COMMON DISEASES OF THE SKIN

WITH NOTES ON

DIAGNOSIS AND TREATMENT

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COMMON DISEASES OF THE SKIN

WITH NOTES ON

DIAGNOSIS AND TREATMENT

BY

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PREFACE

THE object of this small volume is to provide illustrations and a short description of some of the commoner diseases of the skin, with a few lines on differential diagnosis and methods of treatment. No one appreciates better than the author that dermatology can only be properly taught from clinical material, but this is not always within reach of the student and illustrations can in a measure replace it. The book is not intended to take the place of the larger works on dermatology, but the necessarily comprehensive nature of such works makes them at times a source of confusion to the student, whose lack of knowledge renders it difficult for him to identify one disease among the descriptions of a number of somewhat similar, but perhaps rare, ones. Graduates of the Faculty of Medicine of McGill University will recognize that the views enunciated closely follow the teaching of the former Professor of Dermatology, Dr. Francis J. Shepherd, whose almost uncanny astuteness in diagnosis and simple methods of treatment the writer had the advantage of following for twenty years as his assistant in the Montreal General Hospital clinic. In choosing the diseases which should be included in a work of this scope, the writer has based his selection on the statistics of the hospital clinic with which he is connected, thereby, possibly, admitting some not properly classed as common, because of the large proportion of aliens in his clientele.

MONTREAL, 123 CRESCENT STREET

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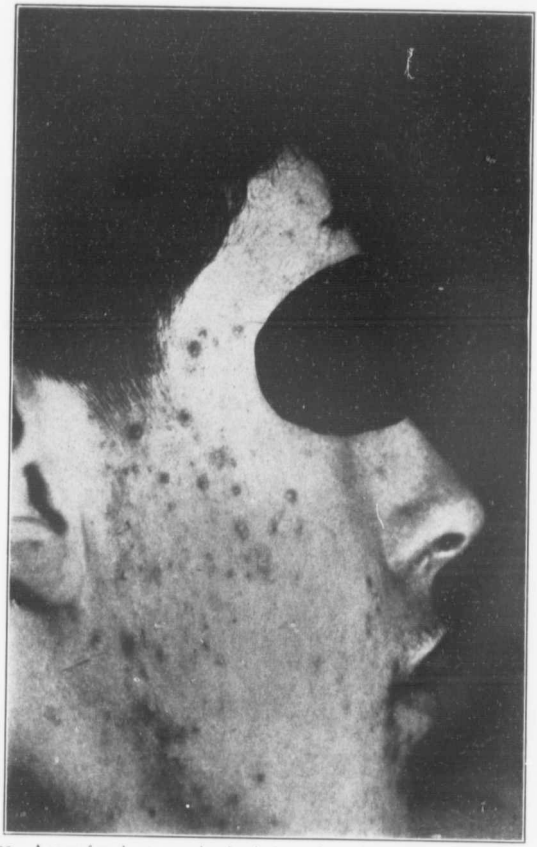
COMMON DISEASES OF THE SKIN

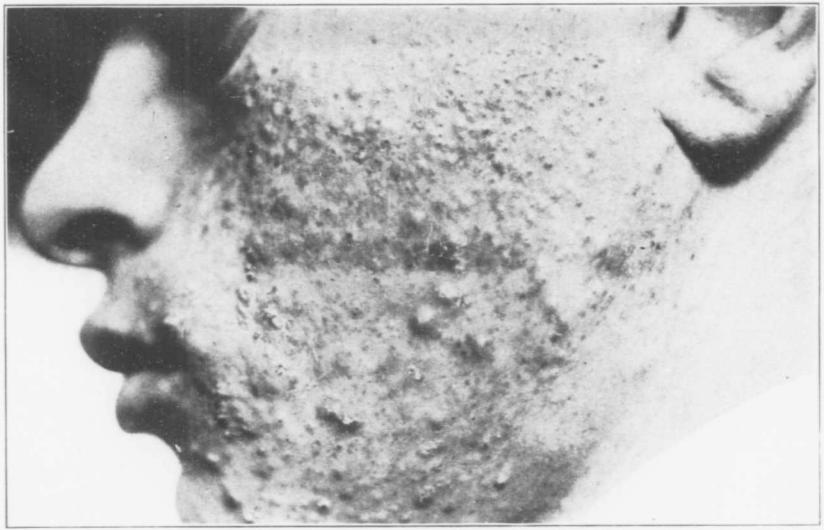
ACNE COMEDO

Acne and **Comedo** are disorders of the sebaceous glands closely related to each other and for that reason considered together. A **Comedo** is the plugged duct of a sebaceous gland, due either to the secretion of the gland having become too thick to escape freely, or to an occlusion of the orifice of the gland having dammed back the sebum which, together with epithelial cells, collects in the duct. The lumen of such a duct becomes distended, and in the course of time, dust collecting in its mouth, gives rise to a dark point commonly known as a "blackhead." Pressure on the skin about the opening of the duct will express its contents of thickened sebaceous material in a long, cylindrical worm-like shape, popularly known as a "flesh worm." Comedones cause no symptoms.

Acne is a chronic inflammatory disease of the sebaceous glands, due to the introduction of organisms from without; and it is those ducts which contain comedones which are most likely to become infected. The most common situation is the face, but the shoulders, back, and upper part of the chest are frequently involved. The disease makes its appearance at puberty when there is increased functioning of the sebaceous glands generally, and is characterized by papules, pustules, and small subcutaneous abscesses. The papules correspond with the mouths of the occluded ducts, are hard, tender, of a bright red colour, and surrounded by an inflammatory areola. The inflammation may subside and the process end here, or the papule may become a pustule which breaks and discharges; or a small abscess



Acne. A case of moderate severity showing comedones, hard comedo-topped papules and small pustules.

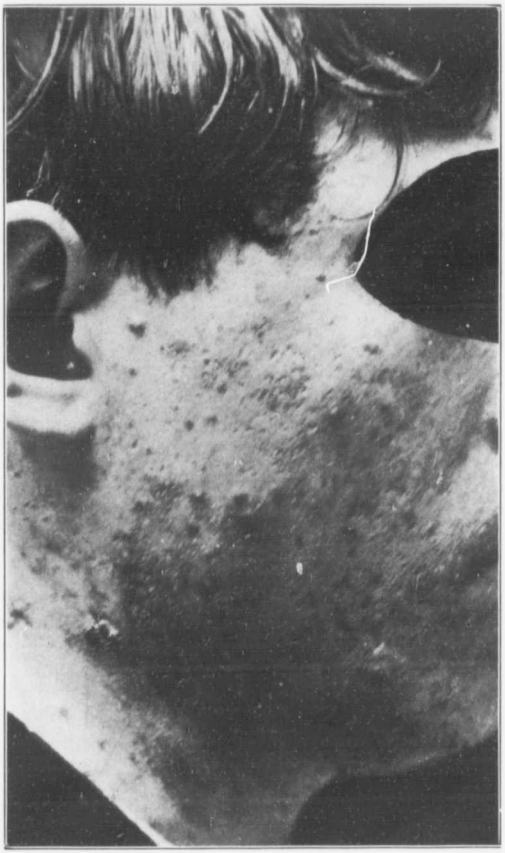


Acne. Severe type, showing comedones, numerous small papules and pustules and large, flat nodules overlying small, deep abscesses.

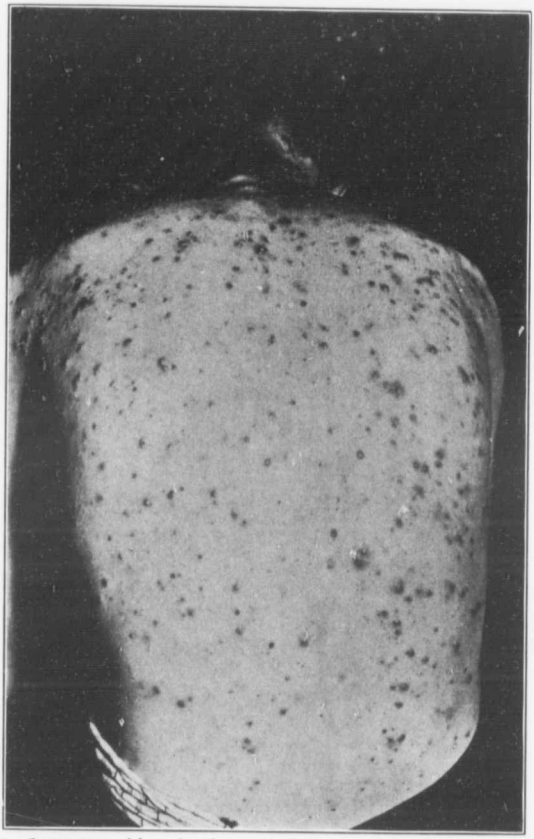
may form in the gland itself and show no tendency to point or break. As this small abscess increases in size, the papule above it becomes larger and less elevated, and a slight sense of fluctuation can be elicited. Ultimately, if the pus is not evacuated, the inflammatory reaction dies down and the pus is replaced by a cheesy material which can often be felt through the skin as a small, hard mass. A small pit or dimple, not unlike that left by a smallpox pustule, frequently appears in the skin over the site of the abscess, from destruction of the subcutaneous tissue. This latter condition is sometimes classed as a separate disease under the name of Acne varioliformis.

The diagnosis is readily made from the distribution of the lesions, the age of the patient, and the character of the eruption. Acne rosacea is the only disease likely to be mistaken for it, the main points of difference being the later age at which rosacea appears, the comparatively few pustules, and the presence of the characteristic enlarged blood vessels.

Treatment is often unsatisfactory. On account of the great liability of comedones to become infected, it is important to get rid of them. Many forms of comedo extractors can be obtained but most have the same defect; namely, that the opening through which the comedo is expressed is too large and pressure fails to dislodge it. We have found nothing to answer so well as a series of watchkeys of assorted sizes, selecting keys having considerable metal about the central opening as otherwise the pressure exerted in expressing the comedo is liable to cut the skin. Daily washing of the face with hot water and soap tends to increase the fluidity of the sebaceous matter and aid in the extraction of the comedones. The popular idea that soap should never be used upon the face may have something to do with the production of comedones. For acne, in addition to daily steaming of the face, strong antiseptic applications are needed to prevent the purulent infection from extending. Alcohol pure, or with one or two grains of bichloride of mercury to the ounce, makes a good application, but must only be used once a day. In cases where there is much inflammation, calamine lotion (calamine preparata 40 grains, zinc oxide 30 grains, to the ounce of



Acne. Severe type showing, besides papules and pustules, numerous pits and scars following the healing of deep-seated abscesses.

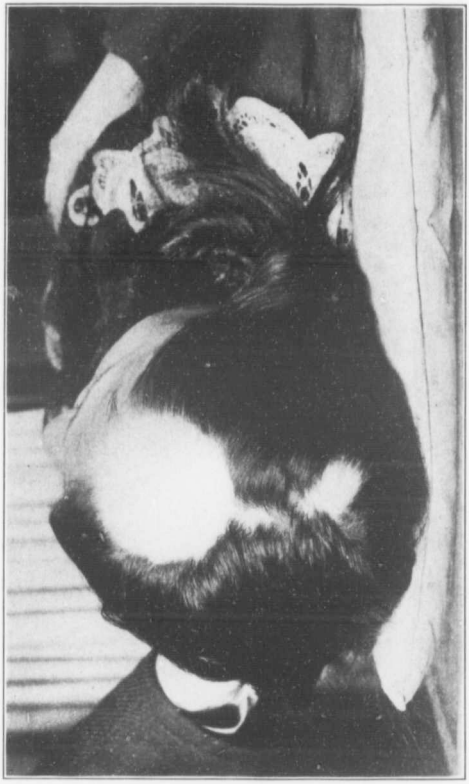


Acne. Severe type of long duration on the back, extends here lower than usual. There was a similar involvement of the front of the trunk.

lime water) can be used at first in place of alcohol. Another good lotion contains precipitated sulphur one drachm and ether one drachm, to one ounce of rectified spirits, but in some people this tends to blacken the comedones. All pustules and subcutaneous abscesses should be opened under antiseptic precautions and the contents squeezed out daily. The deep subcutaneous abscesses are conveniently emptied by inserting a straight Hagedorn needle until the point is felt to enter the abscess cavity; then, if the needle is rotated slightly, the pus can be forced out along its shaft while it is still in place. When the original opening of the duct is seen, it is better to insert the needle at this point. Often in severe cases of acne considerable improvement can be brought about by provoking sufficient inflammatory reaction in the skin to cause desquamation. For this purpose we use the escharotic paste known as Fordyce's, which contains betanaphthol 4, resorcin 4 to 8, sulphur 12, paraffin and green soap of each 13 parts. This is applied daily for from twenty minutes to an hour at a time until it produces intense redness and slight swelling. A few days after discontinuing it desquamation occurs. Treatment of whatever form requires to be kept up for a long time, a fresh crop of papules often appearing after the disease seems completely eradicated. Another form of treatment which gave great promise was the use of vaccines, either stock preparations of streptococcus and staphylococcus or one made from pus obtained from the lesions. In our experience this has proved disappointing, even when an autogenous vaccine is used, though we have had just enough success to warrant one in giving it a trial in resistant cases. We have had no experience with vaccine made from the acne bacillus, but better results are claimed for it. When the vaccine treatment is tried, it should be in conjunction with the other methods outlined above.

ALOPECIA

Alopecia, or Baldness, one of the results of passing years, is commonly not accepted by the individual affected without a struggle, and advice is often sought from the physician regarding

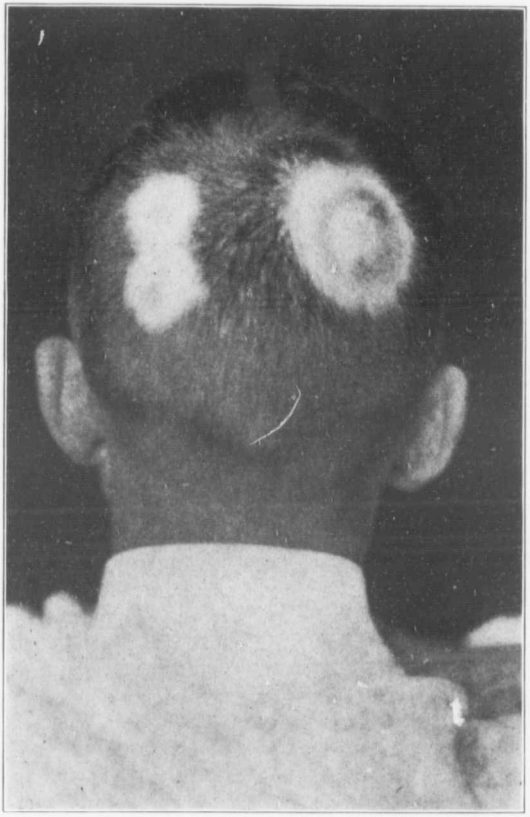


Alopecia areata. Typical case showing round, completely denuded, bald areas.

its prevention and cure. Its advent before the usual age for its appearance has been attributed to many causes, but none of them, unless it be some concurrent disease of the scalp, give a satisfactory explanation. More often it is found to be a family characteristic. In some families the hair turns grey early in life but does not fall, in others there is early baldness, and no method of treatment yet devised has been able to prevent either of these occurrences. Hence in cases of early baldness the family history should be gone into thoroughly and if a hereditary tendency is found, one should be chary about giving a favourable prognosis. Baldness or thinning of the hair following an acute or protracted illness is usually recovered from when the individual has regained vigorous health. The regrowth of the hair can be helped by stimulating lotions of which the following has proved of value in our hands. Tincture of cantharides 1 ounce, spirit of rosemary $1\frac{1}{2}$ ounces, dilute acetic acid $1\frac{1}{2}$ ounces, glycerine 10 minims, and rose water to 8 ounces. Close cutting or shaving of the head during an acute illness to prevent the hair from falling is of doubtful value, though the loss of hair is naturally less noticeable under such conditions.

ALOPECIA AREATA

Alopecia areata is a form of baldness in which the hair rapidly falls from an oval or circular area while the rest of the scalp is entirely unaffected. The loss of hair is so rapid that the affected spot becomes entirely denuded of hair in a few days, leaving the bare surface of the scalp smooth like parchment, and apparently depressed below the level of the surrounding skin. About the borders of the bald spot, if the disease is spreading, the hairs are readily pulled out and under the low power of the microscope they are found to have the shape of exclamation points (!). They show a gradual atrophy of the hair just above the bulbous root, which represents the dot of the exclamation point. After the disease has lasted months or even years, hair again begins to grow upon the bald spot, first in the form of a fine down without colour, but ultimately this becomes coarser, stronger, and



Alopecia areata. Regrowth of the hair has begun at the centres of the three patches. Complete recovery followed.

pigmented like the rest of the hair. Occasionally the new growth, though it gets coarse and strong, fails to develop pigment, giving the scalp a piebald appearance. The bald patches are almost invariably multiple and may coalesce as they extend, in time involving the entire scalp and producing total baldness; and so too, the eyebrows, eyelashes, and beard may be involved. The

Alopecia areata. Severe type of doubtful prognosis as the disease began at the margin of the hair and extended towards the vertex.

disease tends to recur, and one frequently sees recently denuded and healing areas present at the same time. Most cases eventually completely regain the lost hair, but there is one form of the disease in which the hair is rarely replaced and permanent baldness results; namely, when the bald areas appear first at the margin of the hair and extend towards the crown.

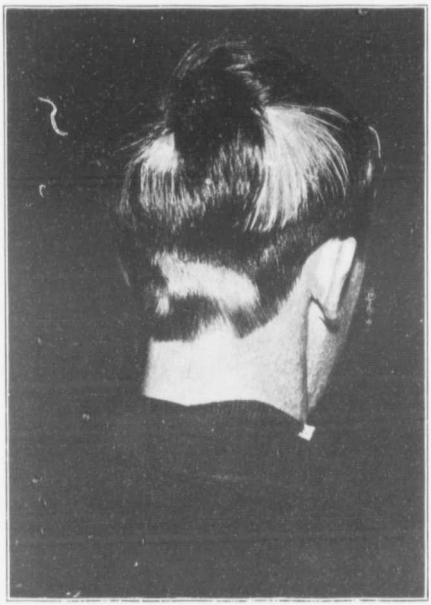
The diagnosis is not difficult. In ringworm, which occasionally produces round bald areas, there is a much more gradual loss of hair, and careful examination will always reveal the characteristic stumps where the diseased hairs have broken off just above the surface of the scalp.

Many methods of treatment have been advocated, and as most of the cases tend to get well spontaneously they are apparently

Alopecia areata. Case likely to produce permanent baldness; the disease began at the margin of the hair, encircled the scalp and extended towards the centre.

successful. In our experience equal parts of glycerine and carbolic acid painted over the bald areas once a day answers as well as anything. Shaving the head or close cropping the hair does not seem of any benefit; the disease occurs in the beard of

those who shave daily. It is well always to assure the patient that recovery will follow in time, as worry and anxiety in many cases have proved the forerunners of a fresh attack, and, except in the exceptional cases already mentioned, one can reasonably promise a cure.

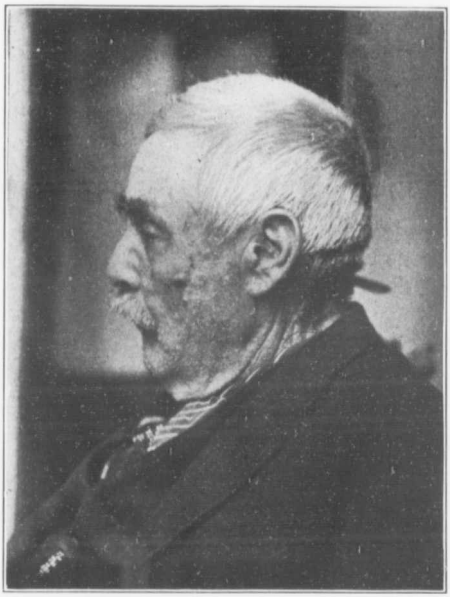


Alopecia areata. Complete recovery of hair but with entire absence of pigment, a rare result.

CARCINOMA

Cancer of the skin is fairly common in the aged, owing to the tendency of either congenital or acquired moles and warty growths to become malignant in old people. With advancing years, senile or seborrhœic warts appear on the face, upper part

of the thorax, and hands of most individuals. These warts are flat, soft, slightly elevated above the skin level, covered with a dark brown or black scale, often reach the size of a dime, and look like enormous freckles. Where malignancy supervenes, there is slight ulceration, with a thin, serous discharge which



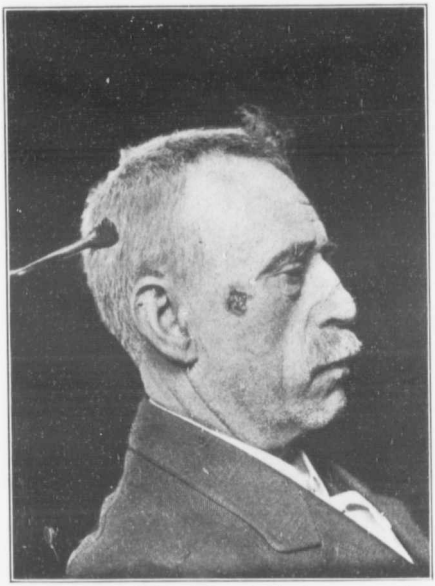
Carcinoma. Early papular stage of Rodent Ulcer, which later resulted in a characteristic ulcer with undermined edges.

forms crusts, and concurrently the base of the wart and adjacent skin becomes slightly indurated. From such a beginning the malignant process slowly spreads, either as a gradually deepening and widening ulcer, or as a fungating, cauliflower-like growth.

Another type of skin cancer begins as a pearly nodule of a pinkish white colour, showing dilated vessels running into it from

the surrounding skin. In the course of time, usually when it has reached the size of a large pea, the central portion breaks down, producing a small crater; and from this the ulceration extends until the nodule disappears and an excavated ulcer is left.

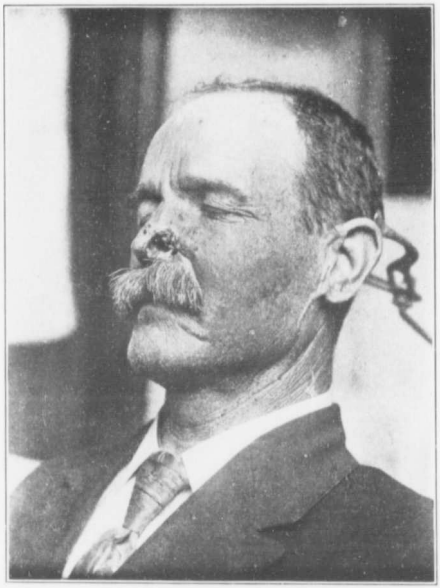
Rodent ulcer, the commonest of all types of skin cancer, begins as a pearly grey, smooth nodule, usually situated on the face.



Carcinoma. Rodent Ulcer which healed completely after treatment by acid nitrate of mercury.

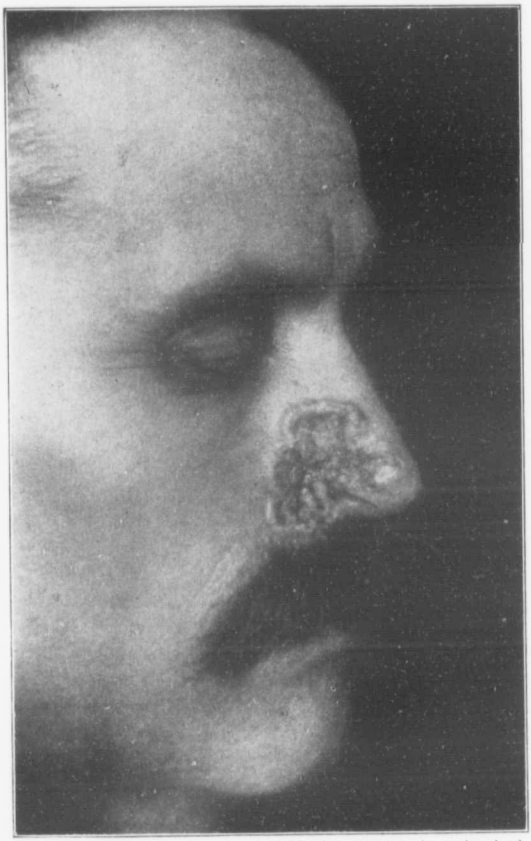
Ulceration takes place very early, and after the original tumour has disappeared, the process spreads slowly, the cancer cells invading the rete first, and thus leading to an ulcer with undermined edges. Extension of the disease is always slow, cases which have existed five years often showing a lesion not larger than a five-cent piece.

The above-mentioned forms of epitheliomata are of the basal-celled type and are frequently seen by the dermatologist; prickle-celled cancers are met with earlier in life, are not limited to the exposed parts of the body, and because of their more rapid growth, generally come first under the notice of the surgeon.

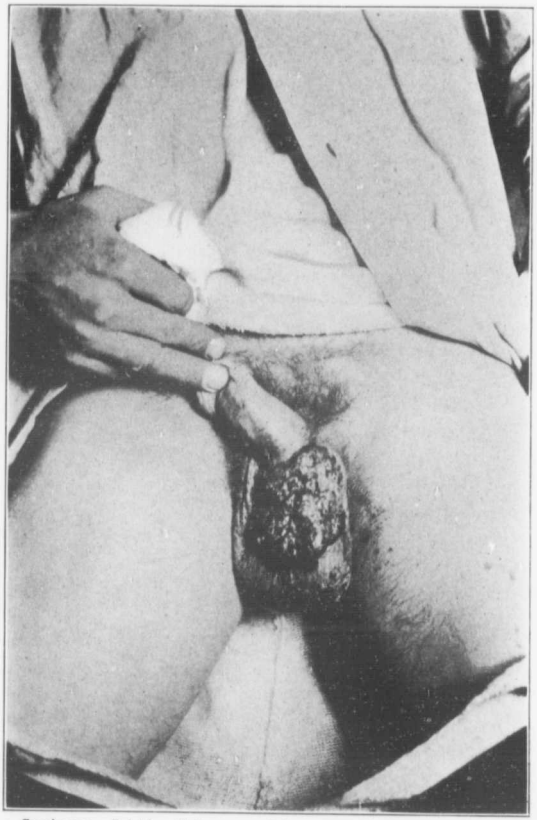


Carcinoma. Rodent Ulcer, the left side of the nose was completely destroyed when the patient came under observation.

Cancer of the skin requires to be distinguished from lupus and tertiary syphilis. Lupus is a disease of much earlier life, does not appear first as a wart or tumour mass, and the raised margins are composed of soft, friable tissue. Deep ulceration is the exception in lupus, and it never shows marginal induration. Tertiary ulcerative syphilides are much more difficult to differentiate from cancer, as the two often resemble each other in



Carcinoma. Rodent Ulcer, three-quarters life size, showing the undermined edge and ulcerated centre.



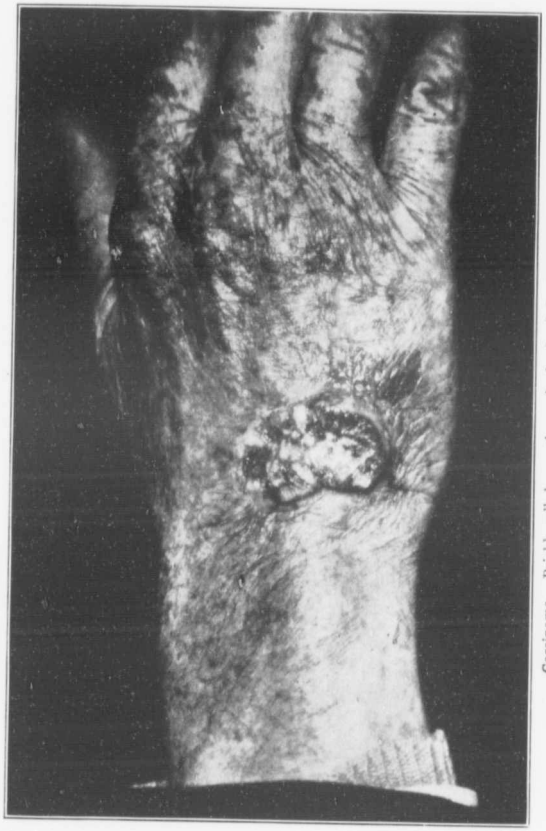
Carcinoma. Prickle-celled cancer of the scrotum in a man aged 30.

their clinical features. Points which are of great value in determining the nature of a doubtful case are its rate of extension and the number of individual lesions. Tertiary syphilis will cover in months an area which it would take years for cancer to produce; and a single lesion is the exception in syphilis and the rule in cancer. Where there is a history of previous manifestations of syphilis, the case should be looked upon as such even though an interval of twenty years has elapsed. It should not be forgotten, moreover, that both lupoid and syphilitic ulceration may at times be the starting points for carcinoma.

Treatment depends upon the type of growth and the length of time it has existed. Small warts which are beginning to take on malignant characteristics are readily removed by freezing with liquid air or by chemical escharotics. Rodent ulcer, when small, responds well to such treatment. In the larger lesions, both of rodent ulcer and the other types, a much better plan is to scrape away the diseased tissues with a sharp spoon curette and cauterize the freshly denuded surface with acid nitrate of mercury. The escharotic action of the acid nitrate does not penetrate too deeply, and it can be at once neutralized by a paste made of bicarbonate of soda. A local or even general anæsthetic may be needed, but usually the patient can stand the slight pain without it and the soreness does not last. Healing of the wound occurs rapidly under a dressing of balsam of Peru; and later any portion of the malignant growth which has escaped destruction can be dealt with again in the same manner. Repeated exposures to X-rays will produce an equally good result, but the treatment is more tedious and therefore less popular. There is practically no tendency to metastases in these basal-celled growths, but in all other forms it is unwise to trust to any form of treatment except complete and wide removal by surgical methods.

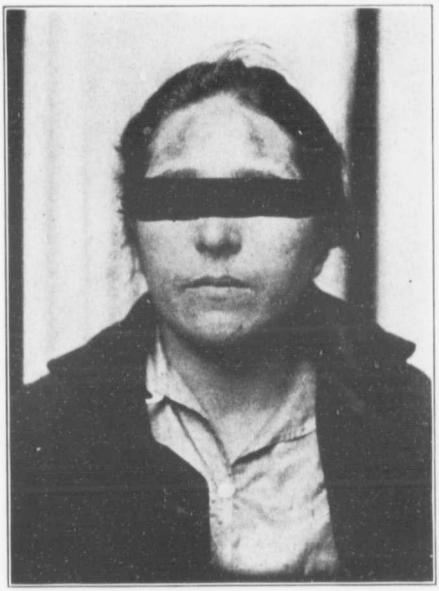
CHLOASMA

Chloasma is a term applied to increased pigmentation occurring either in circumscribed patches or diffusely, the colour varying from light brown to almost black. Certain parts of the



Carcinoma. Prickle-celled growth on the back of the hand in man of 60.

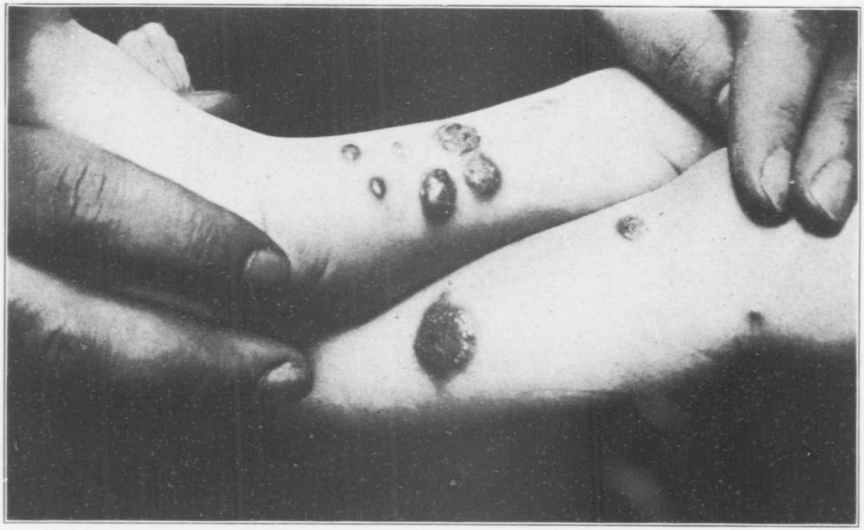
body are more prone to be affected and of these the face is the most often involved the pigment, appearing in patches and bands on the forehead, cheeks, and upper lip. The condition is confined almost exclusively to females and is rare after the menopause, very common in pregnancy, and frequently associated with disease of the internal organs, especially the utero-ovarian sys-



Chloasma. Pigmentation in bracket form on the forehead in a woman of 30.

tem. The pigmented areas are popularly known as "liver spots," from a supposed connection with disease of that viscus, but pigmentation is symptomatic of many systemic diseases and dermatoses.

Pigmentation developing during pregnancy usually disappears a few months after parturition and requires no treatment. In



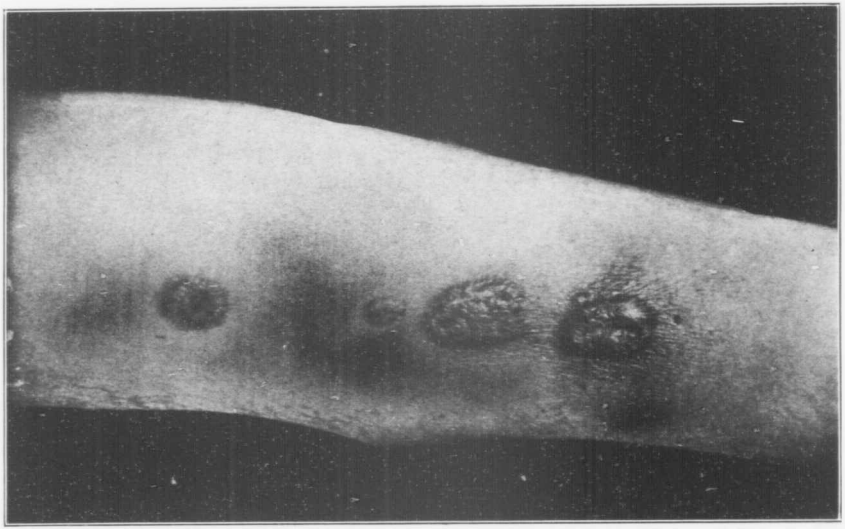
Dermatitis medicamentosa. Bromide eruption showing raised, flat lesions crowned with a ring of small pustules in a child of one year.

cases of unknown origin, treatment of any existent uterine or other disease should be instituted with the idea of removing a possible cause. Locally the only way to remove the pigment is by causing desquamation of the skin over the affected area, and this can be accomplished either by an escharotic paste or by freezing. Fordyce's paste (see Acne) can be applied daily for from twenty to forty minutes until the resultant inflammation is sufficient to cause peeling as it subsides. Small areas are conveniently treated with nitrous oxide snow or liquid air, care being taken to freeze the part just deep enough to destroy the superficial layer of the skin.

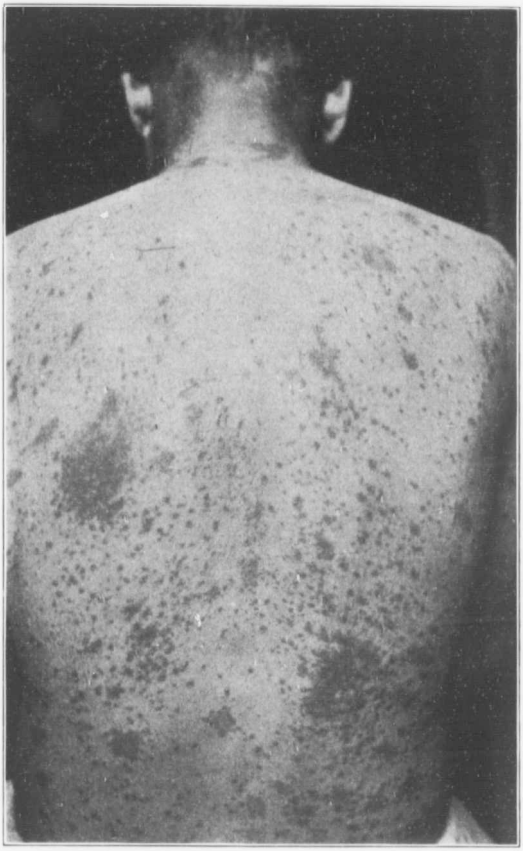
DERMATITIS MEDICAMENTOSA

Dermatitis medicamentosa is the term used to describe eruptions produced by the ingestion of drugs or the absorption of them through the skin; and it sometimes also includes the effects on the skin of irritants, such as iodine and croton oil, applied locally, but here the term is limited to the former class. Many drugs are partly eliminated from the body by means of the glands of the skin, and while some of these invariably produce eruptions if given in sufficient quantities, others do so only in certain individuals who exhibit a special idiosyncrasy to their action. Of those occasionally toxic, there is a very large number and we shall confine our description to those most commonly seen. The amount of any drug, too, which can be ingested before it exerts an untoward effect upon the skin varies within wide limits, some individuals showing a remarkable tolerance in this respect; and the presence of certain diseases seems to increase the individual resistance, iodide of potash, for instance, being better borne by syphilitics.

The **Bromides**, when taken for a long period of time or in excessive doses, produce in adults a form of eruption which closely resembles a pustular acne, but differs from it in having a more general distribution and in showing a wider zone of inflammatory areola about the pustules. If the action of the drug is continued, the pustules become larger and raised, nodular areas form with



Dermatitis medicamentosa. Eruption on the leg of a young woman due to the bromide in an Epilepsy Cure. Bruising of the shins determined the site of the lesions, which promptly healed when the remedy was discontinued.



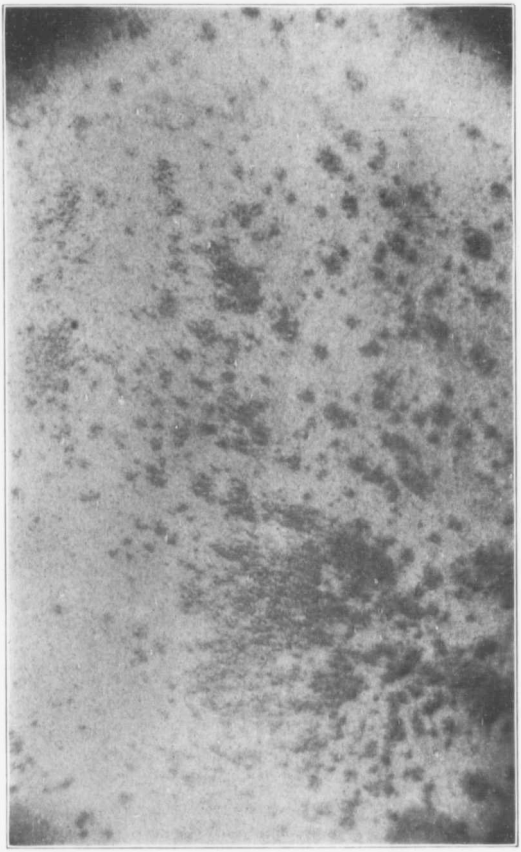
Dermatitis medicamentosa. Eruption following a day after inoculation against typhoid fever. It was of the erythemato-papular type and lasted for about ten days.

some superficial ulceration, the situation of these larger lesions being often determined by accidental bruising or scratching of the skin. In young children, bromide produces a different type of eruption. Raised, angry-looking, round, or oval patches, dark red in colour and crowned with small drop-like pustules develop on the limbs and trunk. These may reach the size of a fifty-cent piece and be so numerous as to cover the body almost entirely. When the drug has been discontinued, they rapidly dry up and disappear without leaving any scar.

The **Iodides** produce an eruption much like the bromides, and pustular, acniform, furuncular, or ulcerative lesions are seen in proportion to the amount of the drug ingested. Where there is excessive dosage or great intolerance to the drug, raised, fungoid swellings exuding pus may develop about the mouth and nostrils, and on the forehead and cheeks.

Most of the resinous drugs, **Copaiba**, **Turpentine**, etc., produce either an intense patchy erythema, somewhat resembling scarlet fever, or an erythematous, macular eruption simulating measles, the latter being especially the case with copaiba where the resemblance to measles is very close. **Belladonna** also frequently produces an erythema, but the skin is not liable to be affected until after the other untoward symptoms of the drug have appeared. **Arsenic** produces a keratosis of the palms and soles with a patchy erythema over the body with induration and superficial scaling, and its long continuance often leads to pigmentation, even without the previous appearance of an inflammatory stage. The eruptions following the use of diphtheria antitoxin and the vaccines for conferring immunity are mostly of the urticarial or erythema multiforme type and only last for a few days.

The diagnosis of dermatitis medicamentosa is readily established when the eruption follows the exhibition of the drug or serum at an interval of a few hours or days; often, however, the active agent is concealed in a patent medicine and the true explanation of the rash is not suspected. In this connection it should be remembered that practically all the so-called "blood purifiers" and "Sarsaparilla Compounds" contain iodide of



Dermatitis medicamentosa. Detail of the last, three-quarters life size. The lesions covered the whole body except the face, hands, and feet.

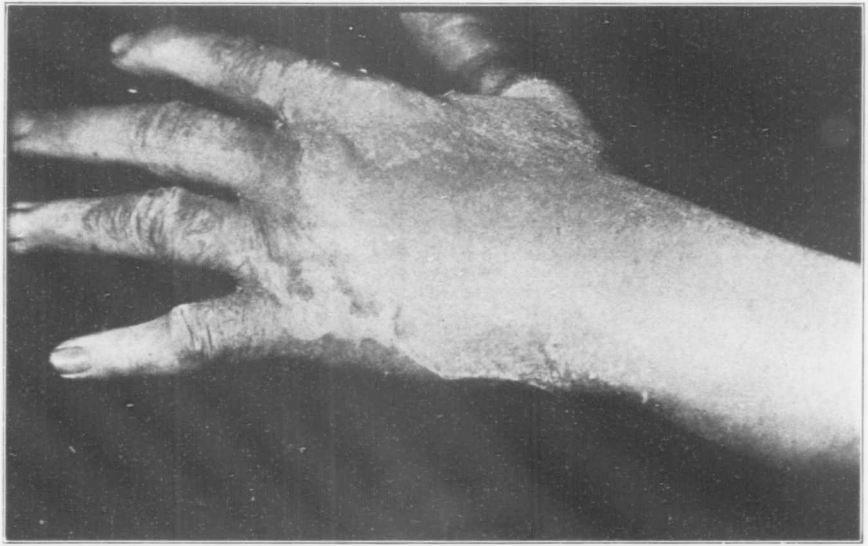
potash, and the "Epilepsy Cures" bromides. An acniform eruption that extends below the level of the waist is suggestive of either iodide or bromide poisoning. The absence of pyrexia and constitutional symptoms will enable one to draw the line between the morbilliform and scarlatinoid rashes and the exanthemata themselves.

Treatment consists in removing the exciting cause.

DERMATITIS REPENS

Dermatitis repens is a mild form of creeping infection confined to the superficial layers of the epidermis. Commonly seen upon the hands, it usually begins at the site of some slight injury, and thus very frequently starts at the borders of the nails. The inflammation causes very little appreciable redness but produces a thin watery pus, which separates the outer layer of the skin from the underlying rete. The bullæ thus produced are only partly filled, scarcely rising above the skin level, and show no tendency to spontaneous rupture. When the covering skin is removed, the surface underneath is vividly red and smooth but does not bleed, though it is acutely sensitive to touch; but it soon loses this character and becomes covered with a corneal layer. When no rupture takes place, healing occurs in a similar manner and the dried outer skin is thrown off. The disease spreads rapidly at the periphery; when starting at the root of the nail, it soon encircles the finger, constituting the familiar "run round." There is usually more than a single lesion and both hands are commonly infected. When neglected, the disease may assume formidable proportions, especially as some of the accidentally denuded areas are likely to become infected with a more virulent form of pyogenic organism, and invasion of the deeper tissues, causing cellulitis and lymphangitis, occur. The disease is much commoner in children than adults, but is met with at all ages and occasionally seen on any part of the body.

There is little difficulty in recognizing the nature of the affection; a bullous erysipelas or any of the other diseases in which bullæ form, is characterized by severe constitutional symptoms



Dermatitis repens. Disease started at the base of the thumb, covered all of the back of the wrist and lower part of the arm, and is now spreading down the fingers. Note the white area at the base of the little finger where the outer layer of skin has been separated by the creeping eruption.

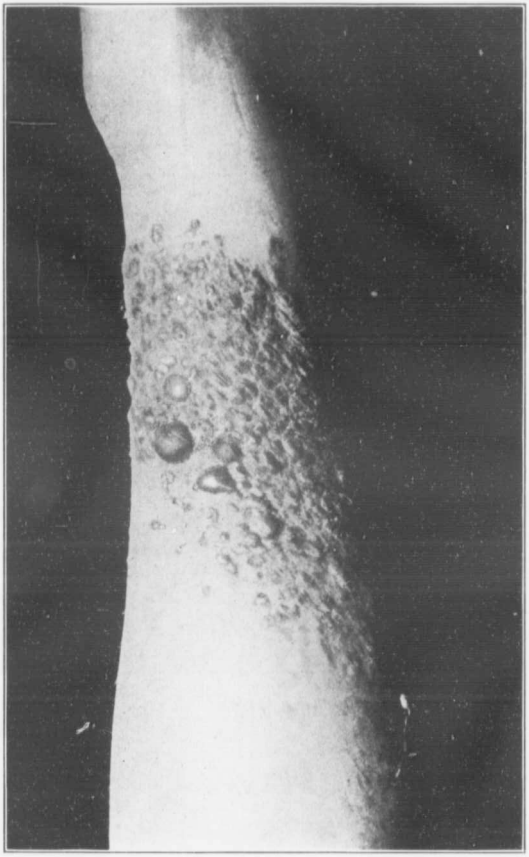
and, locally, by a wide area of surrounding hyperæmia; whereas in dermatitis repens the outer layer is lifted by the exudate without any antecedent redness.

Treatment consists in cutting away the loosened skin and applying antiseptic solutions to the denuded area. Moist dressings of 1 to 5000 bichloride of mercury in water kept in contact with the part for twenty-four hours will arrest its progress. By seeing the case daily any extension of the disease can be similarly dealt with, and healing can be aided, once the extension has ceased, by mild antiseptic ointments.

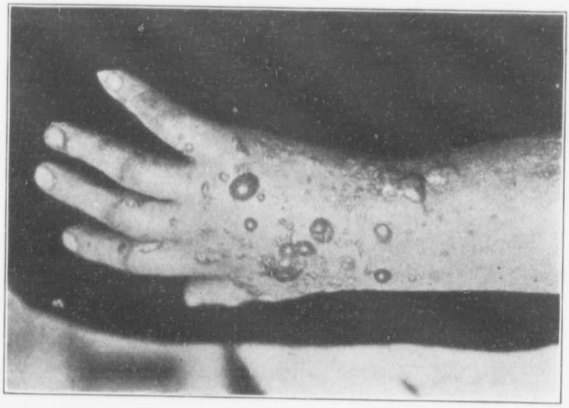
DERMATITIS VENENATA

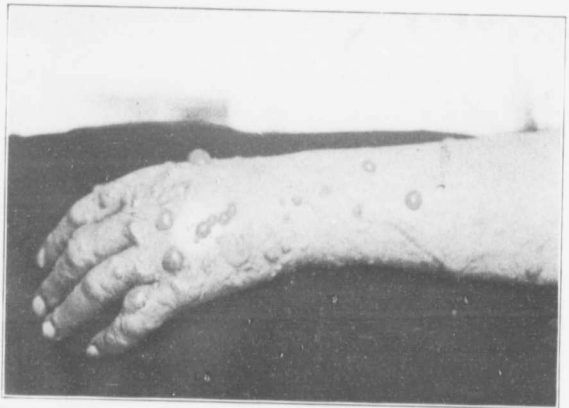
Dermatitis venenata is that form of inflammation of the skin produced by the poisonous juice of certain plants, or by the irritant action of certain drugs or chemicals when brought in contact with the skin. In Canada and the United States there are but three plants commonly met with that poison those who come in contact with them. Poison Ivy (Rhus toxicodendron), which grows as a recumbent creeper along the banks of rivers and in low grounds, is not unlike the common Virginia creeper, but its compound leaves have three instead of five leaflets. Poison Elder (Rhus venenata), a small shrub from six to eighteen feet in height, having compound leaves with seven to thirteen leaflets, is found in swamps and is not a native of Canada. The Chinese Primrose (Primula obconica) is not a native of North America but is cultivated as an ornamental plant in conservatories. Of the three, the poison elder is much the most virulent, while the primrose is the least. Liability to poisoning varies widely; some people are immune, while others are so susceptible that they do not require actually to touch the plant to be affected by it.

The eruption produced by contact with poison ivy and poison elder begins as an intense erythema which stings and burns, and in a short time, usually within twenty-four hours, vesicles appear on the inflamed surface. They are tensely filled with a clear fluid, increase rapidly in size, and often coalesce to form

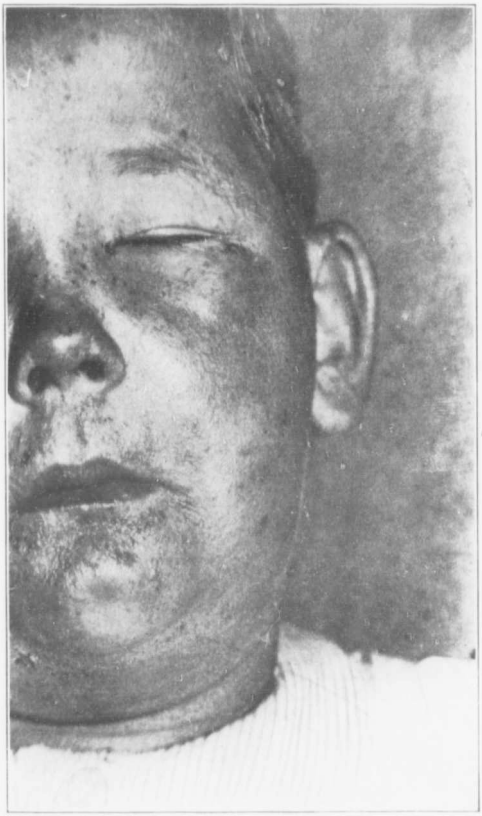


Dermatitis venenata. Poison ivy eruption. Vesicles and bullæ on an erythematous base.



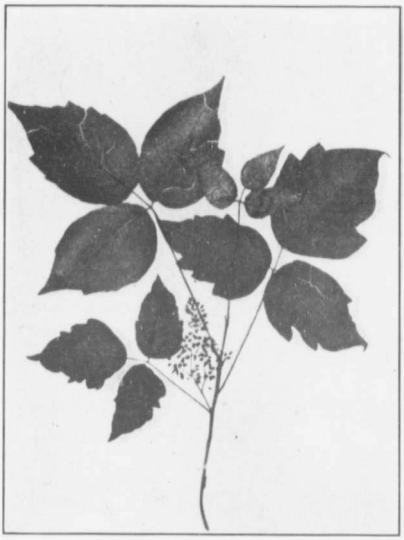


Dermatitis venenata. Poison ivy. Eruption developed on both hands and lower part of the face after a day in the country. The larger bullæ were loculated and required to be punctured in several places to evacuate the contents, but left no scars.



Dermatitis venenata. Poison ivy. Whole face including the ears exhibited an intense erythema with a few vesicles. Hands were primarily affected and carried the poison to the face and genitals where a like condition was present. Subject, a boy, aged 9.

large blebs; while the underlying tissues become swollen and œdematous, and when the face is affected the eyes are closed by the swelling. After several days the intensity of the disease subsides, and as the part gradually gets well, desquamation occurs. While the exposed parts of the body are primarily affected, the poison is frequently carried by the hands to other parts, espe-



Poison Ivy. Rhus toxicodendron, one-quarter natural size.

cially to the genitals, where a similar but less severe eruption is produced.

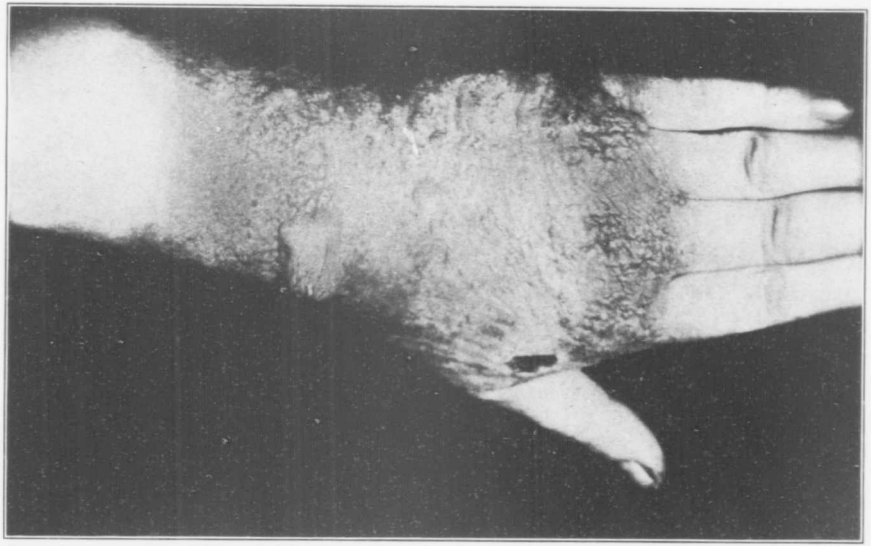
Poisoning by the Chinese primrose never assumes so severe a form, and only the hands and face are likely to be involved, while the eruption resembles an erythematous eczema and is rarely vesicular. There is redness of the skin associated with burning and itching often lasting several days, and as the cause is not often suspected, the case is looked upon as one of eczema.

Any acute erythematous eruption occurring on the hands and face, in an individual who has not been subject to it and who has to do with the care of ornamental flowers, should be investigated with a view to the possibility of primrose poisoning.

A dermatitis may be set up by the local application of drugs from using them either in too great strength or in an injudicious manner. Many drugs which normally produce no irritation

Chinese Primrose. Primula obconica, one-third natural size.

of the skin, may do so if applied under an air-tight covering, and this effect is increased when the surface is already inflamed. We have seen many instances of the conversion of a mild erythematous eczema into a severe purulent type by such a bland application as calamine lotion, when used in this way. Often it is not possible to avoid producing a dermatitis, as in the chrysarobin treatment of psoriasis. Dermatitis venenata includes also the very large group of occupation dermatites,



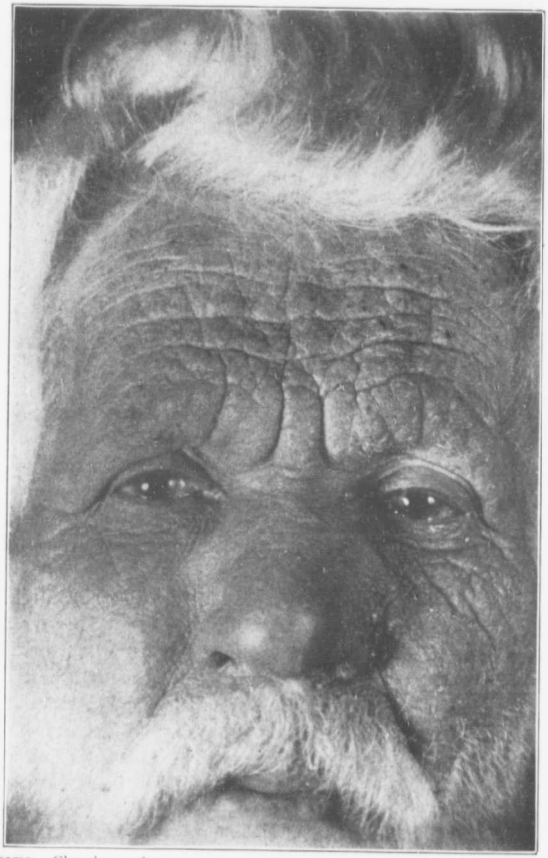
Dermatitis venenata. Iodine. Subject applied tincture of iodine to an erythematous eczema and covered it with a dressing. Intense dermatitis with large bullæ containing a sero-purulent exudate.

eczematoid eruptions induced by prolonged exposure to the various irritants incidental to many trades.

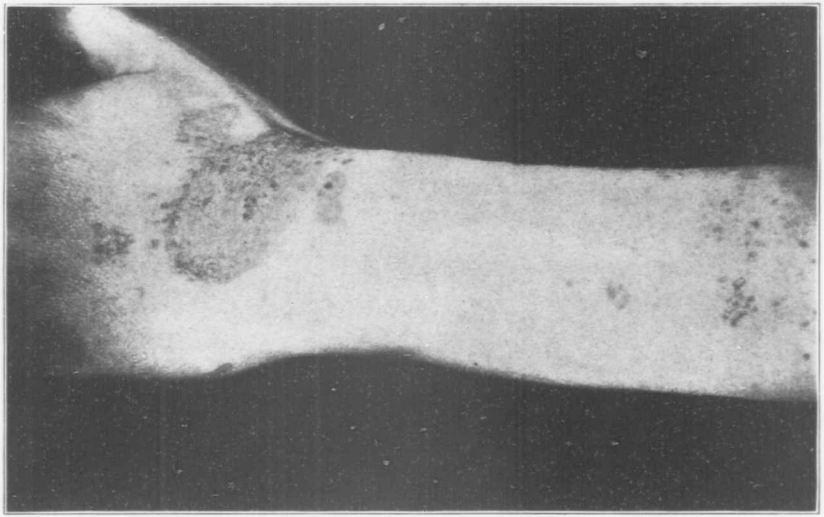
In the treatment of ivy poisoning the essential point is to soothe the inflammation and prevent its spread. If seen early, the surface should be brushed over with alcohol to neutralize any of the poisonous juice still present, and prevent its being carried to other parts of the body. Of soothing applications, first place must be given to lead lotion, one part of liquor plumbi subacetatis to forty parts of water. This should be applied on lint which is kept constantly moist by repeatedly wetting it with the lotion. Many other drugs in weak solution have been found of value, such as boric acid, calamine, sodium hyposulphite, black wash, and lime water. The blebs should be punctured and the contents evacuated. The dermatitis subsides spontaneously when let alone, so many " cures " are vaunted.

ECZEMA

In the older text-books, **Eczema** included a large class of related diseases all showing the same type of inflammation. Latterly, as the causes which produce them have become better understood, the tendency has been to class many of these as dermatites with a qualifying word indicating the specific origin, *i.e.* dermatitis traumatica. This, however, has not solved the problem of what should be included under eczema, and the way in which the difficulty arises can be best explained by citing an example. Iodoform, used as a surgical dressing, often produces a dermatitis which clinically is indistinguishable from eczema, but when the irritant is removed, while most of the cases clear up spontaneously, in some the dermatitis not only continues to exist but extends beyond its original limits; in fact, it behaves just as an eczema, though it began as a dermatitis due to a definite cause. Moreover, it is found that it is in those persons who are subject to attacks of eczema that this extension and persistence of the inflammation is apt to occur: hence, it seems wiser with our present knowledge to include under eczema both all cases of unknown etiology, and those which behave as such even when the exciting cause can be determined.



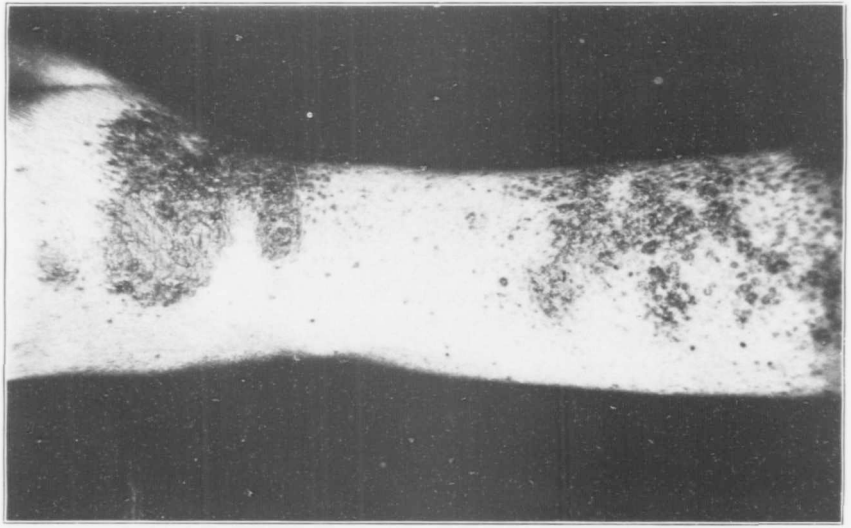
Eczema. Chronic erythematous type. Note the deepening of the natural lines in the forehead from the induration.



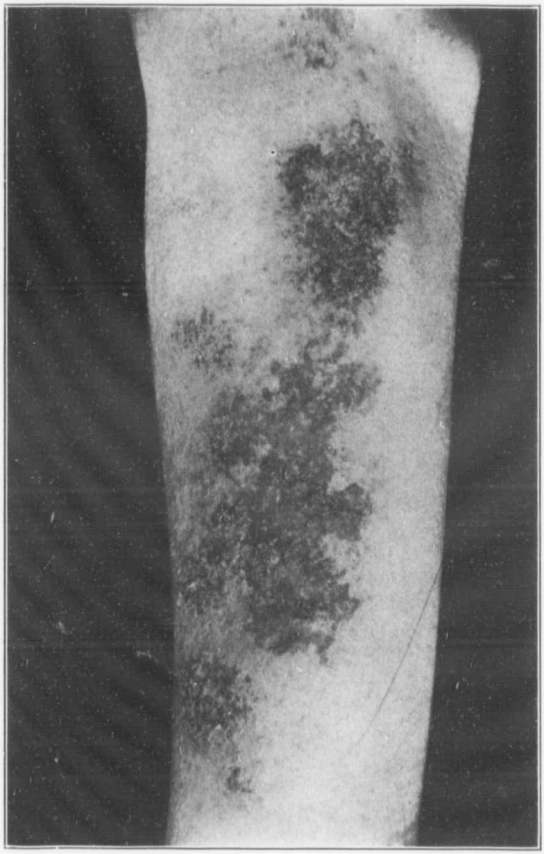
Eczema. Erythemato-papular of recent development.

Eczema presents so many clinical types in its acute and chronic forms that two areas in one individual may have a totally different appearance. There are the erythematous, papular, vesicular, and pustular forms of the disease in acute cases, and the squamous in chronic cases. One form does not remain constant throughout an attack, but may change to another. The disease begins either as an inflammatory erythematous area or by the development of small, uniformly sized papules on the normal skin, with or without hyperæmia. In all cases there is intolerable itching and efforts to relieve this by rubbing or scratching only result in augmenting it. Either of these types may persist for a time without change and the disease then subside; usually, however, in the erythematous type small, pinhead-sized vesicles with thin walls form on the inflamed base, and the spontaneous rupture of these leads to the formation of yellowish crusts from the dried exudate. When the crust is removed, it reveals a reddened moist surface from which a serous, sticky fluid constantly exudes, the vesicular moist, or " weeping " type of the disease. In other cases beginning in papular form, the papules may become confluent and a raised indurated patch result. This in turn may become vesicular or remain dry, and give rise to superficial scaling, the squamous type. Again, in place of vesicles, pustules may form and the disease is then classed as pustular; though cases of this sort are probably due to accidental infection with pus-producing organisms. In all types which have existed for any length of time, thickening of the skin or induration results. The effect of this is deepening of the natural lines and furrows of the skin and loss of its elasticity, and when the parts involved are subject to strain, as over the joints, or to pressure, as on the finger-tips or toes, the indurated skin splits instead of stretching, giving rise to cracks or fissures. It is not usual to find the disease limited to one primary type, more often it can be described as erythemato-papular, papulo-squamous, etc. So also in the moist form the discharge is frequently seropurulent rather than serous, owing to secondary infection.

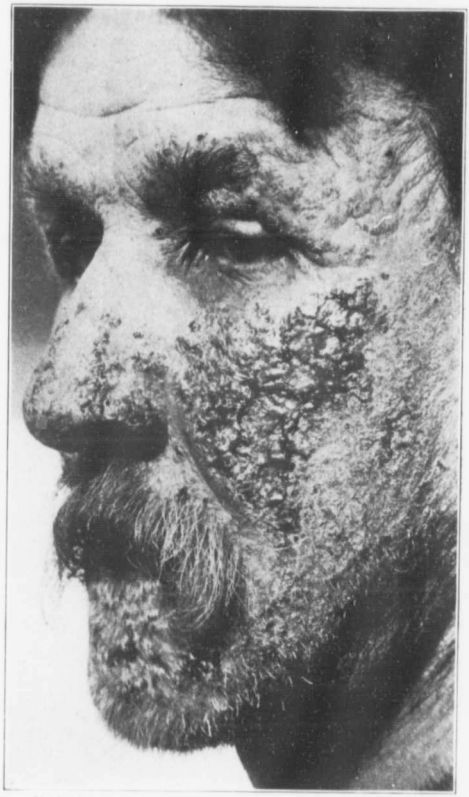
While all forms of eczema may attack any part of the body, certain regions are found to have a predominating type. In



Eczema. Vesicular crusted type. This is the same arm as in the last photograph, taken two days later when the character of the eruption had changed.



Eczema. Erythemato-vesicular type with crusting. Acute rapidly developing disease in a young woman.

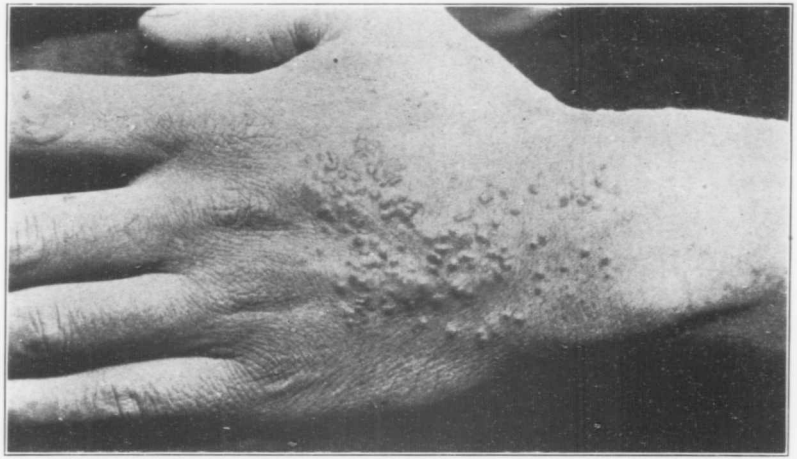


Eczema. Vesicular crusting type on the face. The crusts were yellow and consisted of dried exudate. Rapid recovery under treatment

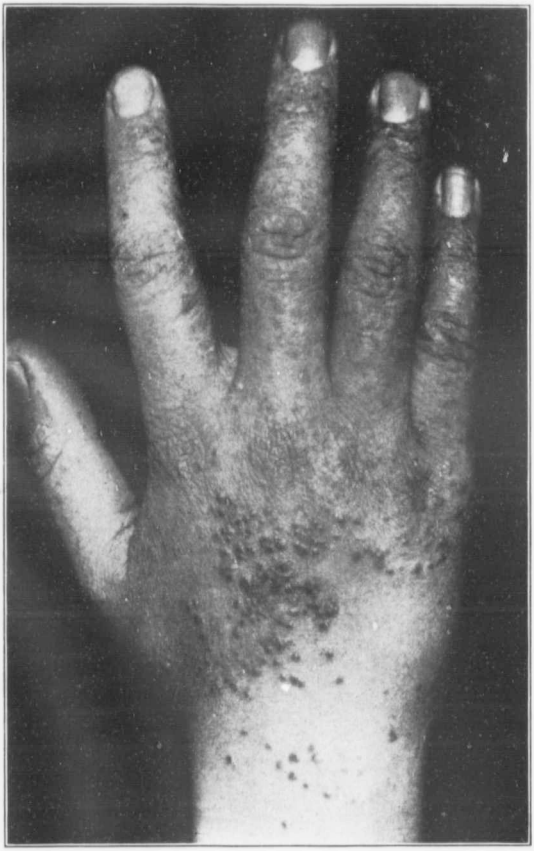
infants the moist crusting form is seen about the scalp and face, particularly on the cheeks. In older children these situations are more apt to present the erythematous variety, and the limbs and buttocks the papular form, the extensor rather than the flexor surfaces being involved. In adult life palmar eczema is commonly of the dry, fissured form, while the lateral borders of the fingers, wrists, and dorsum of the hand show the vesicular type. About the genitals, the erythematous or moist types are most common. On the legs below the knee, chronic eczema produces the condition known as eczema rubrum, an intensely red, dry, glazed surface alternating with moist crusting. Acute attacks of eczema give rise to considerable swelling of the parts affected, and this is especially the case when the face is involved, where the swelling may completely close the eyes. Of subjective symptoms, itching varying in intensity with the type is always a marked feature. Deep fissures are often extremely painful.

In making a diagnosis one must bear in mind that eczema forms nearly two-fifths of all skin diseases, hence in doubtful cases it must first be excluded. Reliance is to be put on getting, either in the previous history of the case or in the present condition, evidence of weeping associated with induration and severe itching. Again, eczema is the only vesicular skin disease in which after the vesicles have once ruptured there is a continuous or intermittent oozing from the diseased part. Many dermatoses resemble some stage of this protean disease, and the means of differentiating them from it are discussed under these diseases. Seborrhœic dermatitis is especially related to eczema which it closely resembles; the points of difference are noted under that disease.

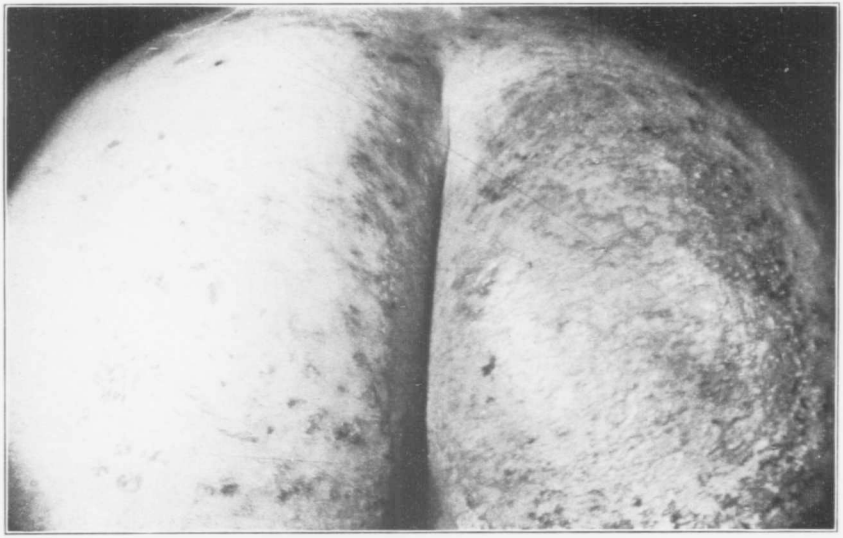
A full consideration of the treatment of eczema is beyond the scope of a small volume. A brief review of the lines along which it is to be carried out, indicating a few of what we have found the most effective remedies, is all that will be attempted. Local treatment must be varied according to the type, but in all varieties protection of the diseased parts from sun, wind, soap, and water, all of which act as irritants and aggravate the condition, is essential. The use of elaborate dressings is to be avoided.



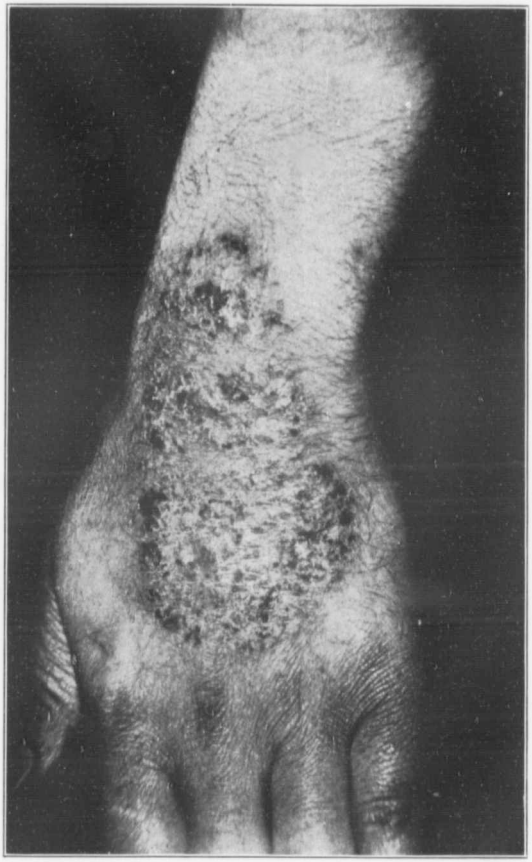
Eczema. Papular form. The papules are larger than is usual in this form of the disease.



Eczema. Papulo-vesicular type.



Eczema. Papular, vesicular, and pustular type in a child of six. This is an unusual situation and the pustular character of many of the lesions was probably due to infection.



Eczema. Pustular type, attributed to a dressing applied over calamine lotion.

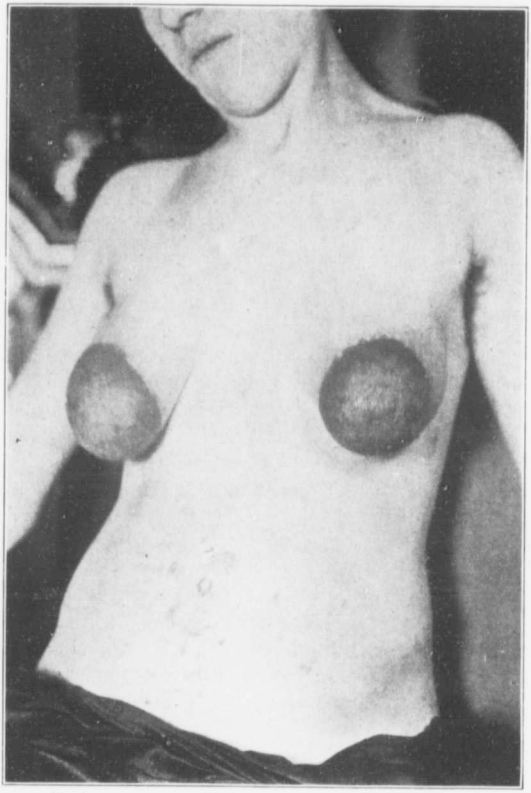
especially in the moist forms, where a mild, subacute attack may be converted into a severe, purulent form. It is a good rule never to apply a dressing to a case that cannot be inspected daily.

In the acute erythematous form of the disease, dusting powders and soothing lotions give good results. A good powder, suggested by Stelwagon, consists of boric acid 1, zinc oxide 2, and talc 5, but it should not be used where there is any exudate, as it tends to form stiff crusts which cause extreme irritation. Lead lotion plain, or with the addition of a drachm of liquor carbonis detergens to the pint, plain olive oil, or olive oil 2, lime water 1, will be found very soothing.

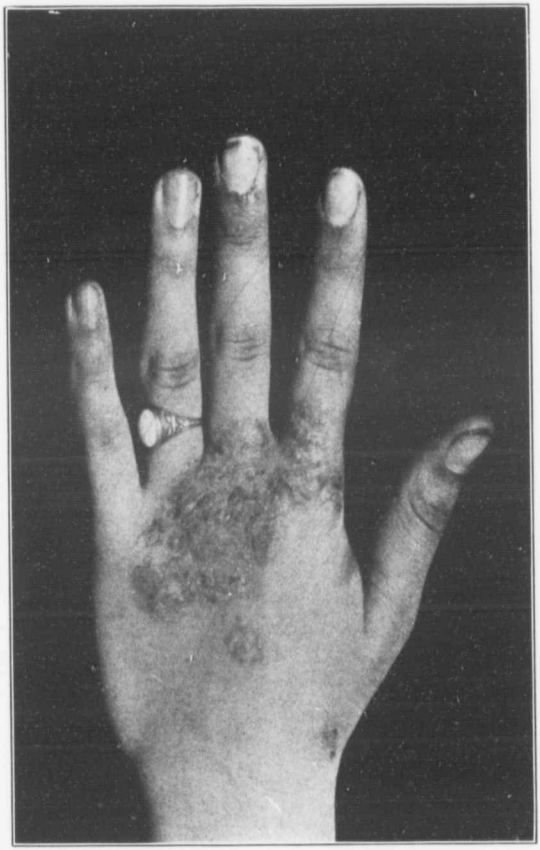
In vesicular eczema of the acute weeping type, the part requires to be kept constantly covered with a soothing ointment or liniment. Hebra's ointment, made by heating together lead plaster 1, olive oil 2, with the addition of one per cent of oil of lavender to disguise the unpleasant odour, is protective, healing, and non-irritating to the inflamed surface. Calamine liniment (calamine 40 grains, zinc oxide 30 grains, lime water 2½ drachms, and olive oil 5½ drachms) is most soothing. The parts should be kept moist by repeated applications, or by covering them with a layer of gutta percha tissue or thin oil silk kept in position with a gauze bandage. Strips of lint or gauze soaked in the liniment or ointment and applied under the oil silk are apt to overheat the part and act like a poultice. When a fresh dressing is needed, usually two or three times in twenty-four hours, the part is cleansed with olive oil before applying it.

In the papular form where there is no moisture and the main complaint is the intolerable itching, tar in some form requires to be added to the application. Ointments here answer best, as they prolong the action, owing to their slow drying properties. Ungt. zinci cum hydrargyri (ungt. hydrargyri ammoniatum 2 drachms, ungt. zinci and ungt. aqua rosae, of each, 3 drachms) is mildly antiseptic and non-irritating, and to it as a base from a half to one drachm of either oil of cade or liquor carbonis detergens can be added to each ounce.

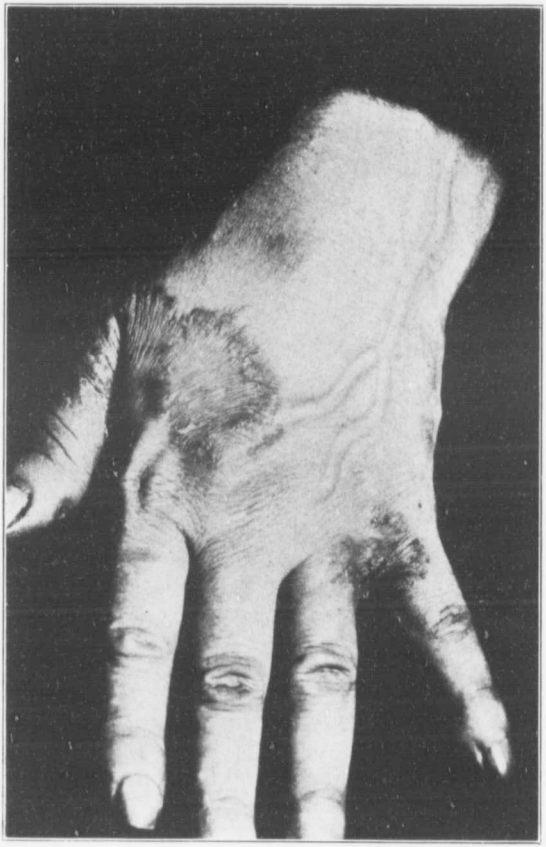
In the squamous chronic type with induration and fissures,



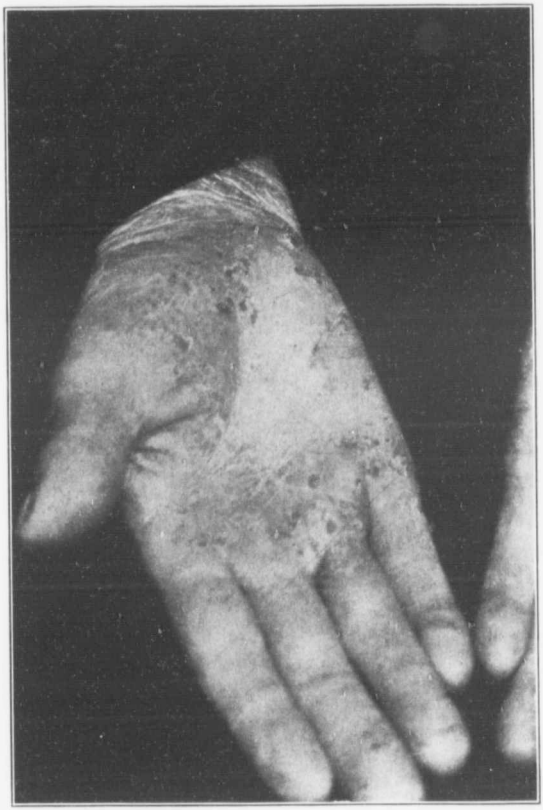
Eczema. Erythematous type with induration. The disease began at the nipples in a nursing mother and spread over almost the whole surface of the glands.



Eczema. Squamous type, early stage. No moisture, but sufficient induration to produce shallow fissures.



Eczema. Chronic squamous type. The circinate form of one of the patches is not uncommon and may lead to an error in diagnosis, but the history and the marked induration were conclusive evidence of the nature of the disease.

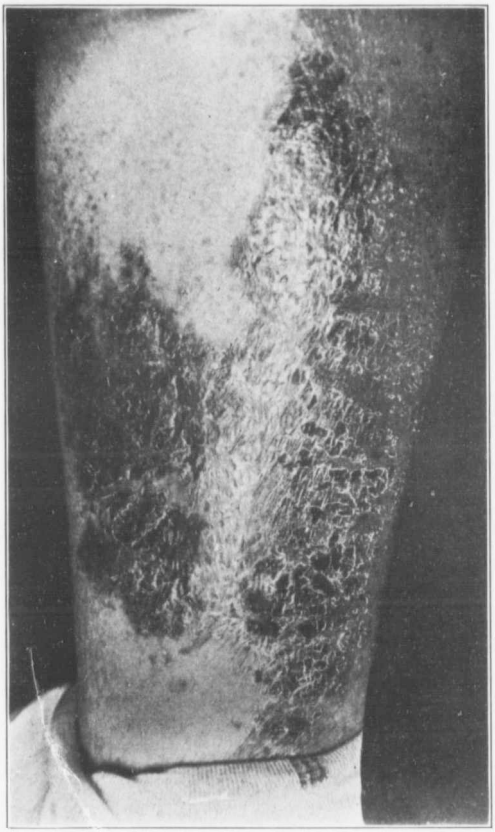


Eczema. Vesicular form on the palms.

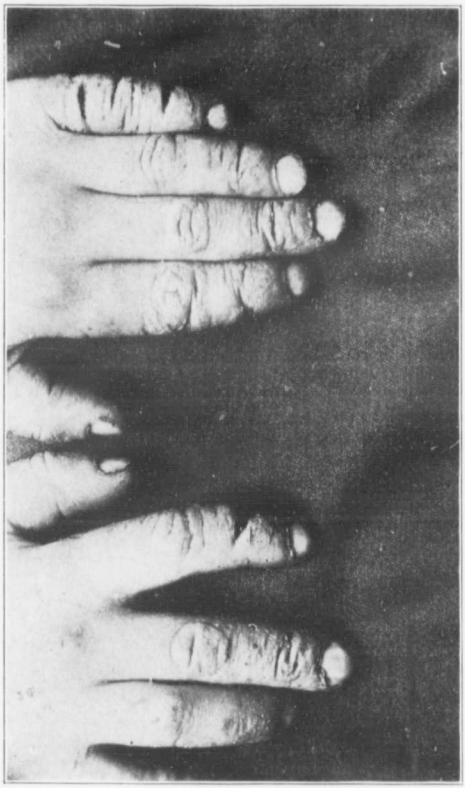
stronger applications again are required. An excellent plan of treatment is to paint the parts with liquor carbonis detergens once or twice daily and in the intervals keep them constantly soaked with the above ointment, cold cream, or lanoline. As this form of the disease is mostly met with on the hands, the patient should be advised to wear loosely fitting kid gloves, with the tips of the fingers cut off unless they also require treatment, and allow the gloves to become thoroughly soaked with the ointment.

Regional eczema requires special procedures in the way of treatment according to its situation. Old chronic cases of eczema of the lower legs, due to varicose veins, can often be healed by applying a rubber web bandage over the dressing and reducing the blood supply. In eczema of the scrotum and adjacent parts of the thighs, the wearing of a thin net suspensory to keep the scrotum from touching the thighs prevents chafing and secures rest to the inflamed surfaces.

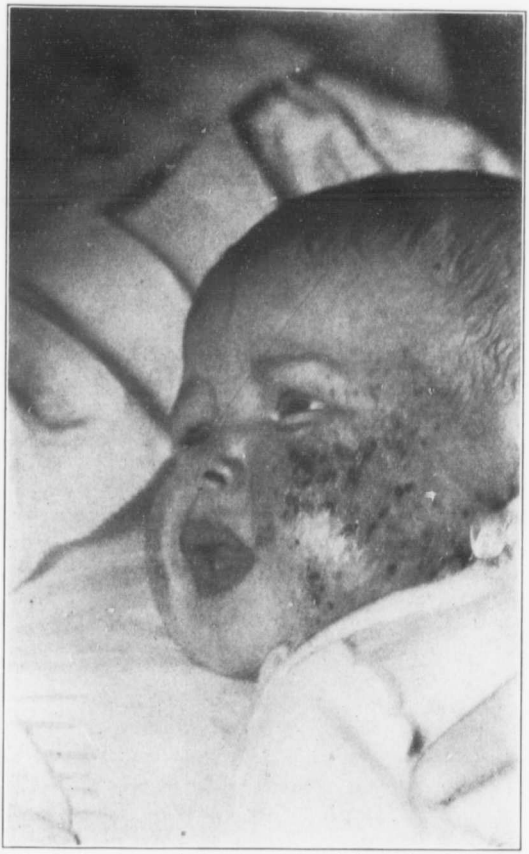
Infantile eczema presents almost insuperable problems in treatment. Contrary to what is generally taught, in our experience it is robust rather than weak infants who suffer from it, and often it attacks breast-fed children living under apparently ideal conditions. The eczema, which usually appears first on the cheeks and spreads in some cases to cover almost the entire body, is of the moist type, beginning during the first six months of life and lasting often until the child is eighteen months old. The activity of the disease varies within wide limits, sometimes entirely subsiding and reappearing without adequate explanation. Many cases are undoubtedly of reflex origin, as shown by those in which the eruption of each succeeding tooth is coincident with a flare-up of the eczema, though the child's general condition is not upset by the dentition. Soothing ointments and liniments are indicated; calamine liniment and ungt. zinci cum hydrargyri are often of great service. Measures should be taken to prevent the child's scratching the affected parts, and as masks for the face are difficult to adjust and keep in place, this can be accomplished by fastening the sleeves of the dress so that the hands cannot be raised to the level of the head. Even with this precaution the face is rubbed



Eczema. Variety rubrum on the lower leg. The lesion was of a brilliant red colour with a glazed surface which, as can be seen, reflected the light. This alternated with periods of profuse exudation.



Eczema. Deep fissures on the hands of a boy, aged 9.



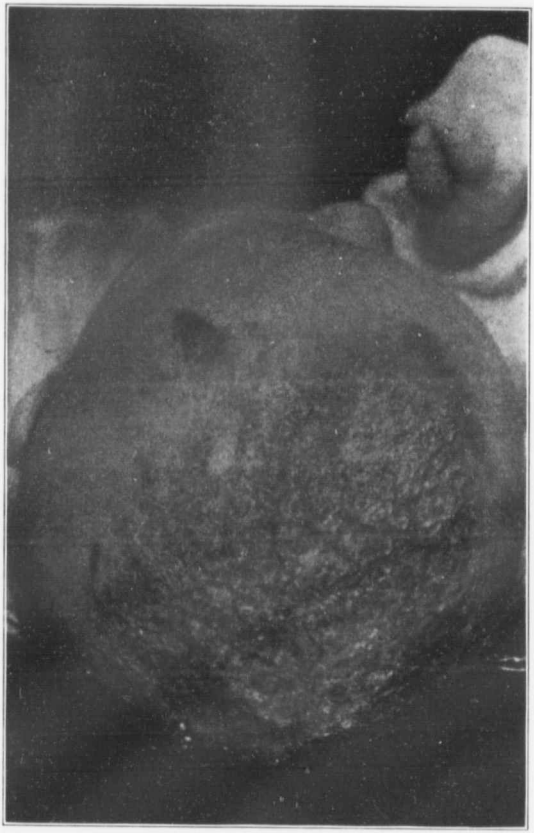
Eczema. Erythemato-vesicular type in an infant of six months. This is the most common situation in infantile eczema.

against the pillow or clothing and the use of a very stiff ointment may be tried to keep the diseased parts covered. Ihle's paste, made with two drachms each of lanolin, vaselin, zinc oxide, and starch, to which boric acid, salicylic acid, etc. can be added, can be smeared on thickly and will adhere better and prove more protective than a thinner ointment.

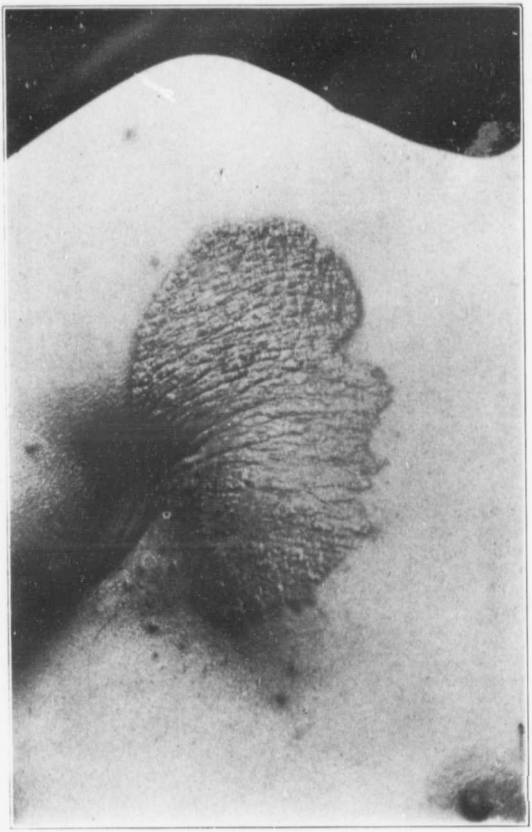
ECZEMA SEBORRHOICUM

Eczema seborrhoicum, known also as Dermatitis seborrhoica, is closely allied to eczema on the one hand and seborrhœa on the other. It resembles eczema in that it shows the same catarrhal type of inflammation and, objectively, is hardly distinguishable from it, while it is frequently a sequel of seborrhœa. The disease resembles the moist form of eczema, but differs from this in showing less tendency to induration and in the character of the exudate, which has more of an oily consistency as seen in some forms of seborrhœa. Subjectively it does not give rise to such severe itching. It is most commonly met with in the hairy parts of the body, scalp, axillæ, and pubes, and from these spreads by continuity to the adjacent skin. In its appearance and mode of extension it suggests strongly a microbic origin, and patches of the disease occurring on the glabrous skin often resemble ringworm. In a typical case involving one of the hairy regions of the body, one sees a surface coated with oily crusts or thick exudate, which on removal discloses a moist, secreting, reddened base. The disease is very persistent and may remain chronic for months, confined to scalp, pubes, or axillæ, with an occasional flare-up in an acute exacerbation, when it invades the neighbouring glabrous skin. When the disease is primary in non-hairy parts of the body its favourite sites are the anterior and posterior regions of the upper parts of the thorax and the sides and angles of the nose. Here the eruption is drier and the exudate not so profuse, and the margins are sharply defined and have a wavy outline.

The disease is recognized from its distribution and its resemblance to eczema, from which it differs in the absence of marked

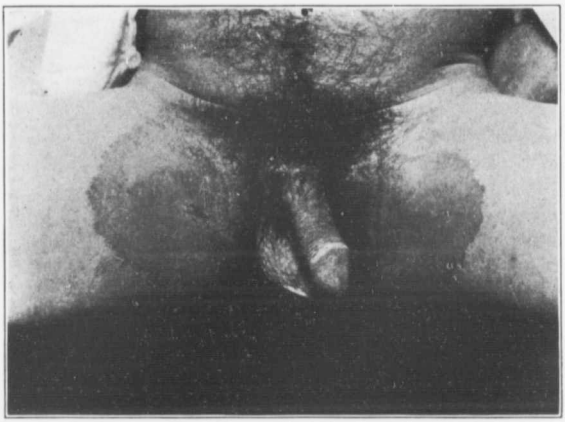


Eczema seborrhoicum. The disease resulted from a milk crust, ultimately spreading over the face; a small offshoot has already invaded the glabrous skin.



Eczema seborrhoicum. Acute attack with well-defined margins and exhibiting more crusting than usual.

infiltration and in having a well defined border. In those rarer forms in which it occurs primarily in regions without coarse hair, it might be confused with ringworm or pityriasis rosea. The former, on microscopical examination, shows the specific fungus, and in the latter the lesions are not sharply defined and the scales are less numerous, thin, and not greasy. Moreover,



Eczema seborrhoicum. The subject had had the disease in the scalp, axillæ, and pubic hair for months. The photograph was taken during an acute exacerbation when the face and neck and regions about the axillæ and thighs became involved. The eruption was erythemato-vesicular in character.

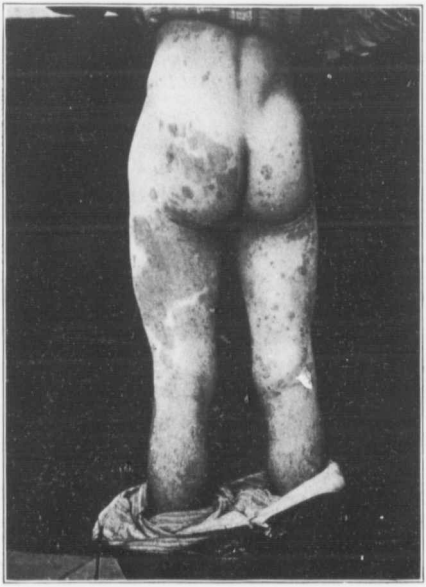
the distribution of pityriasis rosea is so constant that reliance can be placed on this feature to differentiate the two diseases.

In its reaction to treatment as well as in its physical characters eczema seborrhoicum strongly suggests a specific germ which is destroyed by sufficiently strong antiseptics. Sulphur, resorcin, and mercury are all of proved value in combating the disease. Sulphur may be used in the form of an ointment, 30 to 60 grains to the ounce, beginning with the weaker preparation. Resorcin is especially of use on the scalp in the form of a lotion (resorcin 20 grains, acetic acid 30 minims, rectified spirits 2 drachms, castor oil 3 minims, to the ounce of water), sponged in several

times a day. Mercury answers well when used in the form of the oleate, 5 to 20 grains to the ounce. The weaker preparation should be tried first and the strength gradually increased. In this connection it may be noted that much stronger applications can be borne without irritation on the hairy regions of the body than on the glabrous skin.

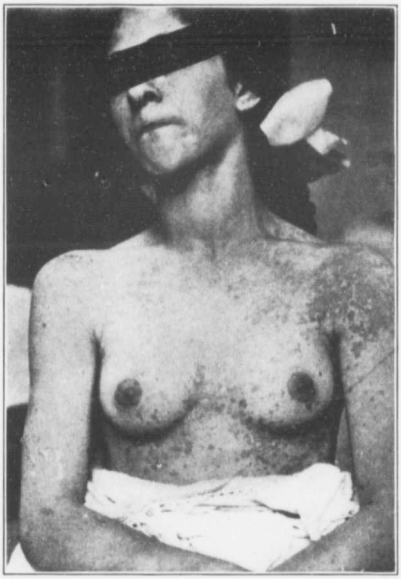
ERYTHEMA MULTIFORME

Erythema multiforme is an acute inflammatory disease presenting a great variety of forms. In the majority of cases it appears first as a macular or patchy erythema, which is often slightly raised above the level of the surrounding skin, and as the



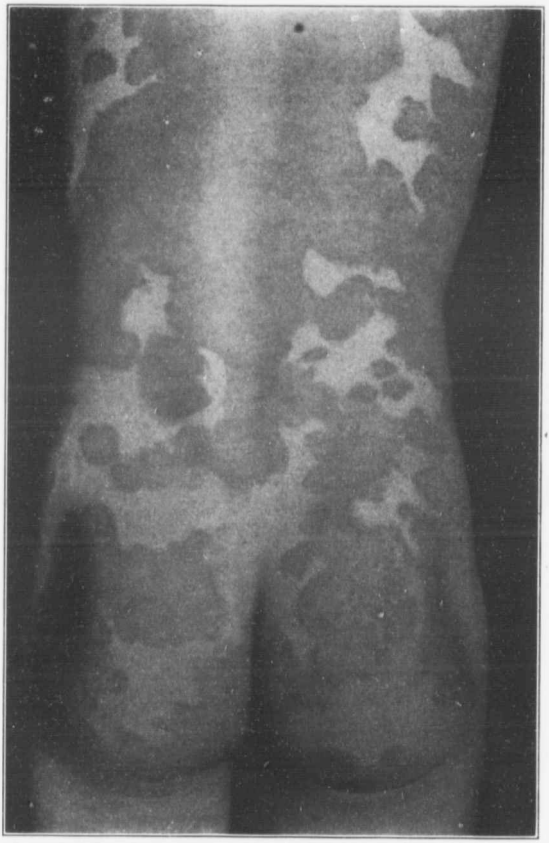
Erythema multiforme. Erythematous type which subsided without change in a few days.

disease progresses the border becomes of a darker red than the rest of the lesion, defining the edge more sharply. The process may end here and the coloration gradually fade, or a second zone of colour, lighter or darker than the general hue of the lesion and parallel with its border, may develop; and this again may be followed by a third and even a fourth, giving it somewhat the ap-

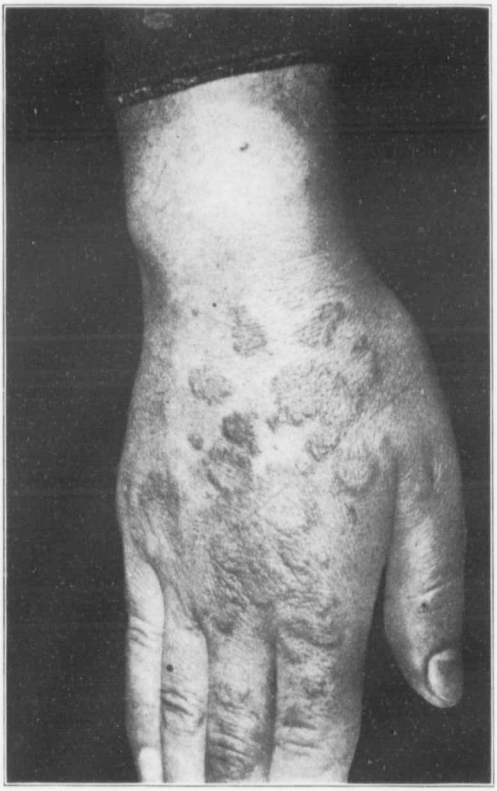


Erythema multiforme. Erythematous type, associated here with a gastro-intestinal disturbance.

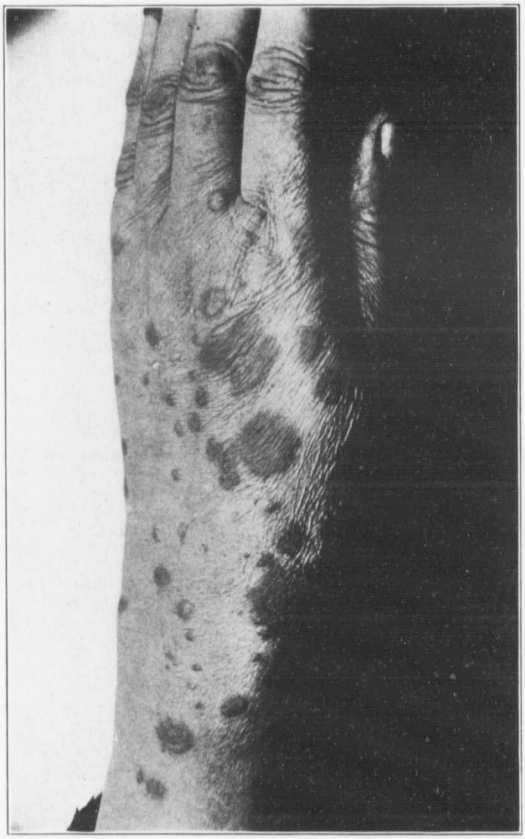
pearance of a target in the arrangement of the rings. In other cases, as the development proceeds in some of the zones the erythema may be replaced by vesicles, pustules, bullæ, or even hæmorrhages, which also follow the concentric arrangement. Round lesions of this description, having a row of small herpetic vesicles at the periphery and a dark, often hæmorrhagic, centre,



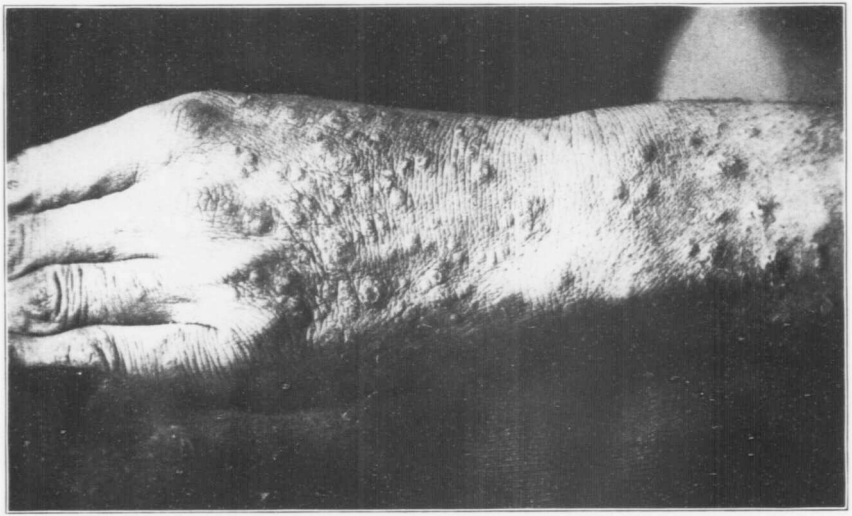
Erythema multiforme. Erythematous type showing the increase in depth of colour at the margins of the lesions.



Erythema multiforme. Erythematous type here limited to the hands.



Erythema multiforme. Erythematous type showing three zones of colour in one of the lesions on the wrist.

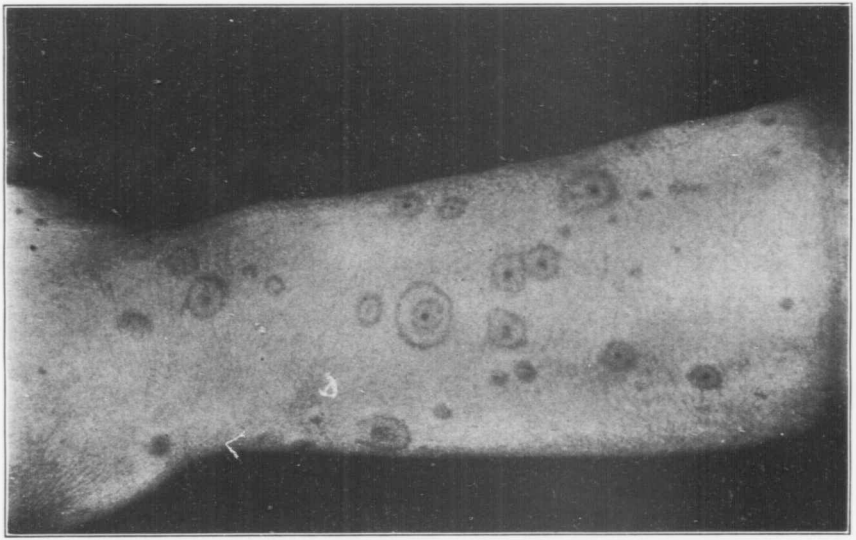


Erythema multiforme. Papular form, seen here as large papules, many of which show a slight depression in the centre. Eruption was limited to the neck and extremities.

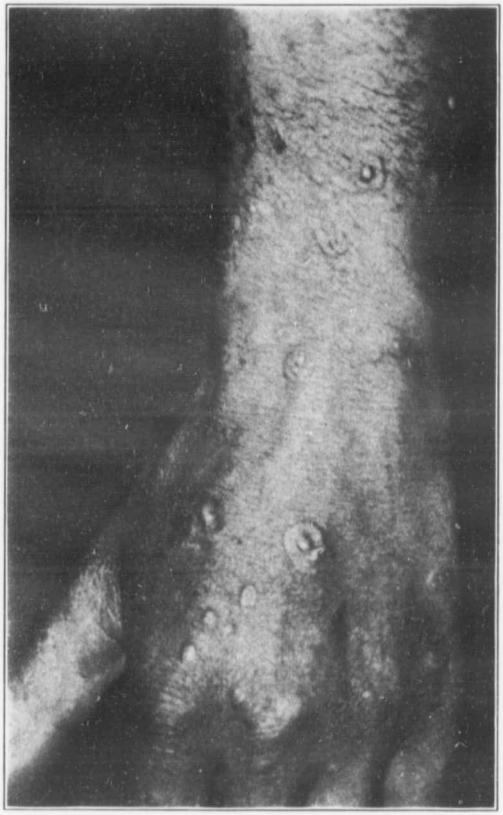
suggested the name herpes iris often applied to this variety of the disease. When the vesicular form of the disease attacks the palms of the hands and soles of the feet, the vesicles do not break but fuse to form a single, large, ring-shaped lesion. If the individual lesions are close enough together to overlap, there is difficulty in making out the characteristic arrangement in concentric patterns, as the border then assumes a wavy outline.

The disease is the cutaneous manifestation of some general toxæmia and its onset is usually accompanied by malaise, rise of temperature, and pain in the joints. The eruption gives rise to burning and stinging sensations rather than itching, and causes as a rule little discomfort. It is symmetrical in distribution and the extremities are more frequently affected than the trunk, though the whole surface of the body may be covered with the rash, which in the majority of the cases appears first on the backs of the hands and the wrists, and is often seen here and about the head and neck, when the rest of the body is entirely free. The herpetic form is much more common on the extremities, the diffuse on the trunk. Erythema multiforme is the eruption produced by ptomaine poisoning, the injection of diphtheria antitoxin, the inoculations against typhoid and other diseases and the use of salvarsan intravenously; it is also seen as a terminal event in septicæmia. In most cases, however, the cause cannot be discovered and often the constitutional symptoms are so slight as to escape notice. The disease runs a definite course, rarely lasting more than two weeks and changes in the character of the eruption can be noted from day to day.

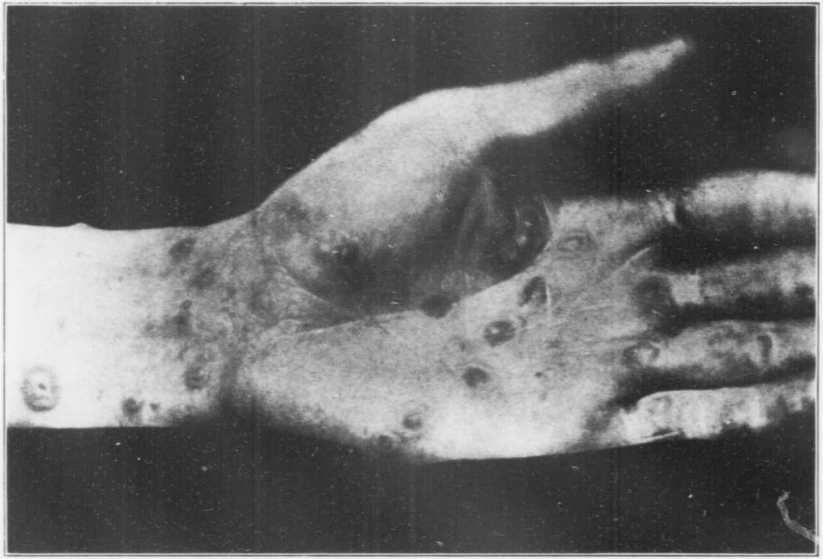
If the characteristic zones of different colour are present, the diagnosis is at once clear. The cases causing the most difficulty are those in which the disease is very extensive and where the major part of the eruption does not present this feature; but in these a careful search will generally reveal it in some of the outlying areas. One of the secondary syphilides, commonly seen about the head and neck, is an erythematous, circinate eruption not unlike erythema multiforme. Where other evidence of syphilis cannot be obtained, its slow development and its persistence in the same form for weeks, will exclude erythema multiforme. Urti-



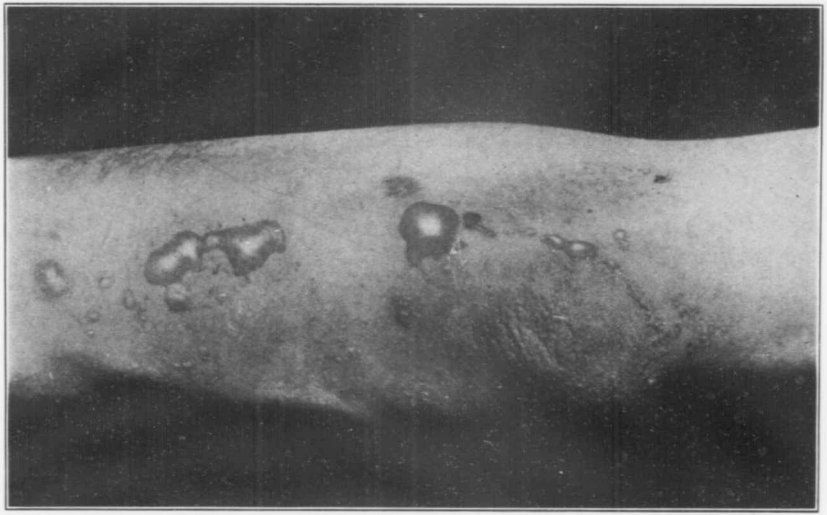
Erythema multiforme. Erythematous, iris form, here consisting of several zones of colour, with, in some cases, a small central hæmorrhage



Erythema multiforme. Vesicular form, the central portion of the lesions consisting of one or two large vesicles.



Erythema multiforme. Vesicular type as seen on the palms and soles. Erythematous, often hæmorrhagic, centre surrounded by vesicles which in most instances have coalesced to form a ring. Erythema iris.



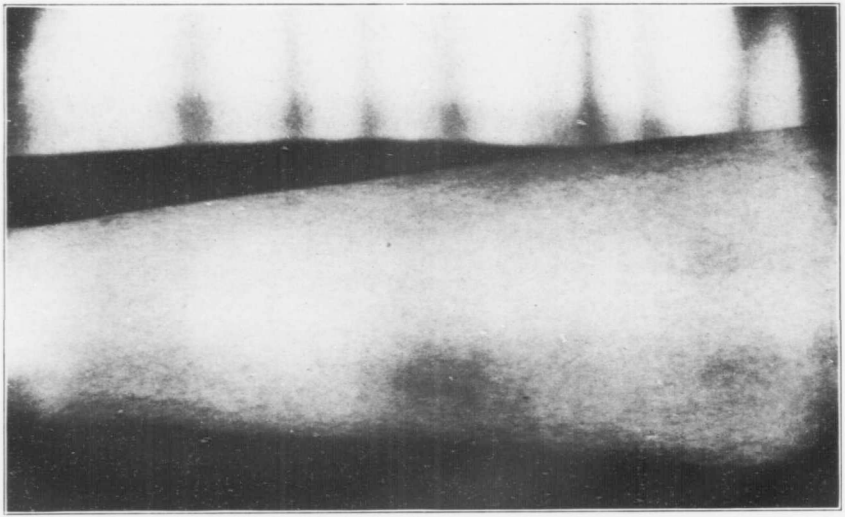
Erythema multiforme. Bullous type consisting of thin-walled, irregularly shaped bullæ on an erythematous base. Lesions were grouped about the elbows, wrists, ankles, and formed a collar about the neck. Complete recovery in ten days. A rare form of the disease.

caria gives rise to raised erythematous wheals, which, however, are extremely evanescent and of a more or less uniform colour. Ringworm forms circles, occasionally concentric ones, but the presence of scales serves to distinguish it. The ring form of impetigo has some resemblance to it, but here the centre of the ring is not of an erythematous character and the distribution is not symmetrical.

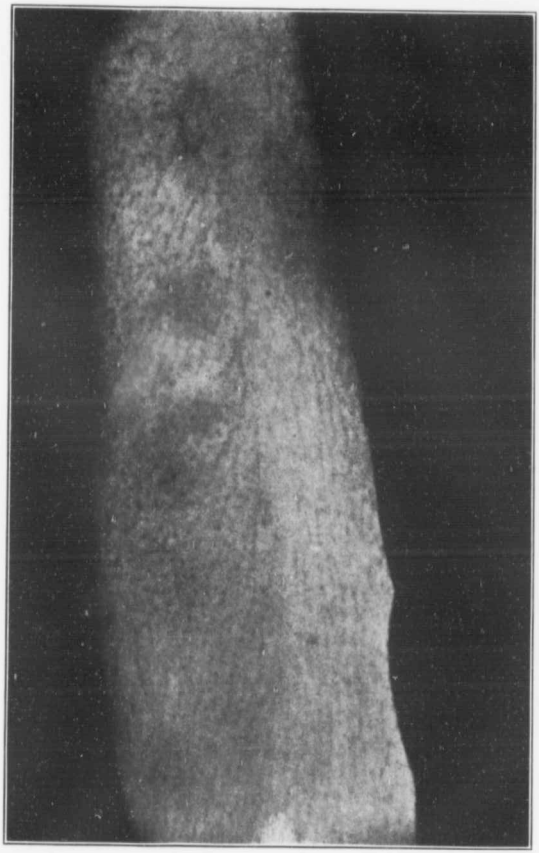
Treatment is confined to cooling applications, like evaporating lead lotion, calamine lotion, and similar preparations. It is doubtful if they influence the course of the disease and often, in the absence of subjective symptoms, they can be dispensed with altogether. Where nothing can readily be assigned as the cause of the disease, it is well to administer a saline cathartic on the chance of its being due to an intestinal toxin; and as many cases seem to have a remote connection with rheumatism, in that they occur in persons suffering from subacute or chronic forms of this disease, here salicylates may be tried.

ERYTHEMA NODOSUM

Erythema nodosum is an acute, inflammatory disease occurring mostly on the extensor surfaces of the legs and forearms. An attack is ushered in with fever, malaise, and pain in the joints, followed in a few hours by slightly raised, bright red tumours, resembling developing furuncles, on the anterior surface of the legs below the knee. These lesions are acutely tender to touch, vary in size up to that of a silver dollar, and may give a sense of fluctuation though they never suppurate. The bright red colour changes in a few days to bluish red or purple, going through the same changes that one sees in a fading bruise, a greenish yellow stain often remaining for some time after the tenderness has disappeared. The lesions are always most numerous over the crests of the tibiæ, but they also occur on the extensor surface of the forearms, and may be found in rare cases elsewhere over the body. The affection bears a close relationship to rheumatic fever and allied diseases, often occurring before, during, or after an attack of one of these. It is commonly met with in older



Erythema nodosum. Subject a girl of 13, attack developing while in hospital with rheumatic fever. Situation of the lesions about the crest of the tibia.



Erythema nodosum. Extensor surface of the lower arm of the previous case.

children or young adults, and females seem more susceptible than males.

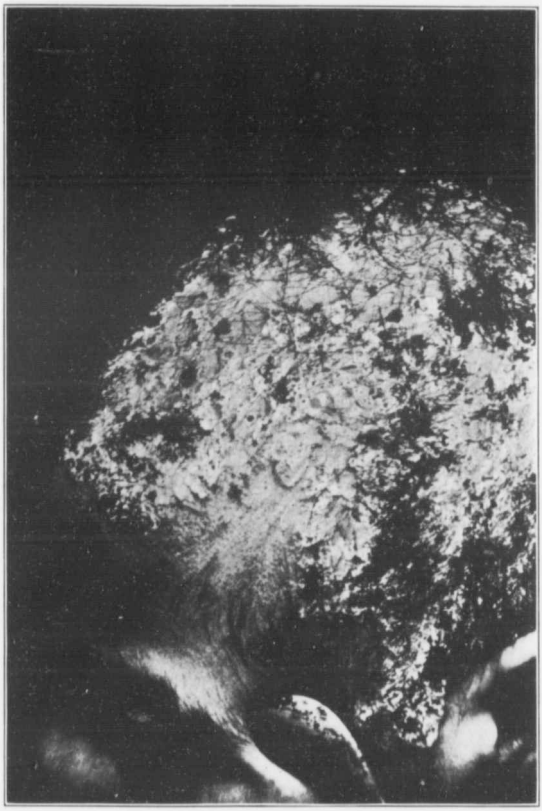
The distribution and peculiar character of the lesions, coupled with the febrile onset, readily determine the diagnosis.

Treatment consists of rest in a reclining position with soothing applications to the inflamed areas. Nothing answers better than lead lotion (liquor plumbi subacetatis, one, to forty parts of water) or the evaporating lead lotion, in which 25 per cent of alcohol is added. The eruption should be kept covered with cloths wet with the lotion. Internally it is our practice to give salicylate of soda in full doses, but, as the disease tends to run a definite course, it is questionable whether this drug has any influence upon it.

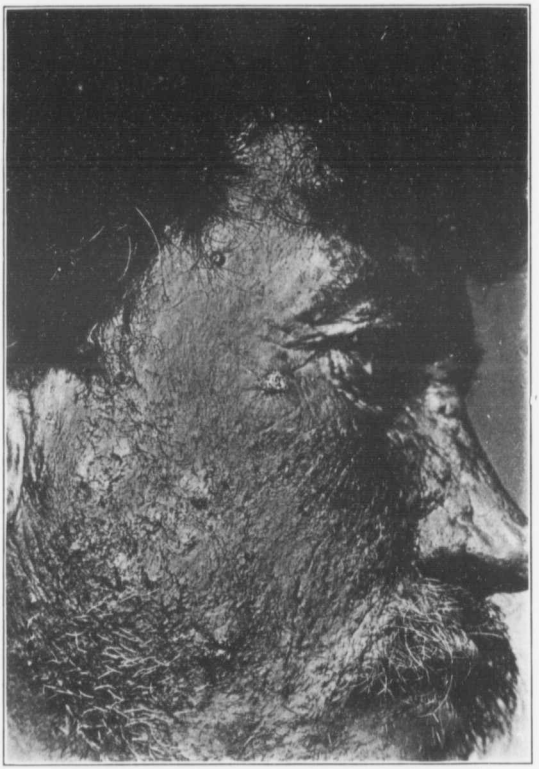
FAVUS

Favus is a contagious, parasitic disease of the skin due to a vegetable fungus the Achorion Schönleinii and is characterized by the growth, mostly on the scalp but occasionally on the body, of colonies of the fungus which produce small, saucer-shaped, sulphur-yellow crusts, firmly adherent to the skin. The mycelia grow through the whole thickness of the skin and invade the hairs and hair follicles, destroying the tissues and rendering the hairs brittle so that they break or fall out. When healing occurs small irregular cicatricial bald patches are left as a permanent evidence of the former presence of the disease. The affection is one of early life, beginning before fifteen years of age and lasting until twenty-five or thirty, slowly extending over the scalp and leaving in its path the bald areas already mentioned. It is quite common among the emigrant class in the larger centres of population, especially so in the Hebrews from Poland, Roumania, and neighbouring countries, but rare in the native born, most of these we have seen being French Canadians from the Gaspe peninsula. It is undoubtedly contagious, but not to any great extent, as it is quite common to find only one child affected among a large family.

The diagnosis in the long-standing cases, where the baldness like moth-eaten fur is present, is not difficult. Early cases can

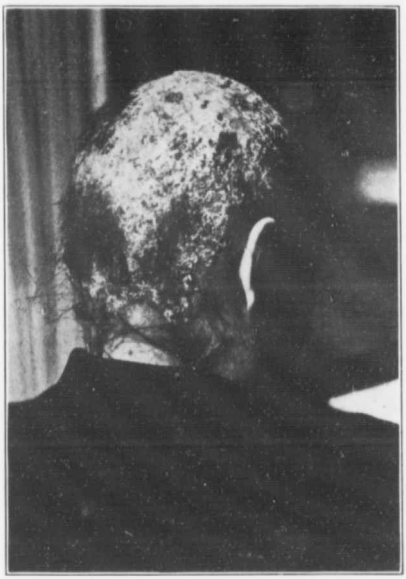


Favus. Shows the saucer-like growth of the fungus and the form of baldness in a very marked case. Three-quarters life size.



Favus. Shows lesions involving the region of the beard and one at the outer canthus. Subject had old chronic patches in the scalp.

be distinguished from ringworm by the adherent character of the sulphur coloured crusts, whose removal causes bleeding, and by microscopical examination of the fungus, which grows in branched filaments much stouter and shorter than in ringworm and with the spores arranged in clusters instead of in chains.

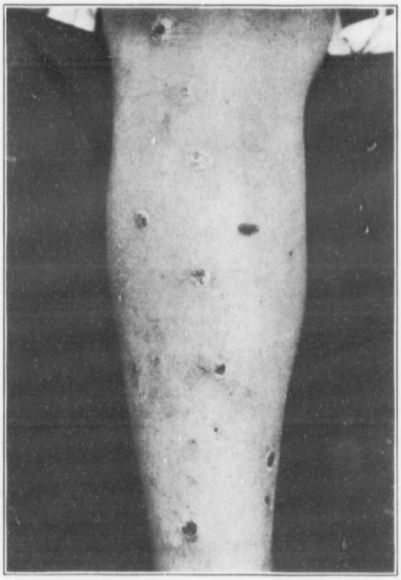


Favus. Severe case involving almost the whole scalp. Subject a French-Canadian girl, aged 19.

The treatment follows much the same lines as in ringworm (which see), removal of the diseased hairs, preferably by X-rays, and strong germicidal applications to the diseased areas daily, preceded by a thorough washing of the part with green soap and water. An ointment consisting of equal parts of carbolic acid, sulphur ointment, and citrine ointment will keep the disease in check and if persistently used for months effect a cure.

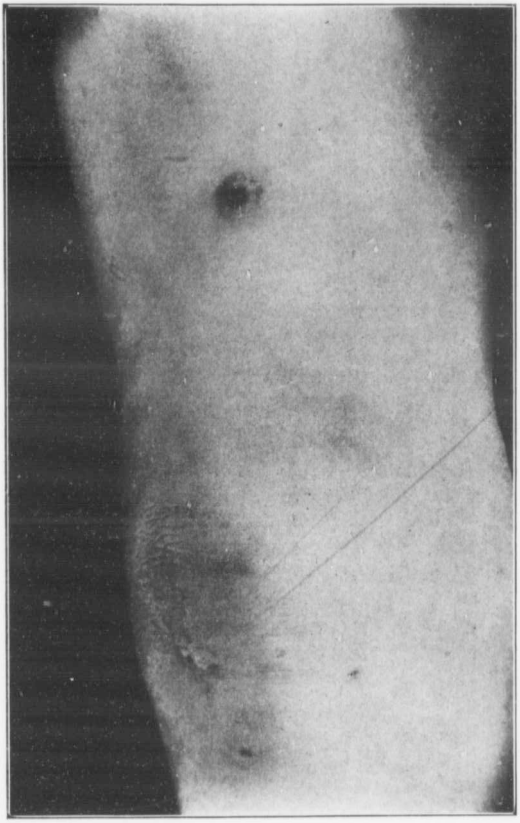
FURUNCULUS

Furunculus, or Boil, hardly needs description, being familiar to every one. It consists of an acute inflammation of the tissues surrounding a hair follicle or sweat duct, resulting in necrosis and pus formation in the centre, and terminating in



Furunculus. Multiple boils on the lower leg of a child aged 7.

rupture and discharge of the necrosed tissues. There is usually more than a single lesion, one boil leading to the production of others in the same neighbourhood through infection of the adjacent hair follicles; and in people of uncleanly habits, more especially in children, furuncles may develop all over the body. The infection is entirely a localized one in spite of the popular opinion that its source lies in the blood. The pain experienced



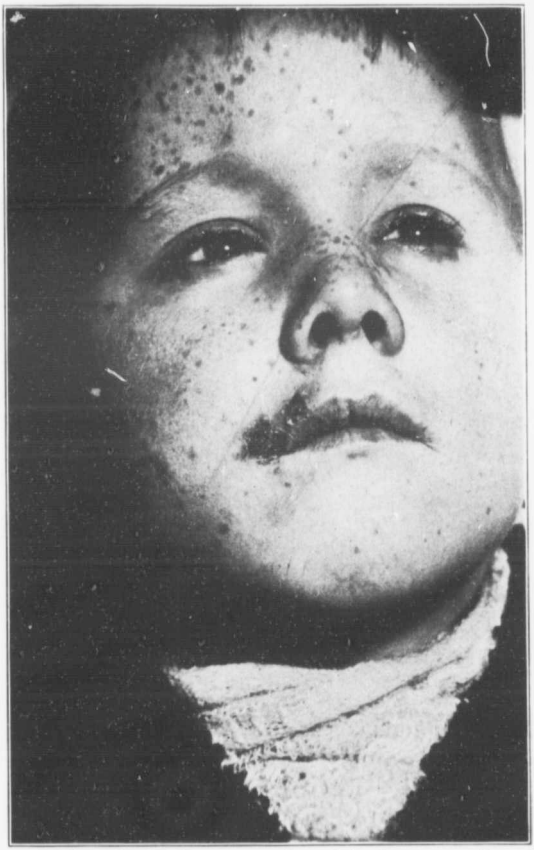
Furunculus. Two small furuncles on the thigh.

varies widely with the situation of the lesion; where there is but little soft tissue overlying the bone, as in the auditory canal, and where the inflamed area is frequently disturbed by muscular contractions, as on the face, the pain is very severe.

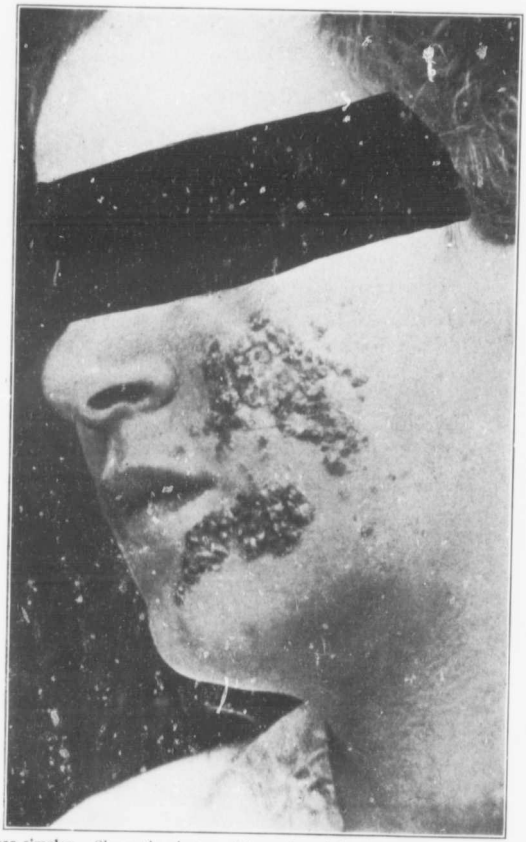
Treatment is to be directed towards alleviating the pain and protecting the patient against accidental autoinoculation. The first indication is met by keeping the inflamed parts at rest as far as possible, and this can be accomplished by covering it with a thick dressing of one of the stiff pastes (Cataplasma kaolini, U. S.), which are applied hot and on cooling act as a splint, providing both protection and immobility. As complete relief from the pain is only obtained after the boil has ruptured, one may attempt to hasten this by hot boracic fomentations, but in our experience very little is gained in this way. The skin surrounding the boil may be protected from infection by smearing it daily with white precipitate ointment before applying the dressing and by carefully disinfecting the part and discharges with some strong antiseptic solution whenever it is handled. Surgical treatment by incision has been losing favour of late years and it certainly adds very appreciably to the painfulness of the disease, does not shorten it, and is apt to produce more noticeable scars. The use of a vaccine made from cultures of staphylococcus pyogenes aureus, the organism most commonly recovered from the pus, has proved of benefit in some cases, but routine treatment in this manner has been disappointing with us. It is worthy of trial, however, in all severe cases, and is more likely to be of service if the vaccine be made from pus obtained from the individual.

HERPES SIMPLEX

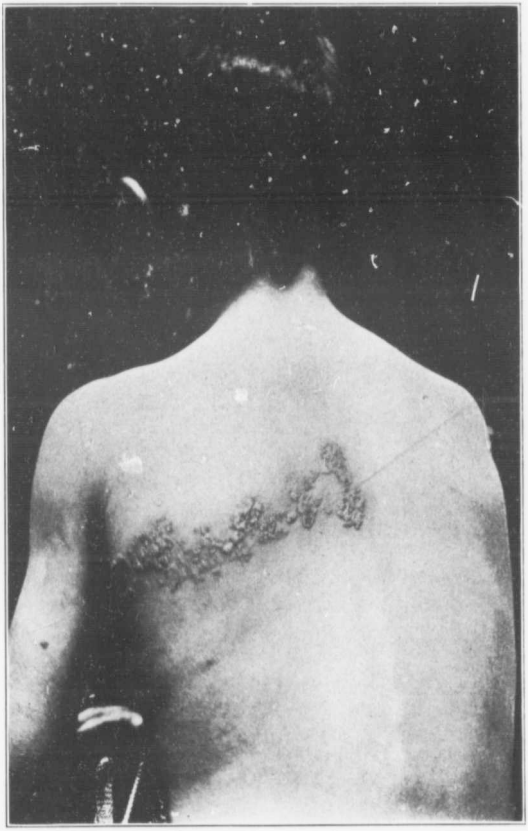
Herpes simplex is an acute inflammatory disease, characterized by an eruption of vesicles about the face or genitals, and usually associated with some disturbance of the general health. The attack begins with a stinging or burning sensation at the points where, within a few hours, groups of tensely filled vesicles appear. These contain a clear serum, later becoming cloudy and generally



Herpes simplex. Showing the commonest form of the disease, one or two groups of vesicles about the mouth, encroaching on the mucous membrane.



Herpes simplex. Shows the clusters of herpetic vesicles, here dried to form yellow crusts.



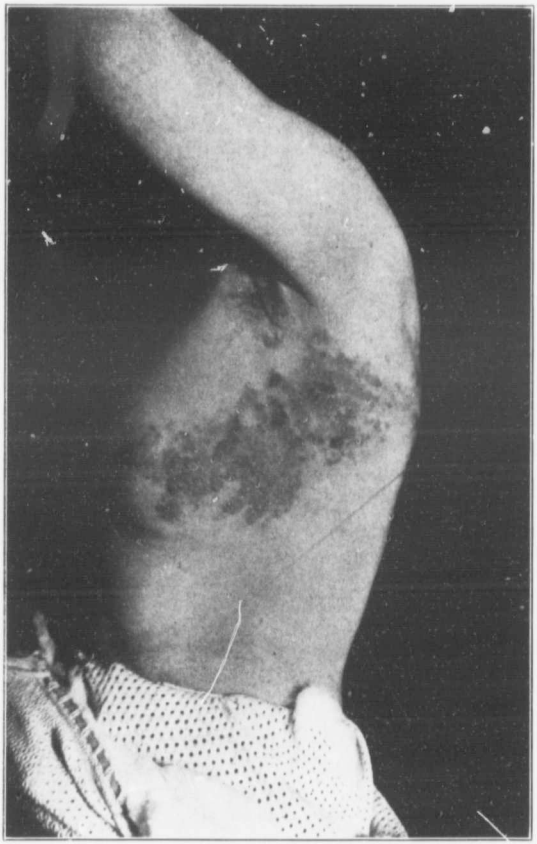
Herpes zoster. Typical case.

escaping to form yellowish crusts, which on falling leave no scars. The lesions are commonly multiple and most frequent about the mouth and nostrils at the junction of the skin and mucous membrane. Many persons are subject to repeated attacks, any slight ailment causing a fresh outbreak, hence the popular name of " cold sores " or " fever blisters." Herpes is a frequent symptom of pneumonia and is seen also in typhoid fever and many of the infectious diseases. Its occurrence on the genitalia is much less common, but here it is also prone to recur in those subject to it, and seems to be induced by sexual excitement. The lesions are smaller, multiple, and occur as single vesicles on an inflamed base. They are liable to be mistaken for chancroid.

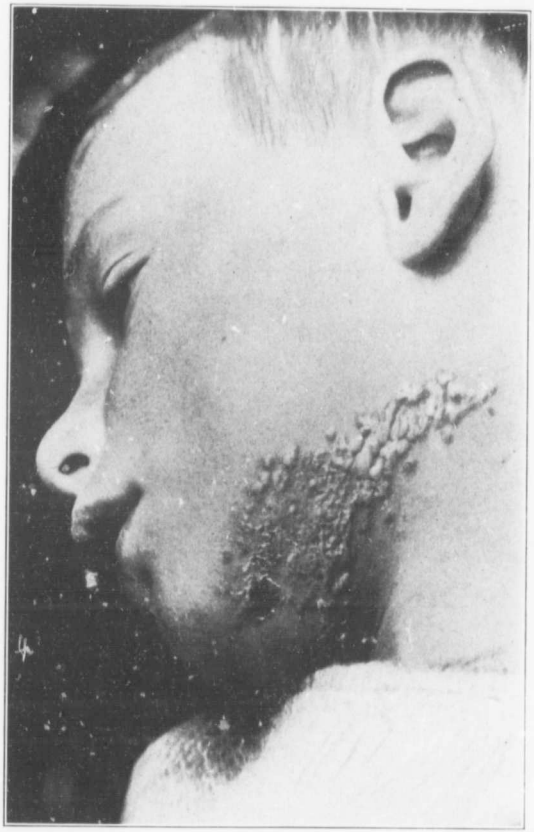
No treatment is required in either of these conditions beyond keeping the part clean and free from accidental infection. One frequently sees an attack of herpes in children followed by impetigo. In some individuals the recurrent attacks can be aborted by taking a saline purge and making frequent local applications of spirits of camphor, when the stinging sensations indicate the onset of a fresh outbreak. In herpes progenitalis cleanliness is of the first importance as a prophylactic, and carbolized vaselin forms a suitable dressing during the attack.

HERPES ZOSTER

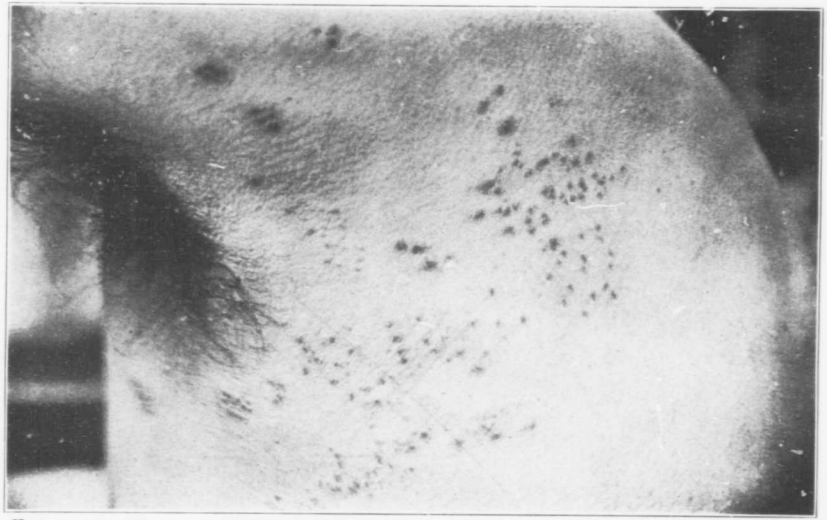
Herpes zoster is the cutaneous manifestation of a neuritis of the sensory nerves of the skin. It involves the whole nerve including the root ganglion, and in many respects closely resembles an infectious disease, one attack generally protecting the individual for life. It is analogous to anterior poliomyelitis, the sensory nerve roots suffering instead of the motor. The onset occurs with neuralgic pain in the affected nerve area accompanied by more or less general malaise. On about the third or fourth day small vesicles appear in groups at points corresponding to the cutaneous distribution of the nerve, and during the next few days these vesicles continue to increase in size and often coalesce. They contain clear serum, occasionally tinged more or less deeply with blood, and show no tendency to rupture. The



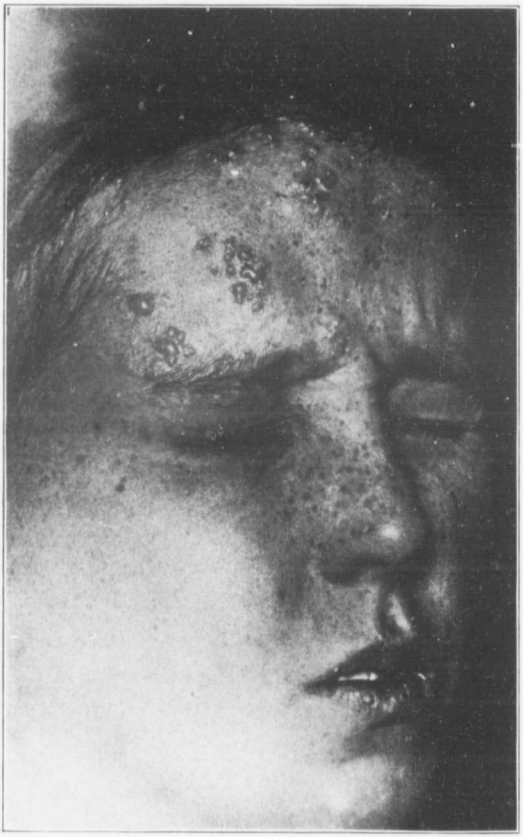
Herpes zoster. Severe type, the back being involved to the same extent.



Herpes zoster. This case was suggestive of herpes simplex, but the presence of other groups of vesicles associated with neuralgic pain determined the diagnosis.

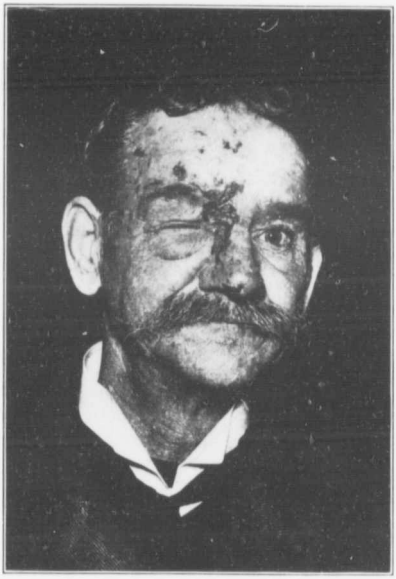


Herpes zoster. This is an unusual picture of the disease, the vesicles being small and not grouped in the usual way.



Herpes zoster. Disease involving the supra-orbital nerve.

neuralgic pain may subside with the appearance of the eruption, but more often it persists, and it may increase in severity. It varies much in intensity, has periodic exacerbations like neuralgic pain generally, and is not in any way proportionate to the extent of the eruption. After about a week, if unruptured, the contents of the vesicles dry and form yellowish crusts which



Herpes zoster. Ulceration following an attack which also involved the cornea.

later drop off without leaving any scar; though occasionally the disease involves the deeper tissues, leading to destructive ulceration, a longer period of healing, and the ultimate production of cicatrices. This very severe form of the disease is more frequently seen when the cranial nerves are involved, and when the supra-orbital is affected ulceration of the cornea is often

present. The disease is almost invariably unilateral, though bilateral instances are sometimes seen.

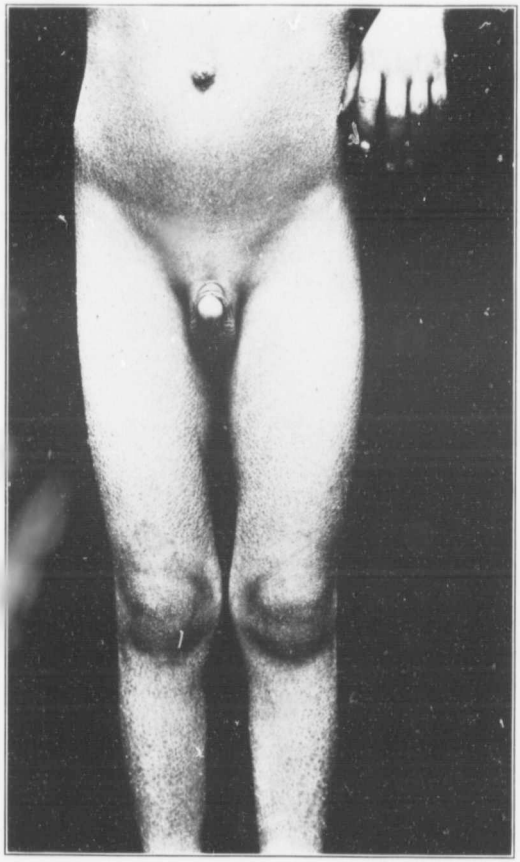
The diagnosis rarely offers any difficulty. The definite distribution of the eruption, corresponding to one or more of the cutaneous nerves, together with the herpetic character of the lesions, is seen in no other disease. When the groups of vesicles are so few in number and so small that their relation to the distribution of one of the cutaneous nerves is not evident, a history of neuralgic pain in the area determines their character.

As the disease runs a definite course, treatment of the eruption is not necessary, unless its situation exposes it to injury or it is of the severe ulcerative type. Protection can be afforded by painting with flexile collodion, but this should be done early in the disease, as it only does harm if the vesicles have already become infected. The pain requires to be relieved and is often severe enough to demand morphia hypodermically.

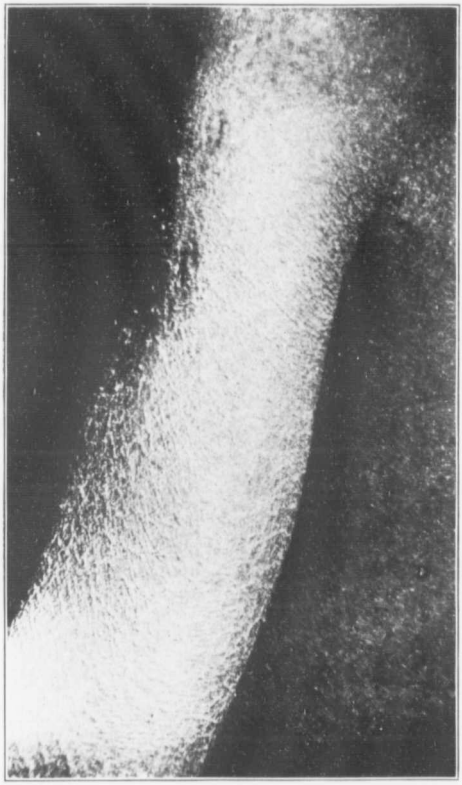
ICHTHYOSIS

Ichthyosis simplex and **Xeroderma** are two degrees of an abnormal condition of the skin which is congenital in origin. In Xeroderma the skin is dry, rough, and harsh, owing to thickening of the corneal layer, which remains adherent instead of exfoliating on the surface as rapidly as it is produced from beneath. Moderate degrees of this condition are extremely common and associated with diminished activity of the sweat glands, persons who never perspire noticeably belonging to this class. Ichthyosis simplex is a more marked example of the same disease, the thickening of the skin being so marked that the natural lines of cleavage are accentuated and the fissures and creases stand out in bold relief. Individuals with this condition form the "alligator skin" attractions of the itinerant shows. Along with the discomfort due to a dry skin and its unsightliness, a xerodermatous individual is more susceptible to ordinary irritating influences, especially in cold weather, and persons suffering from it are unduly susceptible to chapping and eczema.

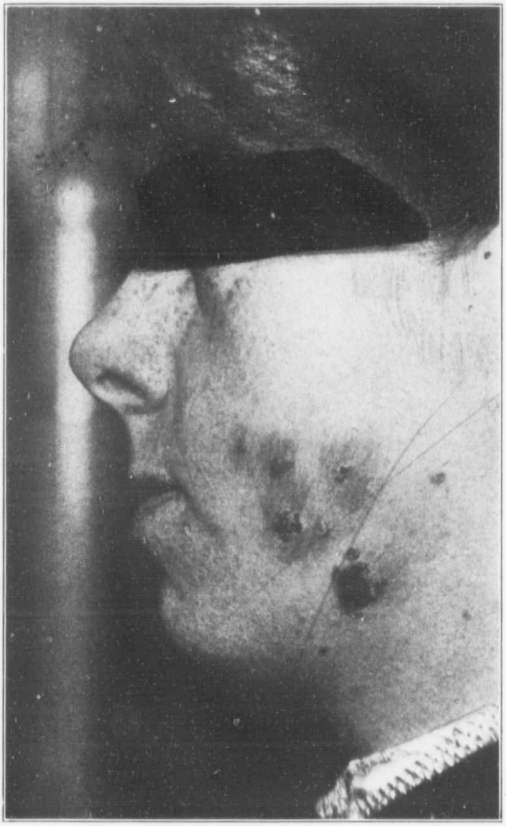
There is a strong hereditary tendency and commonly more than one member of a family is affected.



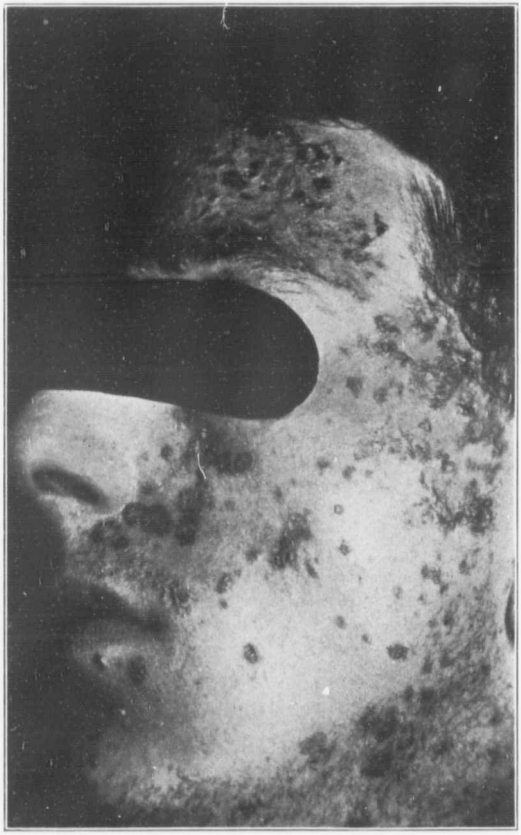
Ichthyosis simplex. Boy, aged 8.



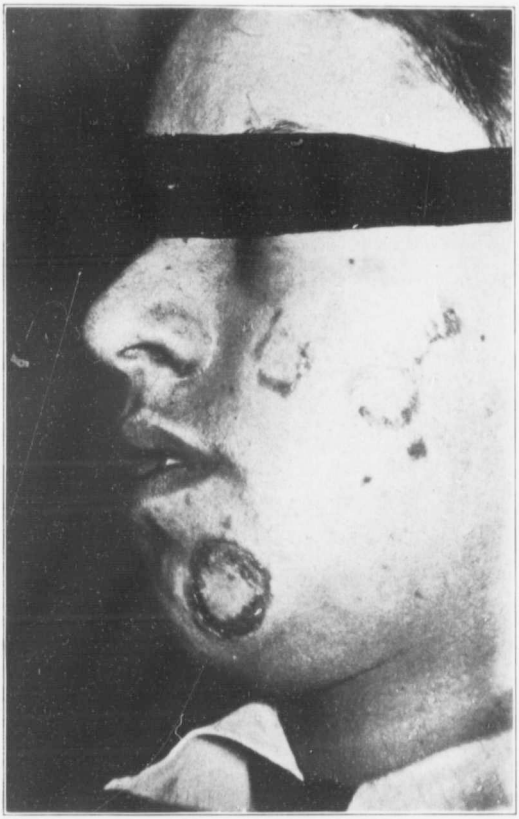
Ichthyosis simplex. Showing detail of the upper arm, three-quarters life size. Same subject.



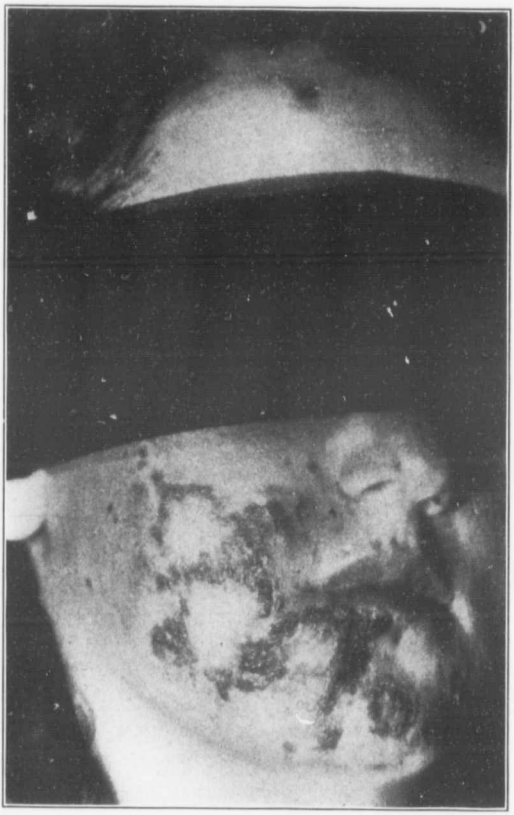
Impetigo contagiosa.



Impetigo contagiosa. This type with numerous small lesions over the face is not uncommon in adults. It responds quickly to treatment.



Impetigo contagiosa. Showing the circinate type, liable to be confused with ringworm.

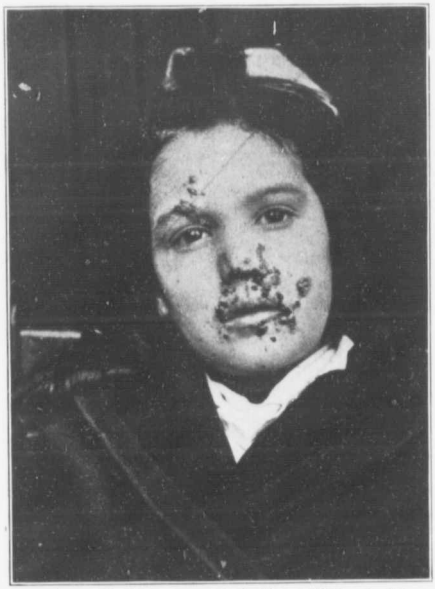


Impetigo contagiosa. Circinate type here affecting the lower part of both sides of the face.

Treatment in mild cases does much to ameliorate the condition, but is useless in cases of ichthyosis. Hot baths with the free use of green soap and scrubbing, followed by an inunction of cocoa butter or any mild oily application will keep the skin soft. Where only the upper arms and thighs are involved we have found the prolonged use of strong brine baths of value.

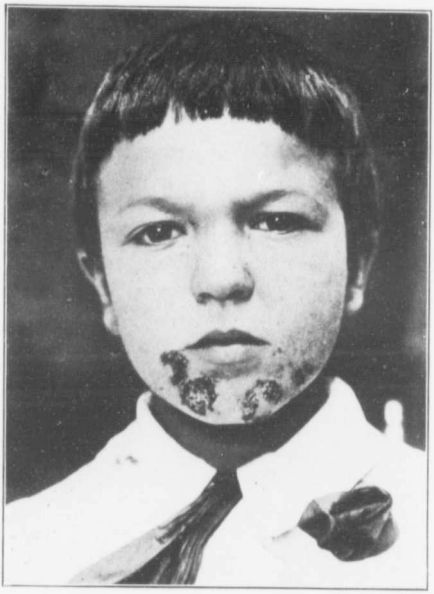
IMPETIGO CONTAGIOSA

Impetigo contagiosa is a localized infection of the skin producing vesicles or pustules, which are auto-inoculable and contagious. The disease begins with the development of one or more vesicles, like herpes, containing a serous fluid which later may



Impetigo contagiosa. Typical case, crusts looking as if they had been stuck on the skin.

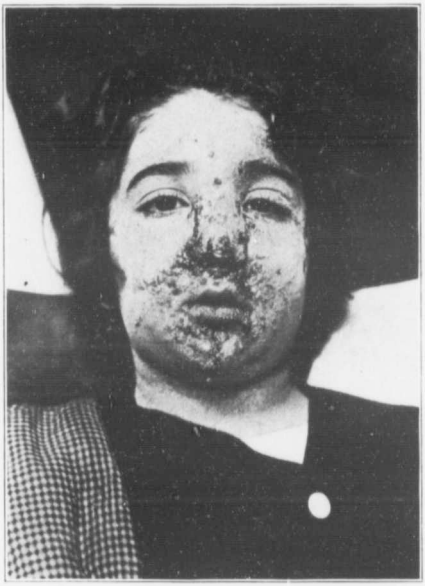
become purulent or sero-purulent, rupture, and form yellowish or greyish-white crusts. There is little or no inflammatory areola surrounding the lesions, which often have the appearance in the crusted stage of being attached to healthy skin. The first lesions are usually about the face or hands, where a scratch or slight injury determines their site, but later they may develop all over



Impetigo contagiosa. Lesions show a tendency towards the ringed form.

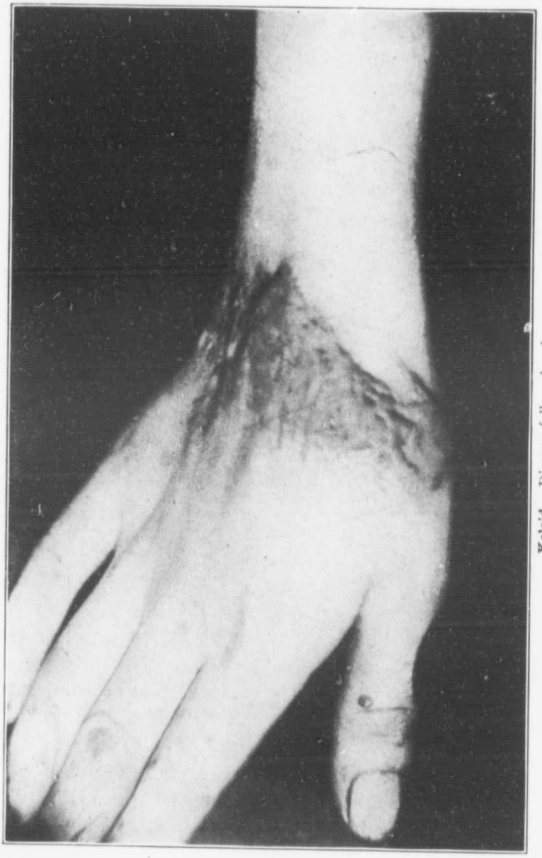
the body, being most numerous on those parts most readily accessible to the hands. Children are much more susceptible to the disease than adults and frequently acquire it by contact, it being quite common to see several members of one family with it at the same time. Besides the common types of the disease there is one occasionally seen in which the lesions assume a circinate or ring form.

The diagnosis is not difficult, the occurrence of groups of vesicles or pustules, with little or no surrounding inflammation, being quite distinctive. Where the number of individual spots is large and they are all nearly of the same size, it may resemble varicella. The distribution of the eruption will help to separate them, impetigo being confined to those parts of the body within



Impetigo contagiosa. Shows a very profuse eruption which appeared first on the upper lip.

reach of the hands, while varicella is more evenly distributed and lesions are seen also on the mucous membranes. It is often impossible to decide between herpes simplex and impetigo in lesions seen about the mouth in children; many, originally herpetic in origin, become infected and give rise to a crop of impetigo lesions while the initial sore is still present.



Keloid. Disease followed a burn.

Treatment is most satisfactory and a cure is readily effected. Before applications are made, old crusts should be softened with oil or warm water and removed, and vesicles and pustules broken and the contents wiped away; unguentum hydrargyri ammoniati is then smeared over the denuded surface several times a day. If new lesions are treated in a similar manner as soon as they appear, a cure can be obtained in a week or ten days. In children under two years of age the full strength of the ointment is unsafe and it requires to be diluted one-half.

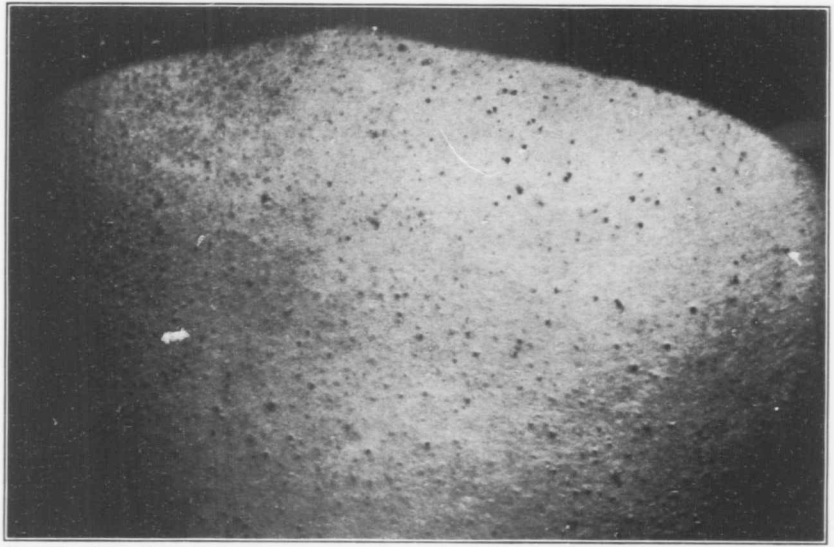
KELOID

Keloid is an exuberant growth of cicatricial tissue usually appearing in the scars resulting from surgical operations, burns, etc., but occasionally arising without any major injury, sufficient to produce cicatrices, having preceded it. The growth is of a dull red colour, forms irregular welts and nodules, is extremely disfiguring, and may extend wide of the original injury. Some individuals show a strong tendency to the production of keloid after wounds of any description and often there is a family or hereditary vulnerability. When the growth is linear in shape following the line of a surgical incision, in many cases as the tissue contracts it diminishes so considerably in size as ultimately to become scarcely noticeable.

Removal of the growth by surgical means is usually followed by its reappearance in a more prominent form, even when every precaution is taken to allay irritation in the healing wound. We have had excellent results from the use of liquid air, taking great care to limit the freezing to the actual growth and only attacking small portions at a time.

KERATOSIS PILARIS

Keratosis pilaris belongs to the class of hypertrophies, the overgrowth being limited to the orifices of the pilosebaceous ducts. Though it does not occur until some time after birth, it is probably not inflammatory, but due to some congenital defect

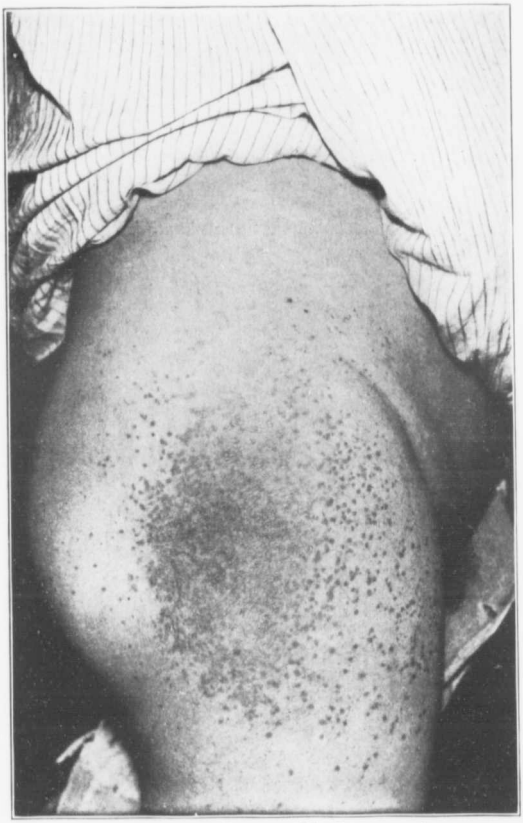


Keratosis pilaris. Shows the horny excrescences at the mouths of the hair follicles, producing the nutmeg-grater effect.

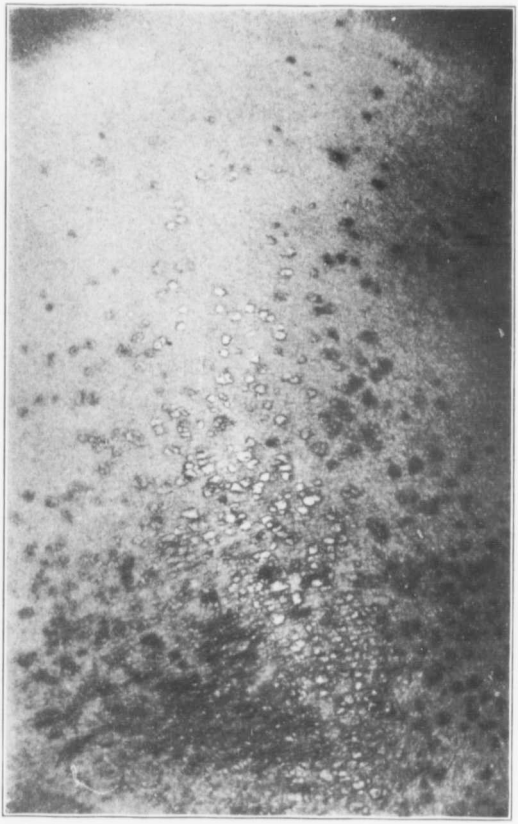
in which the normal exfoliation of the horny cells does not take place and they remain adherent to the mouths of the hair follicles, forming small horny excrescences and giving the skin the feel of a nutmeg grater. A slight degree of this condition is extremely common on the extensor surfaces of the upper arms and thighs, but occasionally the condition is very marked and seen all over the body except the face, hands, and feet. In these severe cases the small hard masses at the mouths of the follicles often become black in colour and occasionally seal the orifices of the hair ducts, causing the hair to curl up in the upper part of the follicle and cause slight irritation, evidenced by the formation of a small, red, inflammatory papule. The condition requires to be distinguished from ichthyosis simplex and xeroderma, where the whole of the skin and not only that at the mouths of the follicles is involved. The horny masses can be softened by an ointment containing 15 grains of salicylic acid to the ounce of vaseline, and warm baths with plenty of soap gets rid of them. The improvement, however, is only temporary and the treatment requires to be repeated at short intervals to keep the skin soft.

LICHEN PLANUS

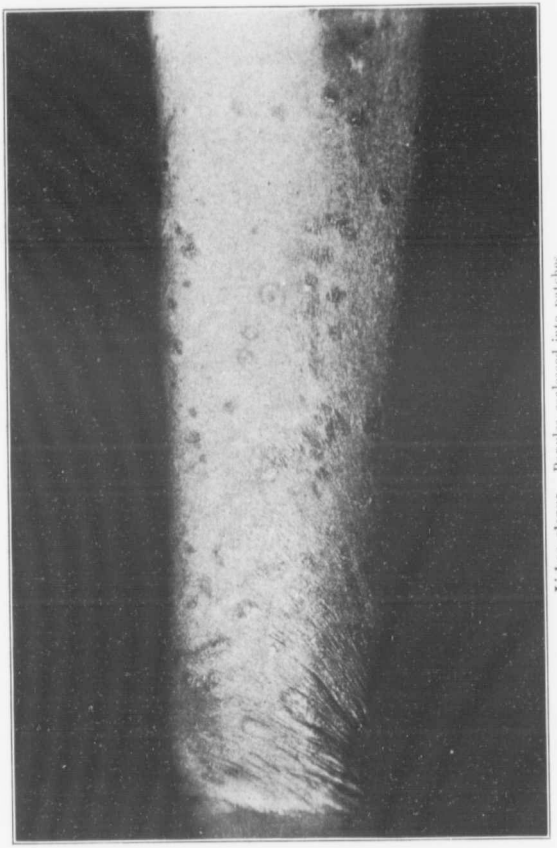
Lichen planus is a chronic, inflammatory disease of the skin in which the characteristic lesion is a smooth, flat-topped, angular papule of a deep red to a reddish-purple colour. The angular papules are arranged in groups and tend to merge, as they increase in size, into flat plaques, which in old lesions are covered with fine, grey scales. When seen in oblique illumination, the smooth, shiny surface of the papules reflects the light like a mirror. The disease usually appears first on the wrists and thighs and may remain limited to these regions but often it spreads widely to finally cover almost the whole surface of the body. There is but little tendency to spontaneous cure and many cases last indefinitely, showing but little change. Occasionally the papules increase in size to such an extent that they become wart-like growths, a form of the disease known as Lichen planus hypertrophicus, commonly seen on the lower legs only. Pigmen-



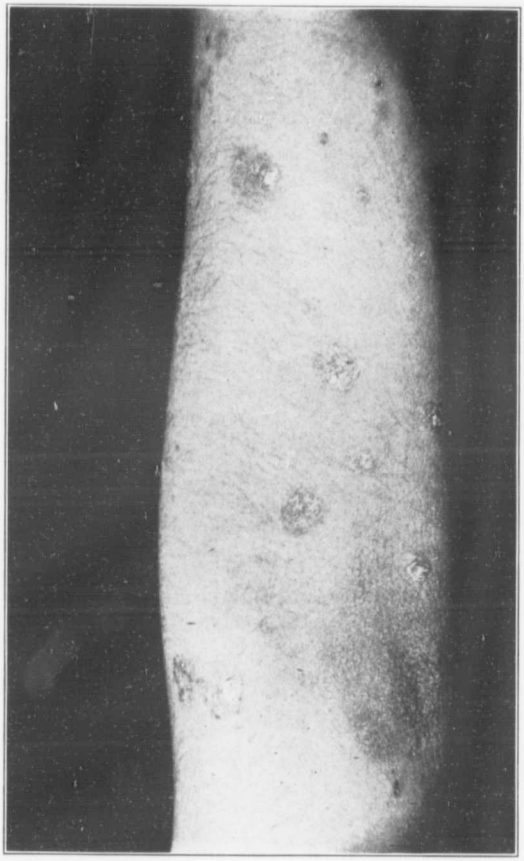
Lichen planus. Early stage with discrete papules.



Lichen planus. Detail of the last picture, three-quarters life size. Note the angular shape of the papules, the flat tops of which have reflected the light in the centre of the picture.



Lichen planus. Papules coalesced into patches

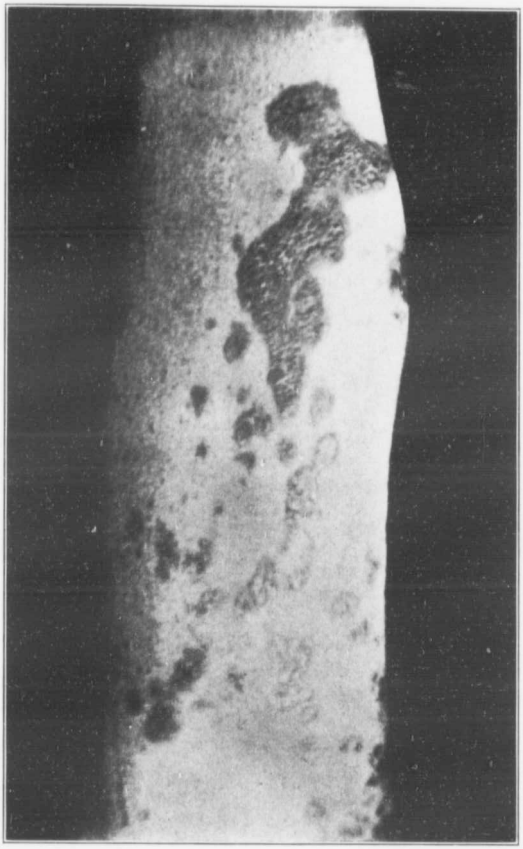


Lichen planus. Patches covered with grey scales somewhat resembling psoriasis

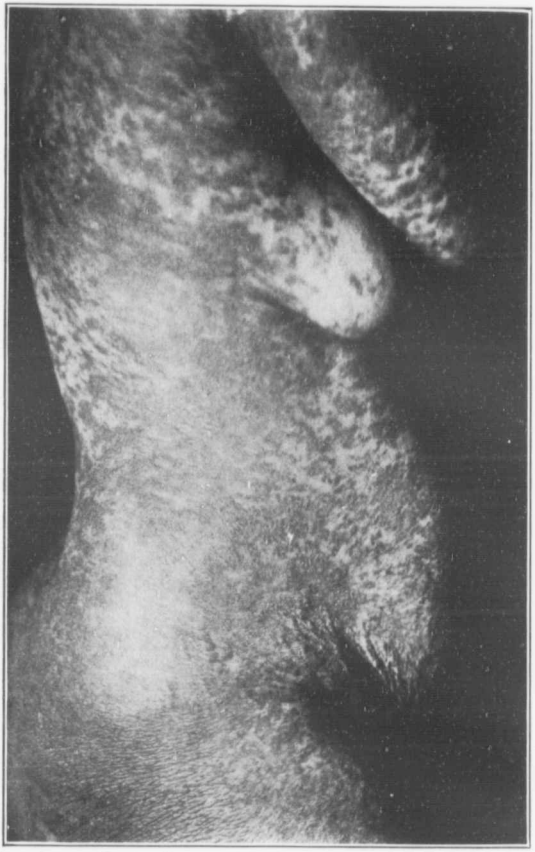
tation of a variable degree is always present and remains long after the disappearance of the active lesions. Subjectively, the disease may cause no symptoms, but in the majority it gives rise to the most intense itching, and attempts to relieve this by scratching often result in altering the appearance of the eruption, excoriations, blood crusts, and infected sores being seen in addition to the lesions already described.

The diagnosis in cases of recent development, where one can see the shiny angular papules almost purple in colour, is not difficult. Old chronic cases somewhat resemble psoriasis, but a careful inspection will reveal the characteristic papules somewhere, and the scaliness is never so profuse as in psoriasis. A secondary syphilide resembling lichen planus, similarly, will only cause confusion if dependence is placed upon the appearance of the disease as a whole, rather than upon the character of the individual lesions.

For internal treatment, arsenic pushed to the limit of tolerance has long been regarded as the best remedy. It should always be given a thorough trial by persisting in its administration for some weeks, using either arsenious acid in pill form or Fowler's solution. Of the two we prefer the latter, liquor arsenicalis, because of the ease with which the dose can be increased from day to day. A mixture containing equal parts of liquor arsenicalis and compound tincture of cardamoms is given the patient, with directions to take five drops after meals in water the first day, and to increase the dose one drop each succeeding day until the limit of tolerance, evidenced by nausea, suffusion about the eyes, etc., is reached, when the dose is reduced to five minims again and then gradually increased in the same manner. If arsenic fails to influence the disease, mercury should be tried, and grey powder in the form of Hutchison's pill (hydrargyrum cum creta, one grain, with pulveris ipecac compound, one-fifth grain) has proved very serviceable in our experience. Most persons can take from three to six pills daily without untoward effects, provided special care is taken of the gums and teeth. Locally an attempt should be made to control the itching, and a lotion containing one or two drachms of liquor carbonis detergens to the



Lichen planus. Hypertrophic variety on the lower leg. Lesions are of considerable elevation and often resemble warts.

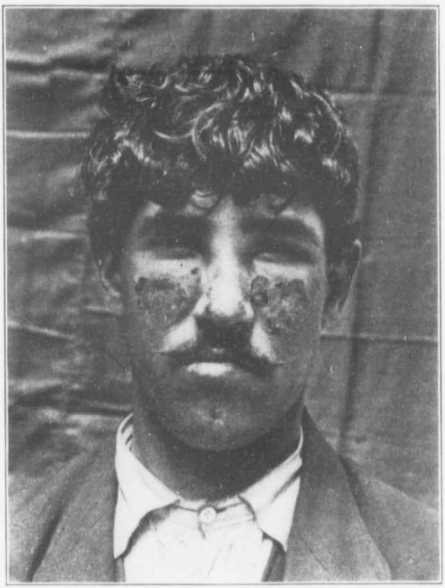


Lichen planus. Showing the general distribution with marked pigmentation in a severe case.

pint of water can be used freely without ill effects, but unfortunately its sedative power is of short duration.

LUPUS ERYTHEMATOSUS

Lupus erythematosus is a small-celled infiltration of the skin tending to produce induration and atrophy and, rarely, slight hypertrophy. Its common situation is about the head and



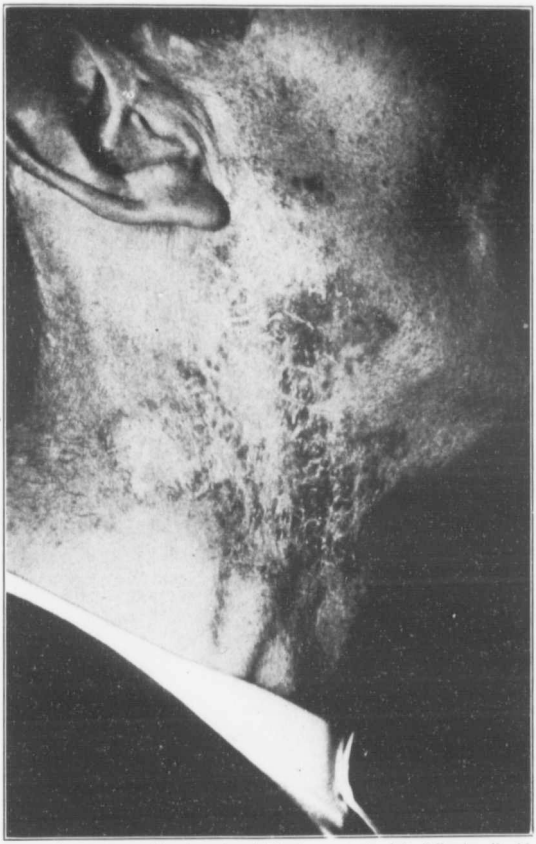
Lupus erythematosus. Showing the typical bats-wing or butterfly shape.

face, especially on the upper portion of the cheeks and across the bridge of the nose, which has given rise to the name of Butterfly or Bats-wing lupus. It occasions no constitutional or subjective symptoms and is seen in early adult or middle life. The patches of disease are first noticeable as reddened, indurated

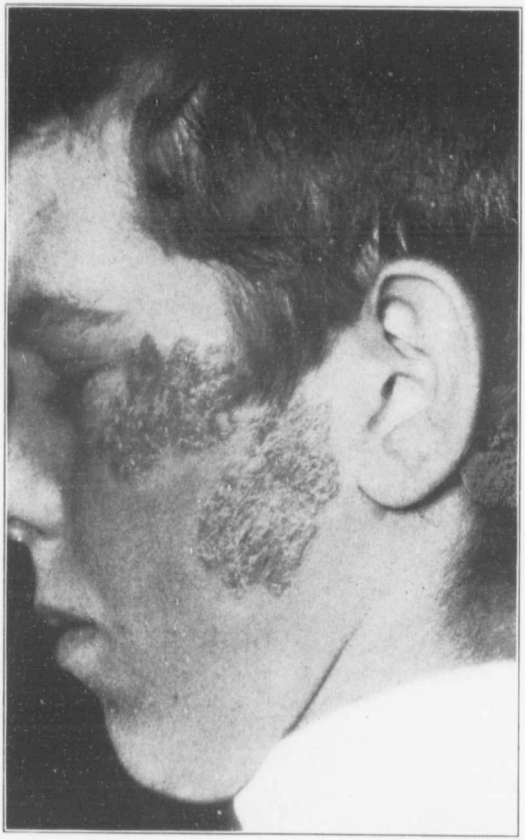
areas with a slightly raised, sharply defined border and showing a few firmly adherent greyish scales, especially in the central portion. The disease slowly extends at the periphery, often taking years to reach the size of a fifty-cent piece, while the central portion either remains active or healing takes place with the formation of thin, pliable cicatricial tissue, almost indistin-

Lupus erythematosus. Showing unilateral disease. This patient returned to the clinic after two years, when the area involved had increased about one-third in size.

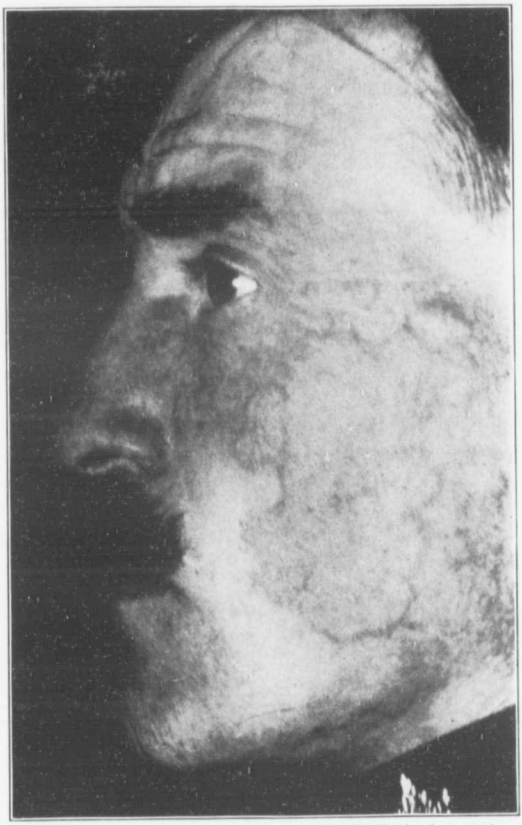
guishable from normal skin. While at first there is commonly more than one focus of disease, these may come to form a single patch by coalescence. On the face and head the disease is usually more or less symmetrical, the common situations on the scalp being back of the ears and at the nape of the neck; rarely other portions of the body are attacked, but in such cases



Lupus erythematosus. Showing cicatricial tissue at the left, following liquid air treatment, which ultimately arrested its progress entirely.



Lupus erythematosus. Case occurring at the unusual age of 12 years.

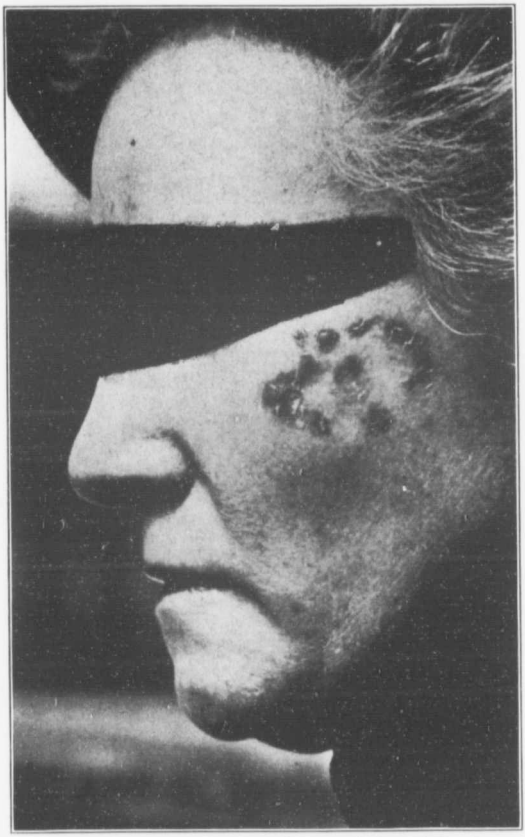


Lupus erythematosus. Unusual case, symmetrical in distribution but starting from twenty or more different foci which later coalesced.

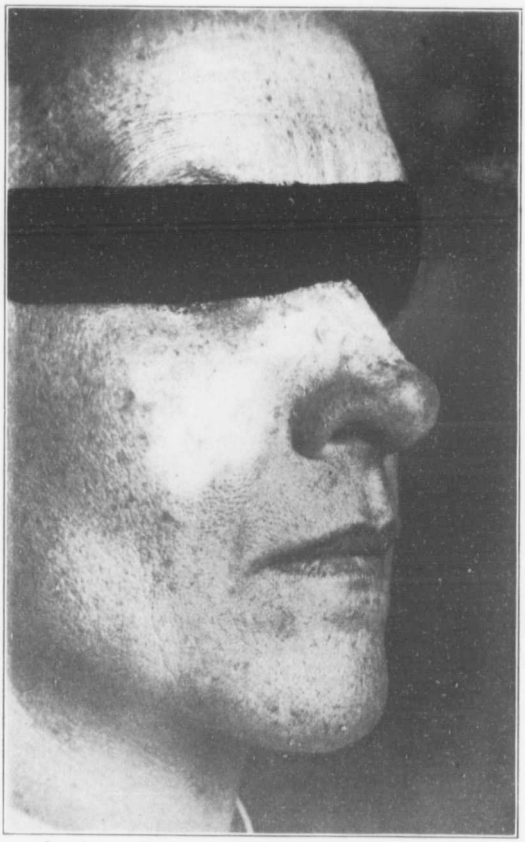
lesions are also found on the head. Besides the common form already described there is a hypertrophic form with the formation of nodules, and a disseminated form, both of which are rare.

The diagnosis is suggested at a glance in the bats-wing type of the disease. In other cases the age of the patient, the sharply defined borders of the diseased areas with their slow growth, absence of ulceration, and atrophic centres are depended upon to determine their nature. Lupus vulgaris and an ulcerating tertiary syphilide are the only diseases likely to be confused with it. Lupus vulgaris shows, in place of the firm smooth border, nodules of soft tissue and much greater destruction of the underlying parts with thick dense scars; and it is a disease commencing much earlier in life. Tertiary syphilis may closely resemble lupus erythematosus, but in such cases, provided no history is obtainable as a help, the rate of progress will decide between them. A syphilitic lesion will cover as much surface in a month as lupus will in a year.

Untreated, the disease lasts indefinitely; even with persistent treatment it is most difficult to cure. Acting on the supposition, as yet unproved, that it is a form of tuberculous infection, the general well-being of the patient should always receive attention, and general tonics, cod liver oil, and hygienic measures be prescribed, if this is found below par. Locally, nothing in our experience can compare with freezing by liquid air. It is applied with swabs of absorbent cotton on wooden holders, as a metal applicator makes too good a conductor for the intense cold. A fairly large swab dipped in the air is brushed backwards and forwards over the part to be treated without exercising much pressure until the surface is frozen white to about the thickness of stiff parchment, as too much pressure results in deeper freezing and the production of unsightly scars. There is usually only slight reaction but occasionally blisters will form. Within a couple of weeks the effect produced can be estimated and the applications repeated until the disease is eradicated. In large areas the advancing margin should be attacked first. Carbon dioxide snow can be used in a similar manner but it is not as easy of



Lupus erythematosus. Showing rather unusual shape of the area.



Lupus erythematosus. Showing the smooth white cicatrix following treatment by liquid air. Several small portions on the nose still show active disease.

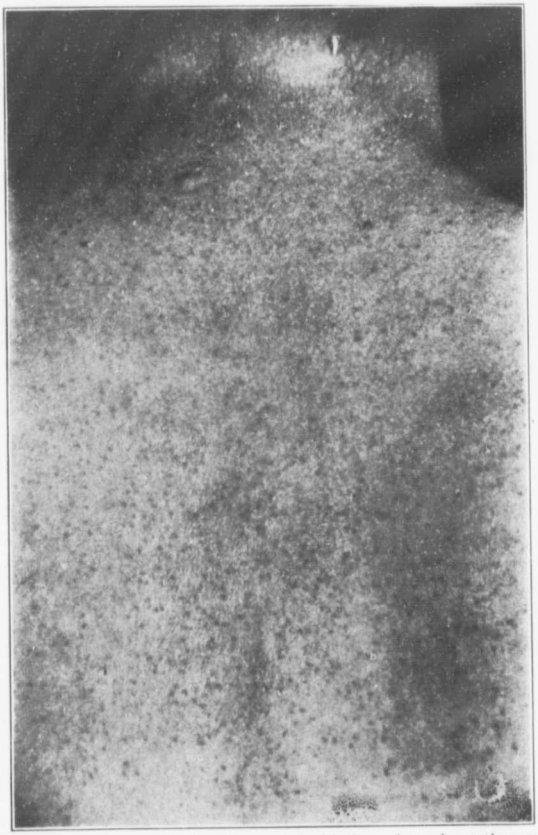
manipulation. Failing this method, mild caustic applications can be made with equal parts of carbolic acid and glycerine painted on once a day, or a lotion composed of resorcin 1½, zinc sulphate and potassium sulphuret *aa* 2½ drachms, with water to make up 6 ounces, can be used in a similar way. Scrubbing the part with spirits of green soap (sapo viridis 2 parts, alcohol 1 part) is a time-honoured remedy. Salicylic acid in the form of an ointment or dissolved in collodion, 20 to 60 grains to the ounce, also answers well. In making use of these remedies the frequency of application must be governed by the amount of inflammatory reaction they induce. Exposure to the Rœntgen rays has not devorp of much value in our experience.

MILIARIA

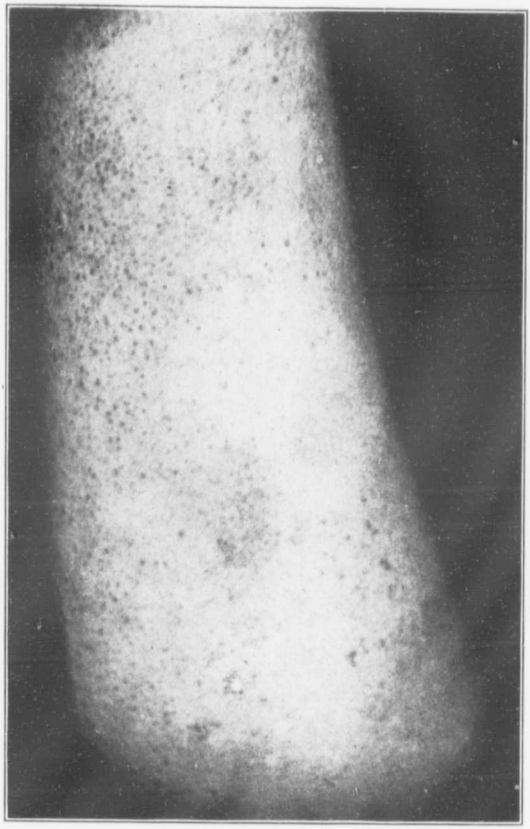
Miliaria, commonly known as Prickly Heat or Flannel Rash, is an acute inflammatory disease produced by excessive sweating. It is met with at any time of year, but is more commonly seen in the summer time in those who are overclad, and at all times in those whose occupation exposes them to excessive heat. Children and young infants form a large proportion of the cases, as they perspire more readily than adults.

The lesions consist of small, bright red papules or papulovesicles corresponding to the orifices of the sudiparous ducts. On its first appearance the inflammation is limited to the mouths of the ducts, and the intervening skin is unaffected, but it usually extends and renders the whole surface of a uniform, red colour, on which the papules stand out. The eruption usually covers a large part of the surface of the body but is apt to be more marked on the front and back of the upper part of the trunk. It lasts from a few days to a couple of weeks, and produces no symptoms but a sense of burning or tingling.

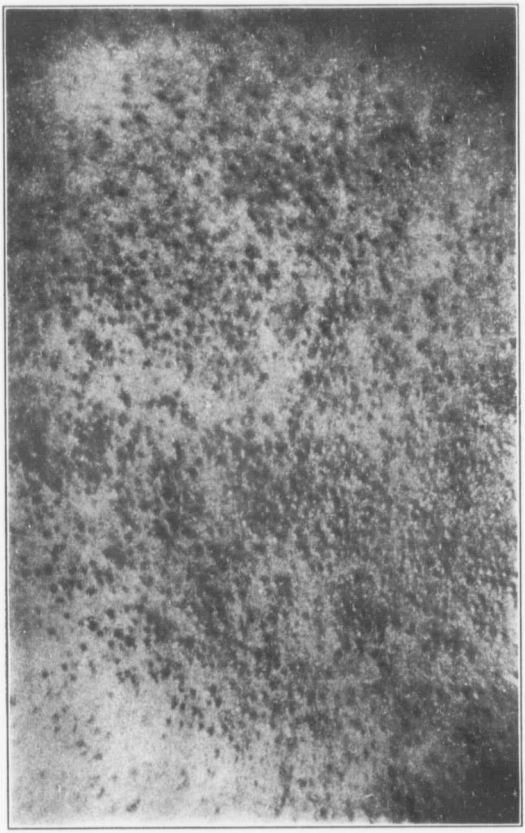
The diagnosis is usually suggested by the conditions under which it occurs. In children it may at times give rise to a suspicion of scarlet fever, but the absence of the other symptoms, especially of the characteristic sore throat, will clear up the point. Papular eczema, unlike miliaria, is extremely itchy, and rarely covers a large surface; moreover, it develops more slowly.



Miliaria. Area between the shoulders spotted with tiny red papules at the mouths of the sweat ducts.



Miliaria. Thigh of a child, showing the discrete papules.



Miliaria. Detail, three-quarters life size, of a vesico-papular eruption developing after profuse sweating.

Miliaria crystallina. Sudamina on the abdomen of a case of typhoid fever, third week of the disease.

Treatment is rarely necessary. Cooling lotions, such as liquor plumbi evaporans, or a dusting powder containing one part of salicylic acid to fifty of boric acid, may be used. The patient's attention should be drawn to the cause, so that further attacks may be avoided.

MILIARIA CRYSTALLINA

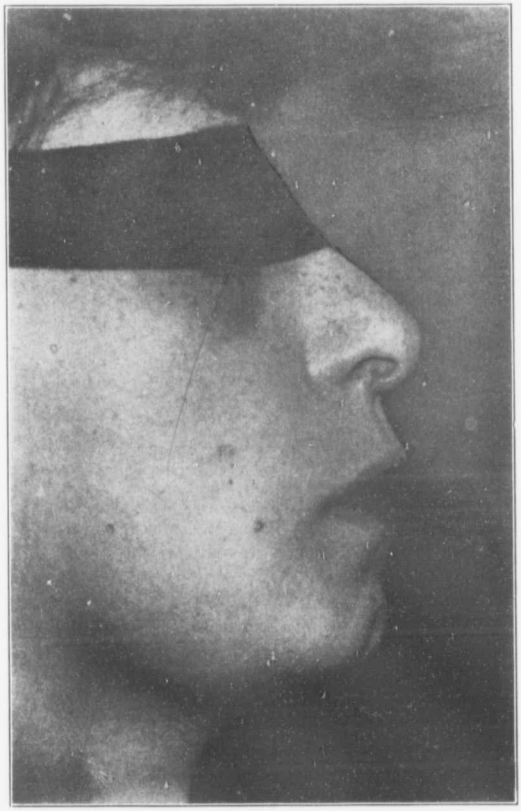
Miliaria crystallina, or Sudamina, is a non-inflammatory affection of the sweat ducts in which the perspiration collects in small, thin-walled vesicles looking like drops of water. It is commonly seen in febrile diseases in which there are periods of profuse sweating alternating with a dry skin, such as acute rheumatism and typhoid fever, where it is most frequently found on the abdomen and front of the thorax. It occasions no discomfort and requires no treatment.

MILIUM

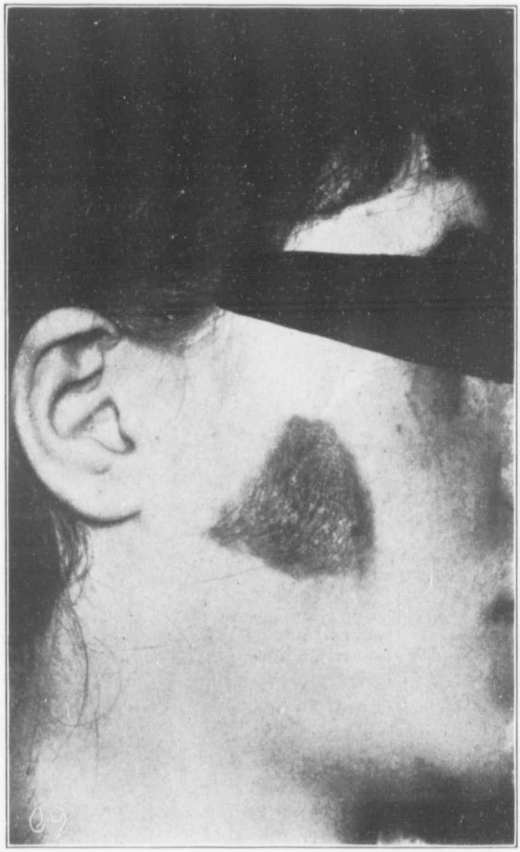
Milium is a non-inflammatory, small, cyst-like collection of sebaceous material which occurs on the face and especially about the eyes in adults. The lesions are pinhead in size, white or yellowish in colour and occasion no symptoms, though their removal is often demanded for the cosmetic effect. This can be easily accomplished by puncturing the skin over the small growths with a needle and expressing the contents with a comedo extractor.

NÆVUS

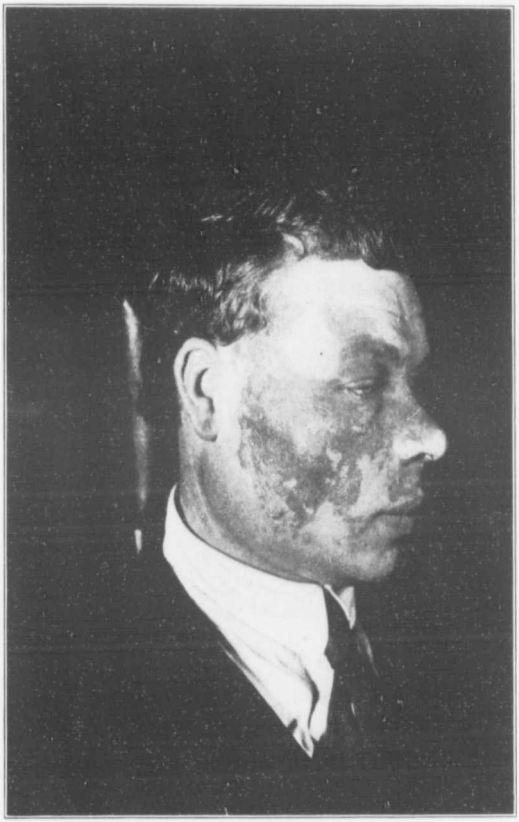
Nævus, or Mole, is a benign new growth of the skin and its appendages or of the blood vessels and is usually congenital in origin. **Nævus pigmentosus** is a circumscribed increase in the cutaneous pigment occurring either in the otherwise normal skin, or associated with an overgrowth of the epithelium, which produces a wart-like mass, **Nævus verrucosus**. The pigmented smooth form is quite common and may be limited to a few small stains, or there may be hundreds scattered over the body. In



Milium. The tiny white tumours can be seen, two near the eye and several on the cheek.



Nævus. Form Pigmentosus et Pilosus, deep brown in colour and covered with coarse hairs.



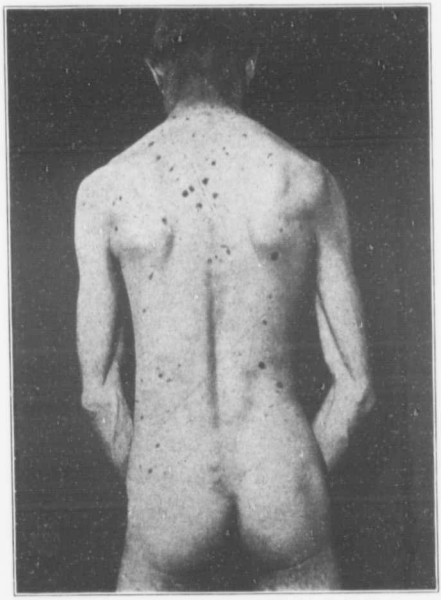
Nævus. Vascularis et Pigmentosus. The stain was brown in colour but pressure showed considerable vascularity as well.

many cases associated with increased pigment, and in a few without any alteration in colour, there is a copious growth of coarse hair, **Nævus pilosus**. **Nævus vascularis** is an aberrant growth of vascular tissue, consisting either of dilated capillaries in the skin, giving to the part a deep red or purplish colour, the "port wine stain"; or of a collection of dilated and large blood

Nævus. Vascularis, port wine stain.

vessels producing tumours of various sizes from a pea to half an orange, many of them with an uneven nodular surface. The vascular nature of these growths is readily demonstrated by the ease with which they are emptied of their contents by pressure made with a microscope slide over them; but in some cases, especially in the port wine stains, there is found also an increase in pigment associated with the increased vascularity. These

nævi are much more common about the head and face and moderate degrees are seen in a large percentage of infants at birth, the favourite situations being about the root of the nose and the margins of the hair in the occipital region. They are of a slightly deeper colour than the surrounding skin, becoming bright or dark red when the child cries or strains, and though they rarely last

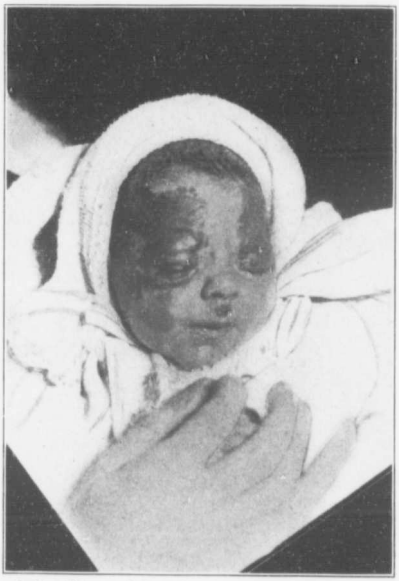


Nævus. Pigmentosus. The spots were almost black in colour and were distributed also over the front of the trunk.

more than a few months, and gradually fade out, occasionally the colour deepens and they increase in size. The raised tumour forms never disappear spontaneously and usually increase in size. Acquired, localized enlargement of blood vessels seen in adult life as well as among the young are known as **Telangiectases.**

They begin as small, round, purplish red, slightly raised spots often with dilated blood vessels running into them like the spokes of a wheel, the "spider nævi," and they are commonly associated with some systemic disease.

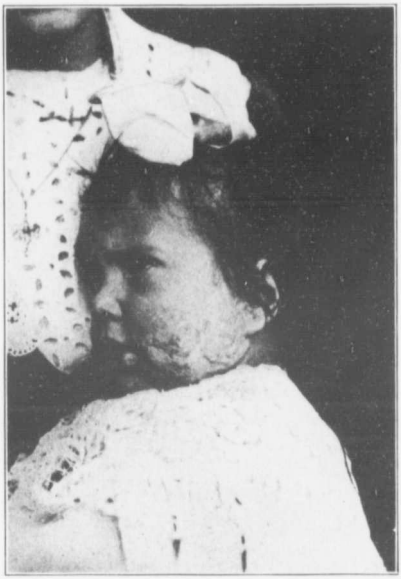
The treatment of port wine stains, especially if they are large or are pigmented as well as vascular, is most unsatisfactory,



Nævus. Vascularis. The nævi formed quite prominent tumours over both eyes, involving the upper lids.

though attempts have been made to remove the disfigurement by X-rays, electrolysis, freezing by carbon dioxide or liquid air, and radium. The smaller forms of vascular tumours are successfully dealt with by freezing the surface with liquid air or carbon dioxide, the resulting scar tissue in the course of a year or eighteen months contracting sufficiently to obliterate

the blood vessels underneath, but the treatment should be begun as early as possible in order to forestall growth. The larger tumours should be excised by the surgeon, as in many of them the blood supply comes from a large vessel.



Nævus. Vascularis. Both sides of the lower part of the face and the chin including the lower lip were involved. After a year's treatment with liquid air the larger part of the nævus was obliterated by the cicatrices as seen.

PEDICULOSIS

Three species of lice are parasitic on the human body. **Pediculus capitis**, the head louse, is mostly confined to the hair of the scalp but occasionally invades the eyebrows. The female attaches her eggs (nits) to the hair close to the scalp by a glue-like substance, which resists the action of soap and water and makes ordinary washing ineffectual. The young hatch out in a

couple of days and the small bell-shaped nits remain indefinitely as empty shells, looking like small particles of dandruff. As the hair grows and the empty nit is carried farther from the surface of the scalp, new ones are added, until it is often possible to count as many as a dozen or more on one hair, and thus the duration of the disease may be computed by the number of the nits and the distance of the outermost one from the head. Itching of considerable degree is caused by the attacks of the pediculi on the skin, and though the lesions which the insect is capable of producing are not severe enough to cause any visible break in the skin, the injuries made by the nails in scratching, and accidental infection of these, leads to considerable enlargement of the suboccipital and occasionally of more remote glands in the neck. The pediculi are most numerous in the hair of the occipital region and are easily seen, especially in children, who are the most frequent sufferers from the disease, though no age is exempt.

As a destructive agent to both the lice and the living ova, nothing is better than kerosene oil and, as it also is a solvent of the chitinous substance which fastens the nits to the hair, it aids in their removal. The hair should be thoroughly soaked in the oil for twelve hours and then washed in warm water with plenty of soap. The oil rarely causes any irritation but it is better to dilute it one-half with olive oil for young children. After the lice are destroyed, unguentum hydrargyri ammoniatum serves as a good application to any infected sores which may be present.

The body louse, **pediculus corporis** or **vestimentorum**, has its habitat on the trunk and rarely travels to the head or extremities, unless present in very large numbers. The back between the shoulders is its favourite home on account of the warmth and freedom from disturbance. The ova are attached to the hairs of the clothing and are found, along with the parasite itself, by examining the inside of the undershirt, especially in the seams and rolled-over edges of the cloth. Itching is the only symptom, and often the only evidence of the presence of the lice is the scratch marks inflicted by the finger nails in the attempt to relieve it, though in long standing cases of the disease pigmentation in the form of small, irregular, brown patches does occur.

Pediculosis. Capitis, showing enormous numbers of nits on the hair, which had been cut away by the mother at one point to get at an infected sore.

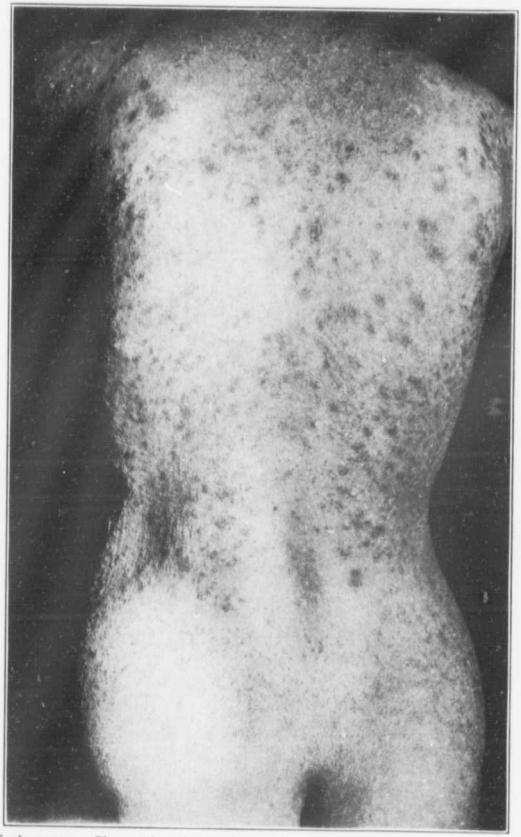
The diagnosis is only in doubt when the patient has donned clean underclothing just before consulting the physician, making it difficult to obtain evidences of the parasite. Scabies can generally be excluded as it does not affect the back until it has been present for some months on the arms and anterior surface of the body and has covered a large extent of surface.

Sulphur ointment destroys the pediculi, but unless the clothing is changed, or the vermin and eggs present on it killed, its use is only palliative. All clothing that will bear it should be boiled and woolen garments exposed to dry heat by baking in a hot oven.

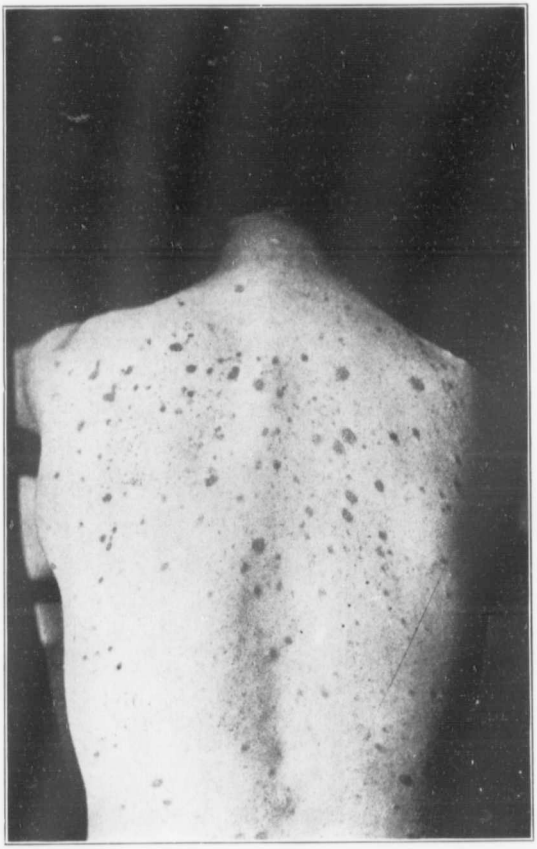
The crab louse, **pediculus pubis**, lives in the hair about the genitals, sometimes wandering to the axillary hair and eyebrows and occasionally to the scalp. As its name implies, this louse is provided with two prehensile claws resembling those of a crab by means of which it clings to the pubic hair and is very difficult to dislodge. The ova are attached to the hairs of the pubic region. Infection occurs by contact and is commonly associated with venereal disease for obvious reasons. It gives rise to intolerable itching. Blue ointment, unguentum hydrargyri, is the time honoured remedy, and is most effectual, though in some individuals it produces an acute dermatitis.

PITYRIASIS ROSEA

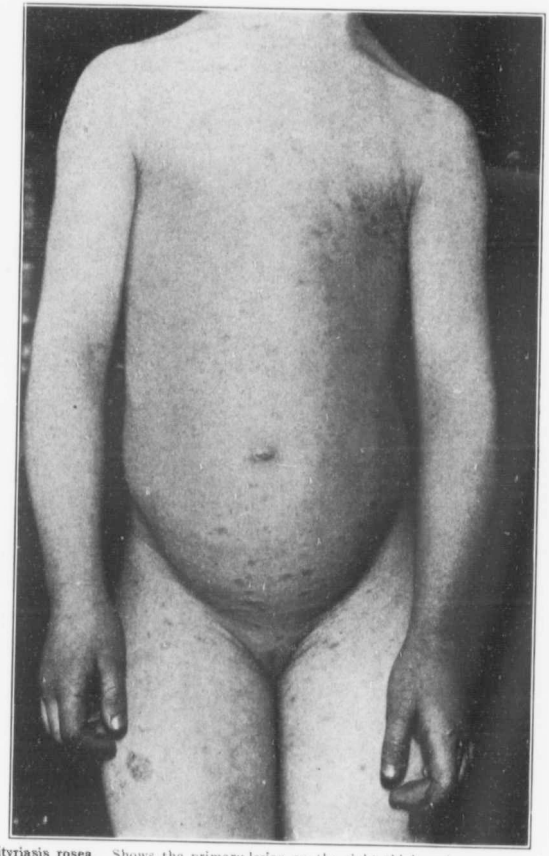
Pityriasis rosea is an acute inflammatory disease having a fairly constant distribution and running a definite course. It begins by the appearance of a single lesion somewhere on the trunk or adjacent portions of the limbs, round or oval in shape, the size of a ten-cent piece or larger, of a pinkish colour at the margins and yellowish or white in the centre, where it is flaked over with small furfuraceous scales. After an interval of a week or more, that portion of the body which is covered by an undershirt becomes studded with numerous similar lesions, varying in size but seldom equalling the original one, and between these larger spots are many small macules or papules which differ from them in not showing any scales. The disease runs a definite



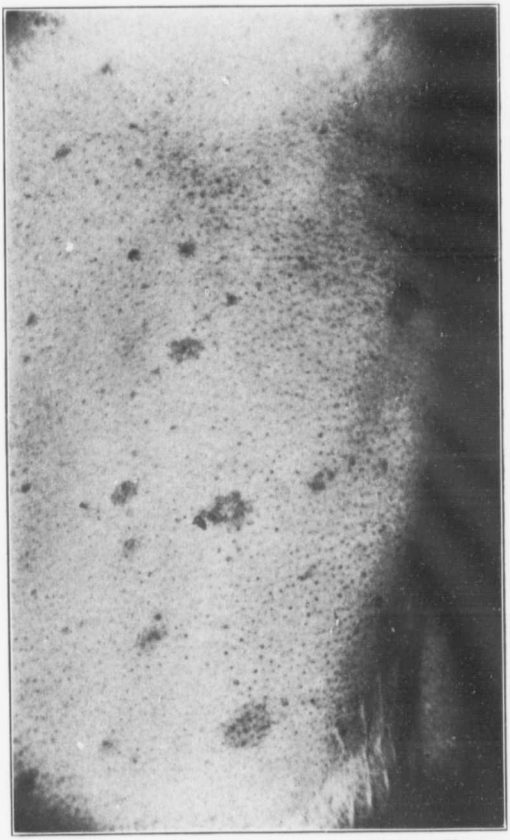
Pityriasis rosea. Shows the distribution of the large and small lesions over the back.



Pityriasis rosea. Shows the detail of the larger lesions only.



Pityriasis rosea. Shows the primary lesion on the right thigh and a commencing general eruption.



Pityriasis rosea. Detail of the eruption, three-quarters life size. The prominent hair follicles, cutis anserina or "goose flesh," which the camera has caught is not part of the disease.

course of from three weeks to three months and gives rise to no symptoms except occasional slight itching.

The diagnosis is made from the distribution of the disease, the history of its rapid development, following at an interval after the appearance of the initial lesion, and the absence of symptoms. When seen early the single spot may be mistaken for ringworm which it closely resembles, but failure to find the ringworm fungus in the scales will enable one to eliminate it. An early secondary syphilide can be excluded by the absence of the other signs of this disease and by the limited distribution.

Treatment is hardly required except as a placebo, though antipruritic lotions are occasionally demanded. Jamieson believes in the possibility of shortening the duration of the disease by the use of potassium permanganate baths and the local application of an ointment of salicylic acid, 15 to 20 grains to the ounce.

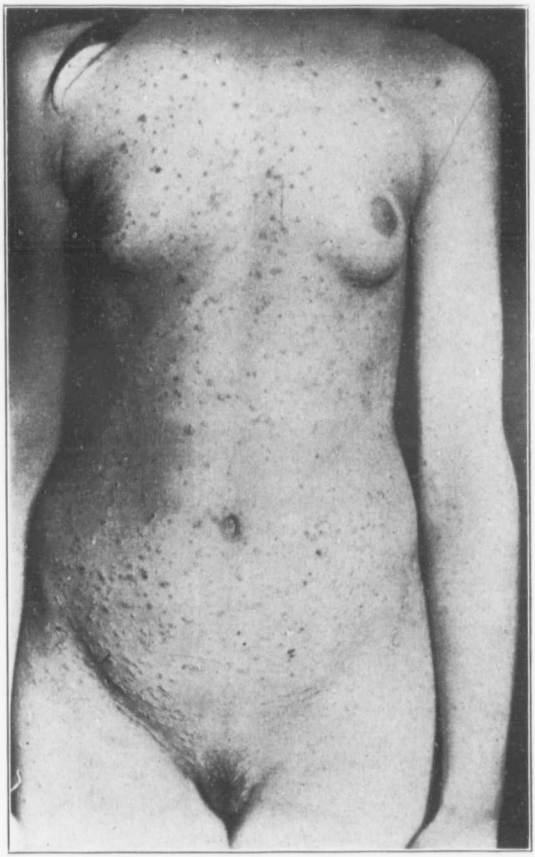
PRURITUS

Pruritus, or Itching, is a sensation common to a great many diseases of the skin and needs no definition. Pruritus, however, for which there is no apparent cutaneous cause and no evident skin lesions except those due to traumatism in the effort to obtain relief by scratching, has been included as a disease in itself. Two principal forms can be recognized, pruritus senilis, one of the disabilities of old age, and pruritus hiemalis or winter itch. **Pruritus senilis**, an incontrollable itching, which disturbs the rest of old people, is of unknown origin, though it has been attributed to loss of the subcutaneous fat, which occurs at that time of life. The itching occurs on any part of the body, is most intense at night, and except for the consequent loss of rest, occasions no other symptoms. It is most refractory to treatment. Antipruritic lotions ease the sufferer for only a short time and need frequent repetition. We have found one or two drachms of liquor carbonis detergens to a pint of water as effectual as any. A mustard paste applied to the nape of the neck for a few minutes will often procure a night's sleep, but treatment of this kind can only be used occasionally. There is the same objection to making use of strong sleeping draughts.

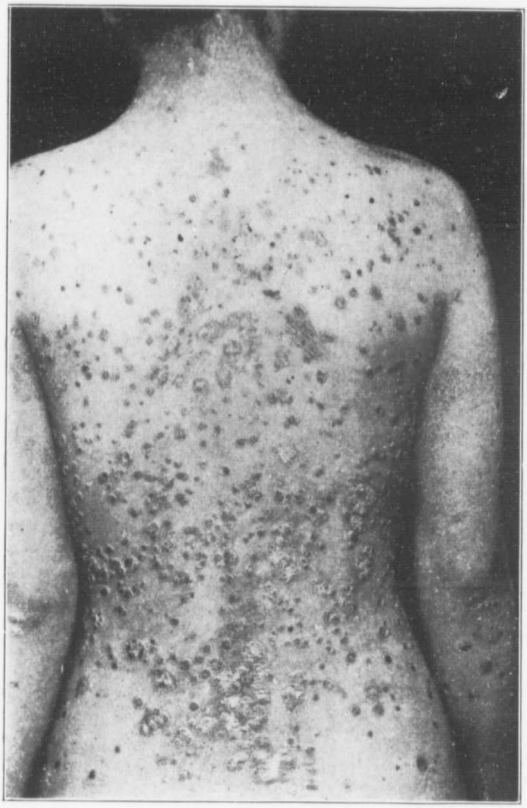
In **Pruritus hiemalis** the itching is most severe just after removing the clothes at bedtime. It is more common in cold climates and is thought to be due to the clinging character of the heavy woolen underwear worn in winter. When the itching affects only the legs, it is sometimes possible to relieve it by the simple expedient of pulling the tight-fitting woolen drawers up to the knees and then pulling them down again, when the garment is put on in the morning. As the hairs of the legs are coarse and lie naturally with the points directed downwards this ensures their lying in that position during the day. Thin cotton or muslin garments worn underneath woolen ones often relieve this form of pruritus, as the smooth cotton does not afford a surface to which the lanugo hairs can cling. Antipruritic lotions bring relief and should be freely used, and the patient encouraged not to scratch. Scratching soon develops into a habit, which when repeatedly indulged, increases the irritability of the skin.

PSORIASIS

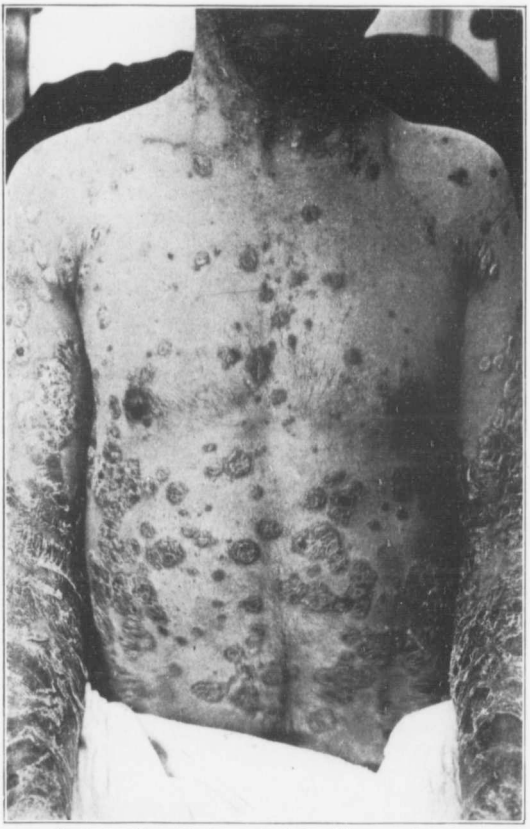
Psoriasis is a chronic inflammatory disease of the skin characterized by the formation of slightly raised, indurated patches of varying shape and size covered with dry scales. The initial lesion is a small papule slightly deeper in colour than the surrounding skin, which, as it increases in size, develops a covering of fine, silvery white, closely adherent scales; and the removal of these with a curette or the finger nail discloses a bright red surface showing one or more tiny bleeding points. As the patches increase in size they may retain a round or oval shape, become irregular in their outlines, or form ring-shaped or gyrate figures, the last two forms resulting from involution of the centre of the patch keeping pace with the extension of its borders. It was formerly the custom to describe many varieties of the disease based on the predominating shape of the lesions; punctata, guttata, and nummularis were round lesions equal in size to a pinhead, a drop, or a coin; and circinata and gyrata were the ring-shaped and wavy-outlined forms already mentioned. Roughly, one can divide the disease into acute and chronic groups,



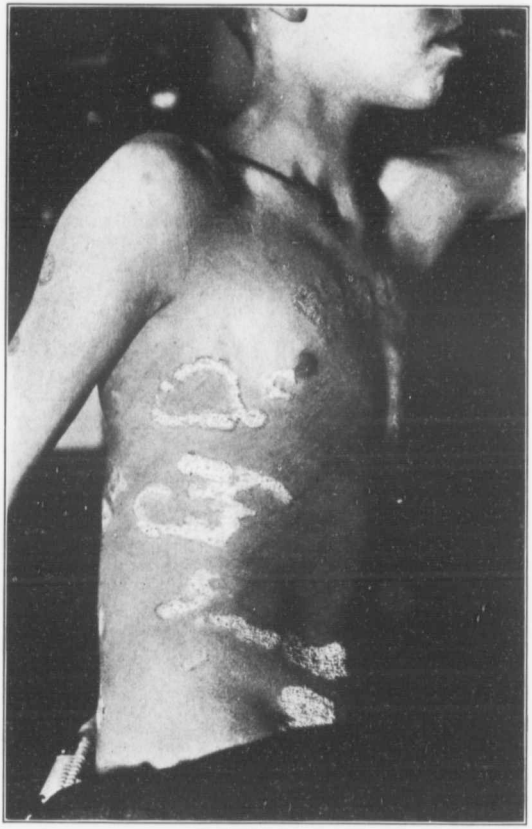
Psoriasis. Variety Punctata, lesions very small.



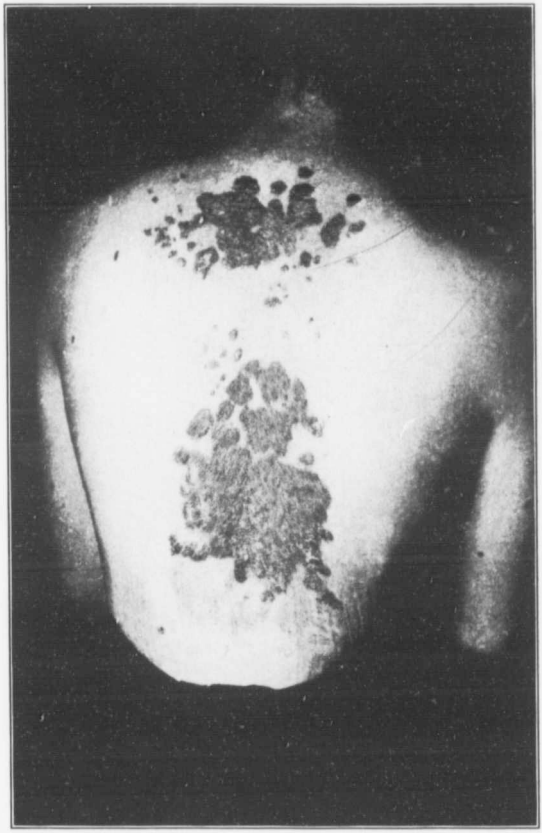
Psoriasis. Guttata.



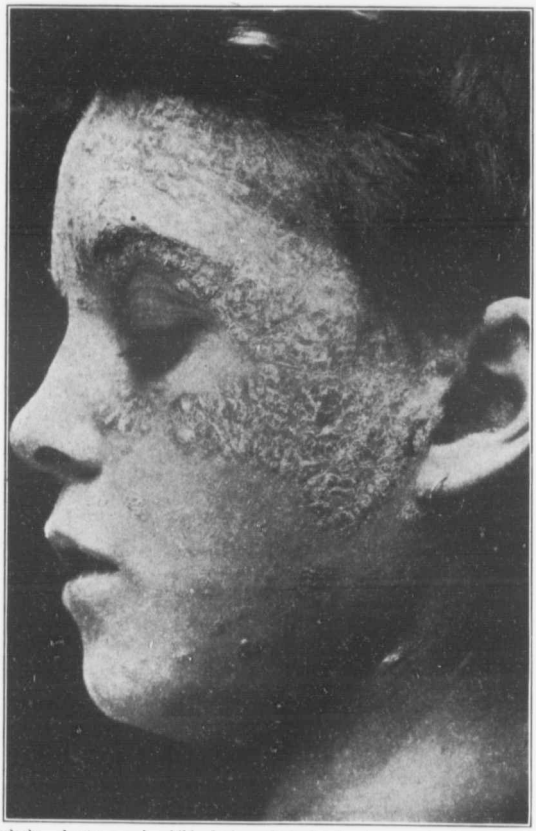
Psoriasis. Nummularis, on the body, diffuse on the arms.



Psoriasis. Gyrata.



Psoriasis. Chronic, the two areas shown persisted for years.

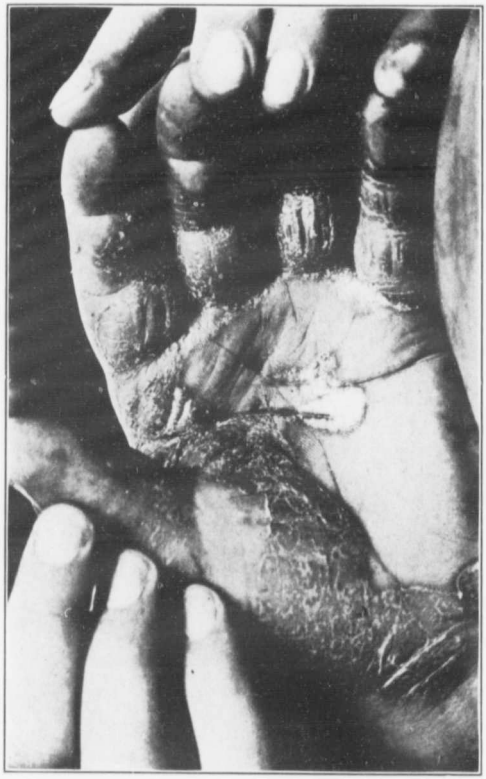


Psoriasis. Acute case in child of nine. It had existed a month when the photo was taken.

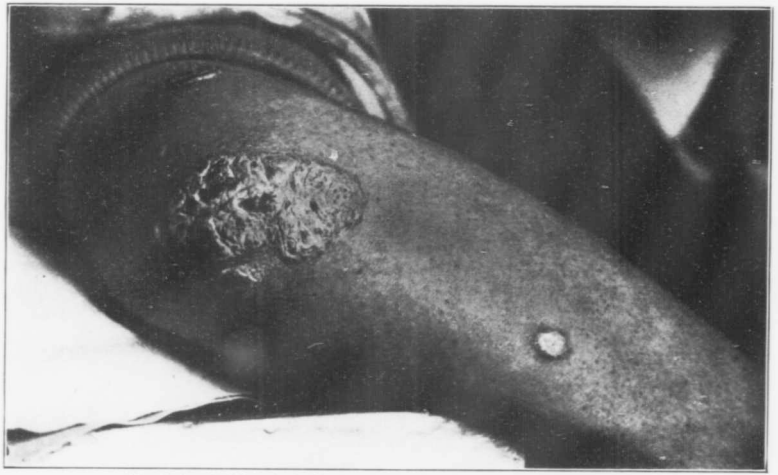
classing as acute those in which there is progressive increase in the size of the lesions or rapid development of new ones, and chronic those where the lesions tend to remain the same size for months or years. In the more acute forms the patches are seen all over the body, and may change in size and shape from week to week, new lesions appearing as the older ones disappear. The chronic form on the other hand shows a marked preference for the extensor surfaces about the elbows and knees and for the scalp. While the disease may last indefinitely, it often improves greatly or disappears entirely with the changes of the seasons, many cases getting well or nearly well in spring or summer to recur with the autumn or winter, others having recrudesences in summer and remissions in winter. In the majority, however, the patches do not entirely disappear from the knees, elbows, and scalp, when the remissions occur. Psoriasis is seen at all ages with the exception of early childhood and has a well marked hereditary or family tendency, it being quite common to find it in several generations and in more than one member of a family. It rarely produces any subjective symptoms, though occasionally itching is complained of, and it does not influence the general health.

The diagnosis is readily made in the great majority of cases from the presence of the silvery white scales, and the history that the eruption has always presented the same features. Confirmatory evidence can be obtained by scraping off one of the smaller lesions and noting the tiny bleeding point on the raw surface underneath. In old chronic cases, especially in persons who take good care of their skin, the scaly nature of the disease may not be at once evident, but the scales can invariably be demonstrated by drawing the back of the finger nail across the spots. When the scalp is the only part affected the disease may resemble seborrhœa, but can be distinguished from it by the fact that the patches of psoriasis are multiple and have well-defined margins, while that of seborrhœa is single, as a rule central, and shades off gradually into the normal skin.

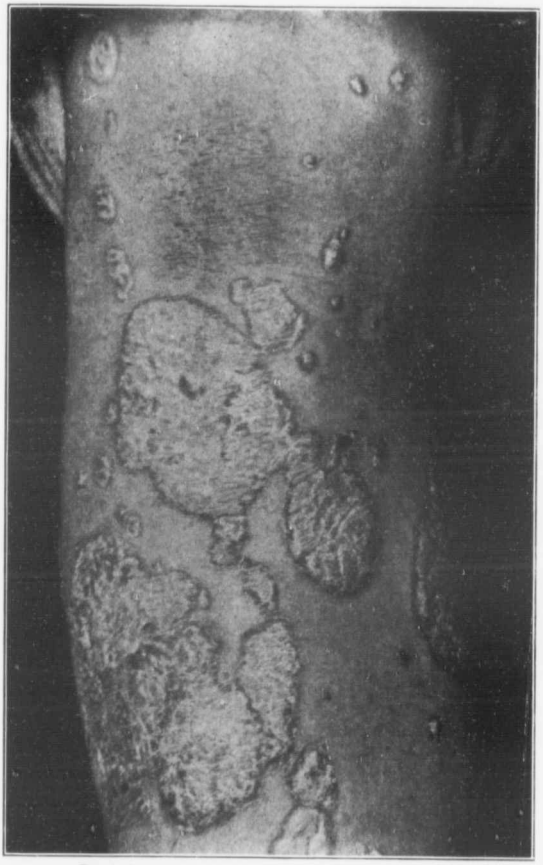
Arsenic has long held first place in the internal treatment of psoriasis. Its administration should begin with small doses



Psoriasis. Palmar, unusual situation.

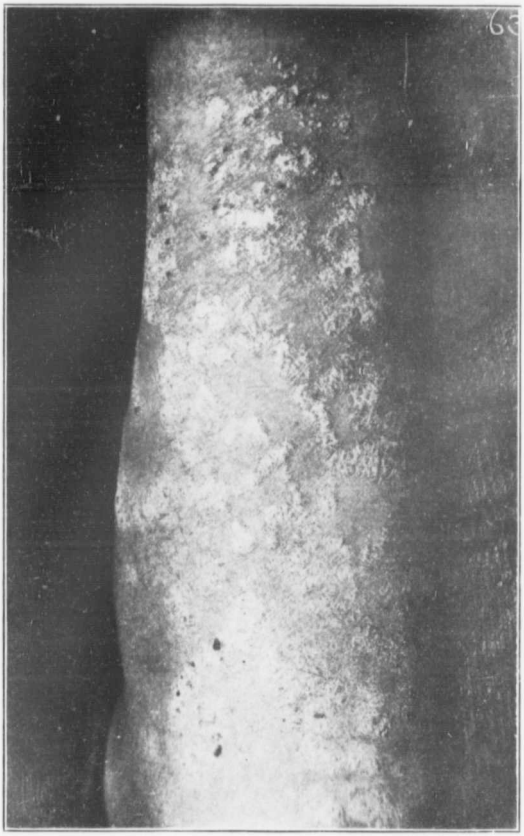


Psoriasis. Subject had old chronic patches on elbows and knees only.



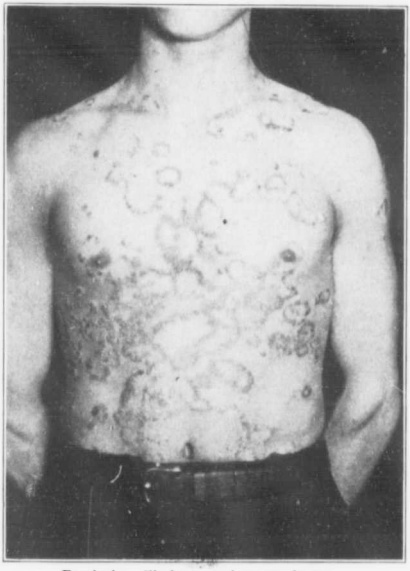
Psoriasis. Large patches on the leg below the knee.

Psoriasis. Subject had old chronic patches on knees and elbows of which one is shown, and generalized eruption of recent development.



Psoriasis. Showing an unusual configuration of the eruption on arm.

slightly increased daily until the patient's tolerance is determined, when it is either withheld temporarily or the course is repeated, beginning with the minimum dose as described under lichen planus. Salicylate of soda given in fairly full dosage has proved useful in our hands in rapidly developing attacks and especially in early life. Thyroid gland has the power in most

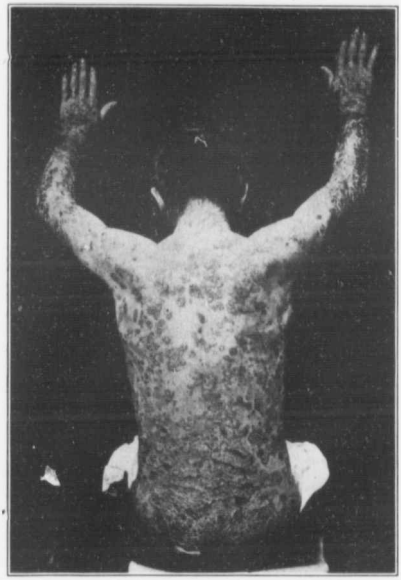


Psoriasis. Circinata and gyrata in type.

patients of rapidly clearing up the eruption, but the disease is apt to return after a short interval and is not influenced by it again to the same extent, on resuming the treatment. In obstinate cases where nothing seems to be of much use it is often wise to abandon specific treatment for a time and put the patient upon general tonics for a few weeks, when the drug which formerly failed may become effective. Change of air and habits, a visit

abroad, may cause the disappearance of the disease but are just as likely to aggravate it.

In the local treatment the essential point is to remove the scales before making applications. A stiff nail brush with soap and hot water should be used to remove all that can be scrubbed off the scaly tops of the patches before applying the chosen remedy,



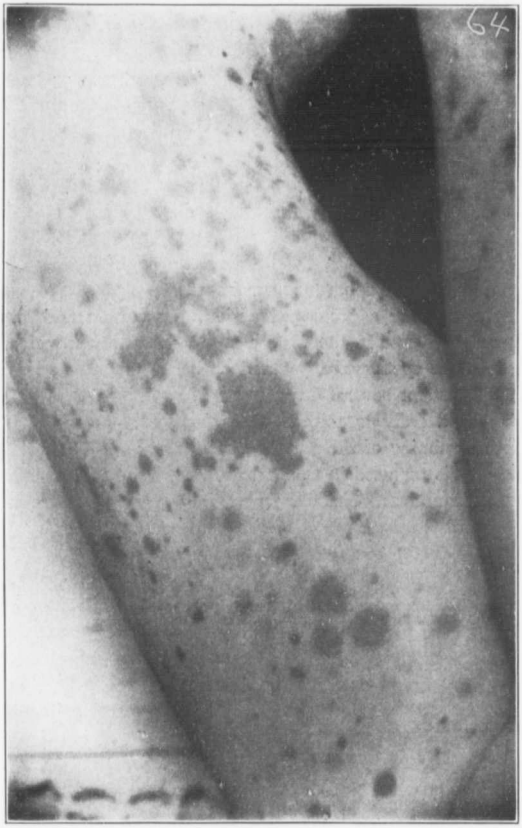
Psoriasis. Type formerly called inveterata, where almost the whole surface of the body is involved.

and the scrubbing should be repeated every day. Failure to get results is often due to neglect of this procedure. Chrysarobin, 5 to 20 grains to the ounce of vaseline, is rubbed well into the denuded patches once a day, using the weaker strength where the surface to be covered is large, as this drug is a powerful irritant both to the skin and the kidneys, and when used for

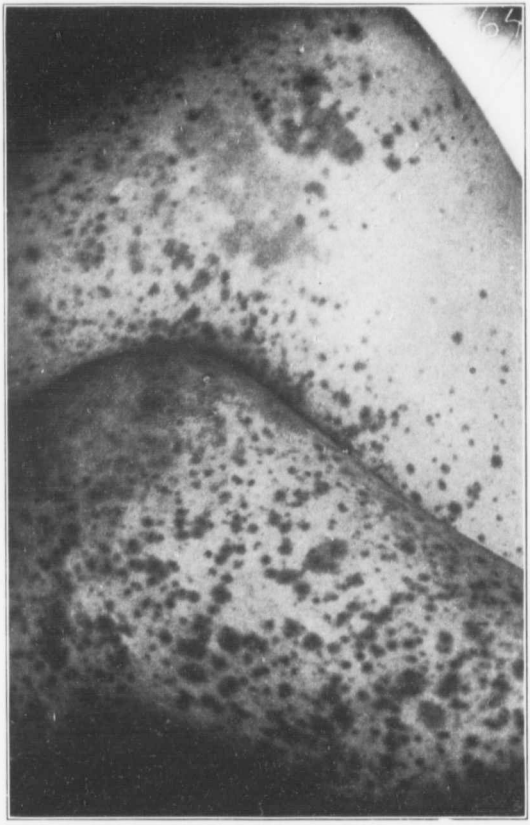
any length of time produces an intense erythema of the skin surrounding the patches. Not infrequently the erythematous dermatitis produced by the chrysarobin is so intense as to necessitate its abandonment until the irritation has subsided. Owing to its staining properties, it is well to warn the patient that anything coming in contact with it will be dyed brown; and it is our practice to have the applications made at night and thus allow the excess to rub off on the night clothes and bed linen, using the same clothes until the treatment is discontinued. For the same reason the patient should be told not to apply the ointment to the face or scalp, but replace it with plain vaseline, which is an excellent solvent for removing the scales. It is found that when the disease is yielding to treatment elsewhere, it usually disappears spontaneously from the scalp. To prevent staining and insure a prolonged action, chrysarobin and other drugs are often used in the form of a gelatine varnish, which is painted on the spots while hot and on cooling forms a coating which will last for several days, but we have not found this as effective as a daily treatment with ointment, preceded by a thorough scrubbing of the parts. Next to chrysarobin in point of efficiency is tar used in the form of the unguentum picis, oil of cade, or liquor carbonis detergens.

PURPURA

Purpura is a hæmorrhagic disease of the skin, symptomatic of some general disorder, and usually associated with a pathological condition of the blood. In **Purpura simplex** there are no constitutional symptoms and the disease is evidenced only by the presence of small intracutaneous or subcutaneous hæmorrhages, which occur in large numbers and are of varying size, up to an inch or more in diameter. Their hæmorrhagic nature is shown by persistence of the colour under pressure, tested by pressing a microscope slide or glass lens upon the skin. The hæmorrhages frequently appear in crops and the colour often indicates their age; thus recent lesions are bluish or bright blood colour according to the depth at which they lie in the integument,



Purpura. Variety Simplex. Shows the thigh of ten-year-old child, in whom the attack produced no symptoms.



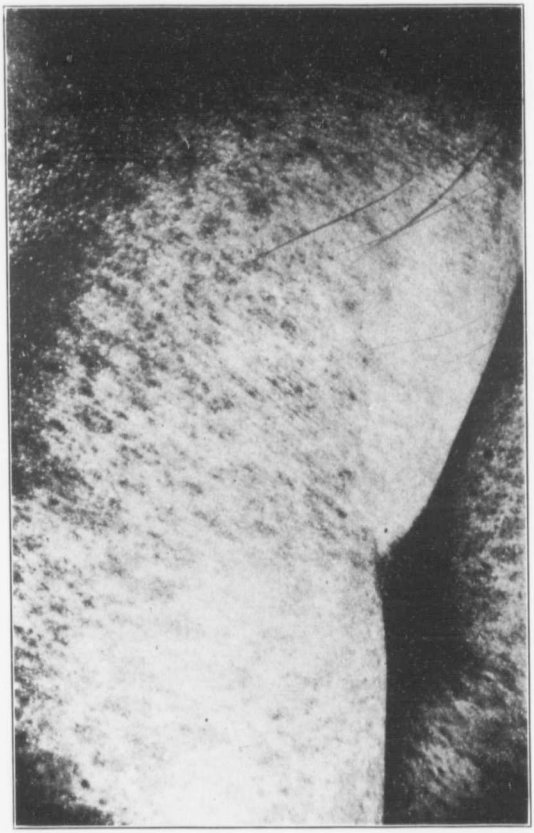
Purpura. Simplex. The lesions here came out in crops, the more recent ones being darker in the picture

and later this changes to purple, then bluish green or greenish yellow as they disappear. The eruption may cover the entire surface of the body, but the spots are more numerous on the extremities, especially the legs, and not infrequently are confined to these parts, the trunk escaping. The attack is commonly over in two weeks, but the disease is apt to recur and may keep on doing so at irregular intervals for months or years. The diagnosis gives rise to no difficulties and no special treatment is required.

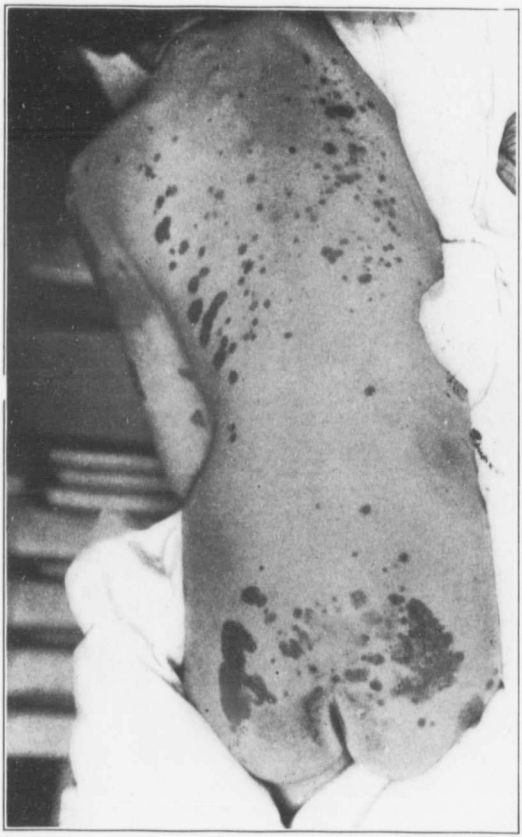
Purpura rheumatica, or **Arthritic purpura**, is associated with the symptoms of arthritis, rheumatic pains, and sometimes soreness and swelling about the joints, with more or less constitutional disturbance. The cutaneous lesions may be similar to those described under Purpura simplex or they may be grouped about the affected joints. Besides the intra- and subcutaneous hæmorrhages, extravasations at times occur so superficially that they give rise to raised, flat, wheal-like lesions. In this form of purpura the symptoms are often very severe and may include endocarditis, pericarditis, and septic angina with high fever, while a fatal ending is not unusual. Cases in which the extravasations of blood are unusually large and accompanied by hæmorrhages from the mucous membranes are known as **Purpura hæmorrhagica** and are indicative of some grave change in the composition of the blood.

The diagnosis of these forms of purpura depends upon the association of the arthritic lesions with the hæmorrhagic eruption.

Treatment must be directed to dealing with a possible etiological factor and hence varies widely with the class of case. Salicylate of soda has been found of use in those cases likely of rheumatic origin, but the fact that this drug produces a hæmorrhagic eruption in some individuals must be kept in mind. Locally no treatment is needed.



Purpura. Simplex. In this case there were a very large number of very small hæmorrhages and no large ones. Illustration shows the upper part of thighs and buttocks in a child, aged five.

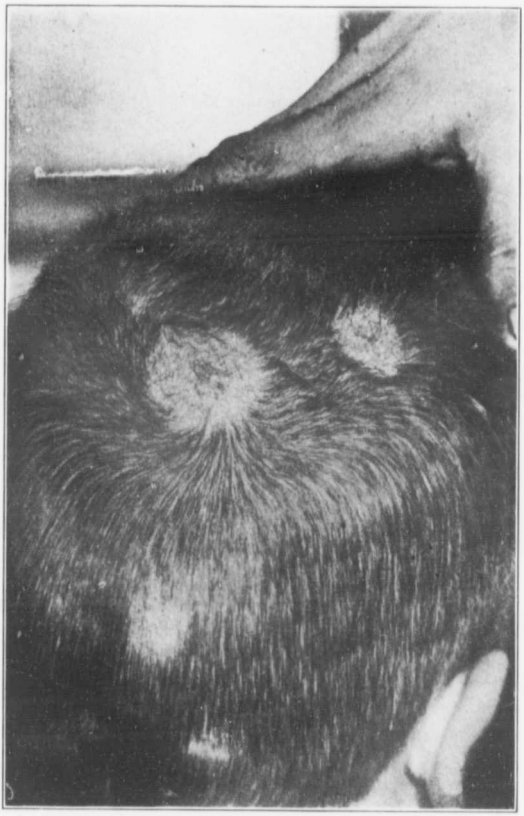


Purpura hæmorrhagica. The large hæmorrhages occurred during an attack of rheumatic fever and only on those parts of the body subjected to pressure.

RINGWORM

Under the heading of Ringworm we include all lesions produced in the skin and its appendages by the parasitic growth of a family of mould-like fungi, the trichophytes. The glabrous skin, scalp, beard, genital regions, hands, feet, and nails are all liable to be attacked by one or more forms of the fungus; but, while some forms are found to thrive equally well in many localities, others will only grow under certain conditions, conditions which one part of the body alone furnishes. By means of microscopic examination and by their growth on various culture media, a large number of different species of fungi and many varieties have been differentiated, but for practical diagnosis and treatment the ability to recognize by means of the microscope the presence of some member of this large family is all that is necessary.

Ringworm of the scalp, **Tinea tonsurans**, is common in children and rare in adults. When the skin of the scalp first becomes infected with the fungus the disease shows merely as a small round area, slightly redder than normal and covered with small dry scales, but later, when the hairs are invaded, they lose their lustre, become dry and brittle, and bend or break off near the surface of the skin. This gives rise to a partially bald patch, circular or oval in outline, covered with a coating of fine, branny scales, among which are seen the stumps of the broken hairs. On examining one of these broken hairs with a strong lens or under the low power of the microscope, its extremity is seen to be frayed and brush-like from the separation of its fibres where the fracture has taken place. The initial patch continues to grow in size and new ones to appear as the spores from the first are distributed and form new colonies, until the whole scalp may ultimately be infected. Ringworm is highly contagious and unless discovered early is likely to spread rapidly through a family or school, especially as the growth of the fungus on the skin causes no irritation and the disease is not discovered until the partial baldness draws attention to it. Occasionally, through accidental causes or through the use of unwise home remedies, pus



Ringworm. Tinea tonsurans. Typical case.

infection occurs, and a condition somewhat analogous to sycosis is produced. The diseased area becomes raised, reddened, spongy, and tender to touch and exudes small drops of pus from the hair follicles on pressure. All the hairs, diseased and sound alike, become loose and soon fall or are readily extracted, leaving a raised, bald patch suggestive of a subcutaneous abscess, and as a consequence sometimes incised by mistake. This condition is known as **Kerion**, and when it does occur results in a complete cure of the ringworm but possibly in the production of permanent baldness owing to the destruction of the hair papillæ.

The diagnosis is readily made from the presence of broken hairs in a more or less bald patch and by microscopic examination. Several of the diseased hairs should be extracted and mounted in liquor potassii on a slide with a cover slip. After a few minutes the hairs become softened and pressure on the coverslip will partly disintegrate them. Under the high power the fungus is seen either as long unbranched threads of mycelium or more often as chains of spores in the hair or the hair-sheath, which comes away with the hair when it is extracted. Favus of the scalp can be distinguished by its different mode of growth, its fungus invading the tissue of the skin and forming a sulphur yellow crust which on removal leaves a bleeding surface underneath. Baldness only occurs from it when the disease is far advanced and in the process of healing, and the individual bald areas are small, irregular in shape, and give the scalp the appearance of moth-eaten fur. Microscopically, too, the fungus will be found in the yellow crusts rather than in the hairs, though the latter are also invaded.

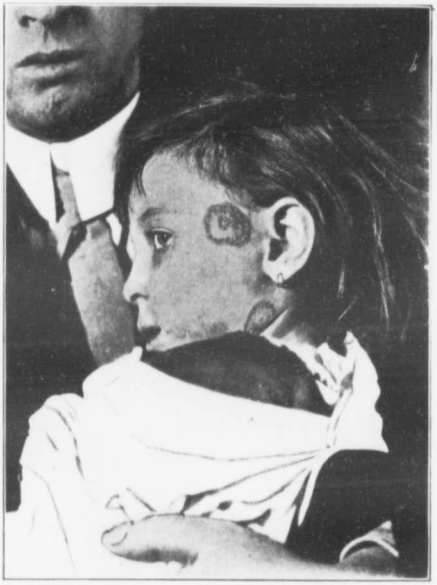
Treatment is effective only if the fungus can be destroyed by germicidal applications or by removal of the hair. Epilation, carefully done, if the area to be treated is small, is most satisfactory. Many hairs will break off level with the skin on the first attempt to remove them, but they can be extracted entire later when they have grown sufficiently to give the epilation forceps a hold. When the area to be denuded is too large for manual epilation, the hair can be removed by an exposure to X-rays, which, if properly given, causes the hair to fall within

two or three weeks. This is the most satisfactory method of removing the hair but it should only be undertaken by an expert Rœntgenologist, as too severe exposure results in destruction of the hair papillæ and subsequent baldness. Complete removal of the hair, while it carries with it most of the fungus which is found in the hair and hair-sheath, does not effect a cure; it is necessary to employ germicidal applications as well to destroy the fungus present in the skin, and it is well to cover the whole scalp occasionally to prevent infection of other parts. Unguentum hydrargyri ammoniatum or oleatis answers very well. When X-ray treatment is not available and the disease is too widespread for epilation, recourse must be had to local applications alone, but the patient should be warned that this method of treatment is slow and tedious, often requiring many months of patient care on the part of the mother or nurse. Tincture or liniment of iodine has proved the most serviceable in our hands and it has one great advantage; namely, that owing to its staining properties, one can judge whether one's directions are being carried out properly. The hair should first be evenly and closely cropped, using a barber's clippers, and it is then easy to detect any small scaly areas where the disease has already begun but in which the hairs are not as yet involved. Shaving the scalp is not wise as it increases the difficulty of detecting incipient patches. Iodine is then painted daily for five days on all the places showing evidences of disease, and it stains and destroys the superficial layer of the epidermis. On the sixth day the iodine is replaced by vaseline, and on the seventh the head is thoroughly washed and the child inspected by the physician, who is able with a metallic comb to remove the superficial eschar caused by the iodine, along with all the loose diseased hairs and scales which have become entangled in it. After repeating this process several times the iodine can be discontinued for a week, and the next inspection will show by the presence or absence of scales and broken hairs how the case is progressing. In isolated patches of small size, where there is objection to cutting the hair, the production of an artificial kerion by applying equal parts of olive and croton oil daily, until

Ringworm. Tinea circinata. The spreading border was slightly raised and there was more inflammatory reaction than is commonly seen.

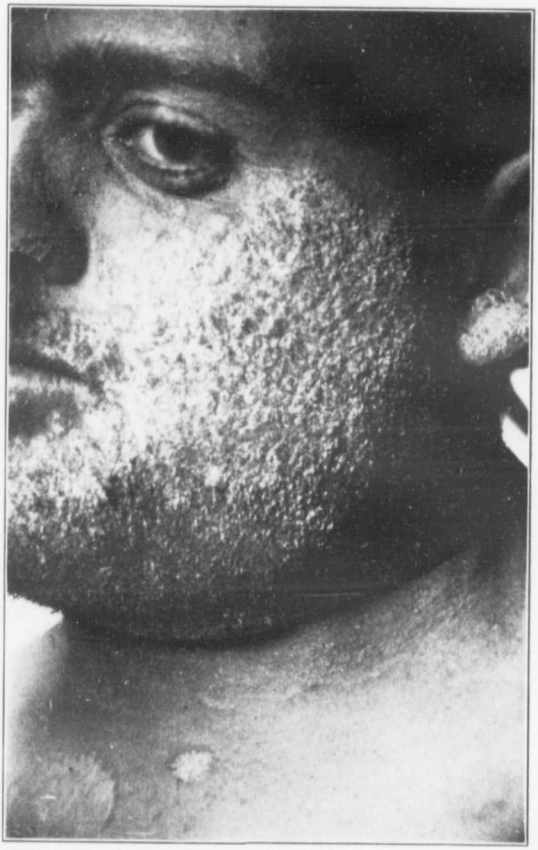
suppuration takes place and the hairs fall or can be easily extracted, is an alternative method of treatment. As it is difficult to limit the destructive effect of the croton oil it should be used cautiously or it may leave a bald area.

Ringworm of the non-hairy skin, **Tinea circinata**, is met with in both childhood and adult life, but is much more common in the



Ringworm. Tinea circinata. Two patches on the child's face, one showing two concentric rings, latter a rare condition.

former. The growth of the fungus on the skin produces an extremely mild, superficial inflammation with the formation of fine scales. The disease, like all fungoid growths, tends to assume a ring shape, spreading outwards at the circumference while the centre heals, and exceptionally a second ring forms within the first. In an actively growing area the extending



Ringworm. Tinea barbæ. Severe form in a stableman. Lesions were seen also on the lobes of the ears, the neck, and upper part of the thorax.

border is slightly raised above the surrounding skin, sharply defined, and covered with fine chaffy scales; occasionally the fungus causes sufficient reaction to produce vesication. The number of individual lesions is usually small, and the uncovered parts of the body are naturally the most frequently affected.

The nature of the disease can always be suspected by the ringed shape of the lesions, but a microscopic examination of the scales is needed to make sure of the diagnosis. A few scrapings mounted in liquor potassii and examined under the high power of the microscope disclose the characteristic mycelia and chains of spores.

A cure is readily effected by any mild antiseptic; when writing ink was a tannate of iron it was the popular school remedy. Tincture of iodine is now most frequently used, but one must avoid its too frequent application as in many children it acts as a powerful irritant and may set up a severe dermatitis. One, or at most two, applications are quite sufficient to kill the fungus. Unguentum hydrargyri ammoniati smeared on several times a day will destroy the fungus without harming the skin.

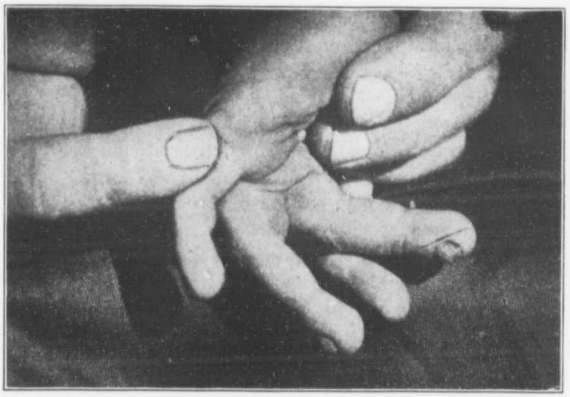
Ringworm of the beard, **Tinea barbæ**, is much less common than the same disease in the scalp and is a much more severe affection. The severe form is met with mostly in stablemen who have the care of cattle or horses, and is due to a variety of the fungus obtained from these animals. The hairs become infected, but do not show the same tendency to break as in tinea tonsurans, and the tissues are deeply invaded by the fungus, producing considerable swelling with the formation of nodules and pustules.

The diagnosis can only be made by a microscopical examination of the infected hairs. Treatment is along the same lines as in ringworm of the scalp, in many cases, however, soothing applications and hot compresses must be employed to reduce the inflammation before the use of strong germicidal remedies can be instituted. When, as is sometimes the case, the beard becomes infected with the same variety of fungus found in the scalp, the disease presents the same picture as in that disease.

Tinea unguium, or Ringworm of the nails, is probably caused

by the spores of the fungus becoming lodged in the furrow under the free border of the nail, and that it is not more common is probably due to the fact that the hard tissue of the nail makes it difficult for it to secure a foothold. As the fungus grows in the nail tissue it renders it opaque, thickened, and brittle, and the free end of the nail breaks away irregularly. More than one finger is usually infected but seldom all of them.

Recognition is not easy unless one suspects the cause and resorts to a microscopical examination of the brittle nail sub-



Ringworm. Tinea unguium. In the middle and ring fingers the thickened nails which have broken off are well shown. The other fingers were not affected.

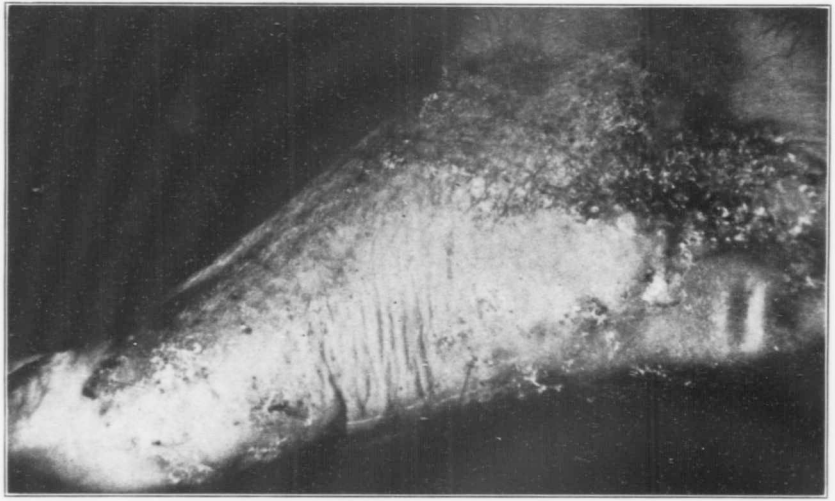
stance, after macerating it for some time, or boiling it in liquor potassii. Other diseases likely to be confounded with ringworm are psoriasis of the nails, always associated with psoriasis elsewhere, and syphilitic onychia.

The disease is more difficult to treat than the other forms of ringworm, owing to the inaccessibility of the fungus in the dense nail tissue. Softening the parts with liquor potassii or a strong solution of salicylic acid enables one to scrape away the diseased portions of the nail, and it also destroys the fungus. These remedies can be conveniently used by soaking small

pieces of gauze in them and then applying the pledgets over the nail and covering the whole with a rubber finger stall.

Another form of Ringworm, **Tinea cruris**, is hard to recognize and occurs on the genital regions, the axillæ, and the hands and feet. The fungus differs somewhat from the trichophyton and has been called the epiphyton. It is very tenacious of life and keeps recurring in the same locality many times after its apparent cure. The lesions it produces are unlike those seen in the other forms of this disease and resemble closely the moist varieties of eczema, but differ from it in having a well-defined margin. In the groins and axillæ the disease occurs as slightly raised areas covered with moist excretion, which dries in yellowish crusts and which re-form over and over again if removed. It has a sharply defined margin and extends slowly at the borders, often remaining practically of the same size for months at a time. During the summer, when the parts affected are apt to be bathed in perspiration, the growth is more active than in the winter when they are dry, but the disease may last for many years. When occurring on the hands or feet, the webs of the fingers or toes are the most frequent site, but it is quite common on the thickened skin of the palms and soles. Here again it closely resembles a chronic vesicular eczema, beginning as vesicles which show little tendency to rupture, but coalesce to form blebs filled with a sero-purulent fluid. This in time dries and the overlying skin desquamates, the same process being frequently repeated.

The diagnosis can only be made with certainty by finding the fungus in the skin, but old cases of recurring eczema of the hands, feet, or genital regions should always be regarded with suspicion, especially if the disease remains limited to these localities. Recognition of the fungus is more difficult here than in other forms of invasion by this parasite. The skin overlying the vesicles or the dry desquamating flakes should be boiled in liquor potassii for fifteen minutes and teased out with a needle, so that when mounted on a slide pressure on the cover-glass will form a thin film, and enable the mycelial threads of the fungus to be seen.



Ringworm. Subject had had an eruption limited to the feet for seven years, becoming active in summer and quiescent in winter, but never disappearing. Fungus found on examination, though the clinical picture suggested eczema.

In treatment the aim is to use germicidal remedies which at the same time are solvents of the skin. Salicylic acid proves very effective and may be used in strength up to 30 grains to the ounce. Sodium hyposulphite, one or two drachms to the ounce in a watery solution, will soften the skin and destroy the fungus. Balsam of Peru, painted on pure, is especially useful between the toes, where, from its viscid quality, it keeps moist and active for longer periods than most applications.

SCABIES

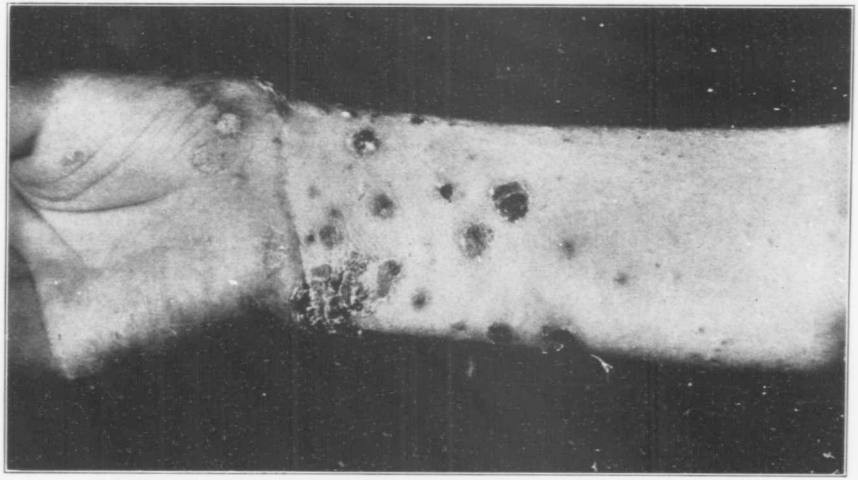
Scabies is a contagious, parasitic disease caused by the itch mite Acarus hominis, a small insect just large enough to be visible to the naked eye. The female drills a burrow in the skin just below the horny layer and here deposits her eggs, and these burrows can sometimes be seen as fine red lines, not over one-quarter inch in length; but more frequently the site of a burrow is disclosed by the formation of a small papule or vesicle at each end. A needle introduced at one end of the burrow and pushed along it will open it up without causing bleeding, and if it is freshly made and contains the living parasite, she may be found clinging to the point of the needle. Owing to the intense itching caused by the disease, secondary lesions due to scratching and pus infection predominate in the majority of cases, and the burrows can only be detected if carefully sought for among the pustules and excoriations. The extent to which secondary lesions develop varies widely, some individuals becoming covered with purulent sores, while others escape with a few scratch marks. The disease first makes it appearance in the majority of cases on the hands in the webs between the fingers, as the parasite here is less likely to be brushed off before it has had time to penetrate the skin, and spreads thence to the arms, axillæ, and genitals; but in time all parts of the body may become infected, the feet being usually the last to become involved. The disease is due to direct contact with an infected person in the great majority of cases, though the possibility of contagion through the medium of clothes cannot be denied. It lasts indefinitely if untreated,

Scabies. Case showing a burrow (arrow pointing to it) and excoriations produced by scratching.

and causes no symptoms apart from the itching and those due to secondary infection.

The diagnosis is as a rule not difficult, though one may not be able to discover the acarus. Its distribution, especially the early involvement of the hands, a history of other similar cases in the persons with whom the patient comes in contact, the severe itching and the presence of the pairs of papules and pustules with a few burrows, make its recognition easy. In dirty adults the possibility of pediculi corporis must sometimes be considered, but here the bulk of the disease is between the shoulders, and the hands and arms are not involved; in children urticaria may cause some confusion, but the history should lead to a definite conclusion, evidence being obtained of the absence of a source of contagion and of the presence at some time of the characteristic wheals. Children subject to urticaria who develop scabies must have contracted the disease from some other member of the family. The cases most difficult to diagnose are those which occur in adults who are accustomed to a daily bath and frequent change of underclothing, as under these conditions the parasites get little chance to multiply and secondary lesions are rarely present. Here the evidence is very slight and the real nature of the disease may remain unsuspected for a long time unless a thorough search is made for the presence of the burrows.

Sulphur ointment will always bring about a positive cure if properly used. The whole surface of the body should be well smeared with the ointment once a day for three days, the patient continuing to wear the same underclothing and refraining from taking a bath. Within three days all the ova have hatched and the young perished, and on the fourth morning the patient takes a hot bath with plenty of soap and puts on clean underclothing. Itching is apt to persist for some time after the parasites have been killed, partly from a habit having been established and possibly from irritation due to the sulphur. If the patient is warned of this and given an antipruritic lotion, it soon subsides.



Scabies. Shows a number of secondary lesions and one faintly outlined burrow on the wrist.

SEBORRHŒA

Seborrhœa, as the name implies, is an excessive flow of the secretion of the sebaceous glands and is not primarily an inflammatory disease. The overabundant secretion may appear either as a dry, flaky, readily detachable, fatty scale (dandruff) or as moist semi-fluid oily crusts collecting on the skin. When, as is frequently the case, the oily crusts or scales overlie an inflamed surface, the condition is more correctly classed as eczema seborrhoicum, though excessive functioning of the sebaceous glands may have been the etiological factor producing it. Seborrhœa is limited to the scalp almost entirely, the so-called seborrhœa corporis, being of inflammatory origin, is a form also of eczema seborrhoicum. The oily form of seborrhœa is quite common in young infants owing to the disinclination of many mothers to use soap on the scalp, where the secretion collects in yellowish, greasy crusts which become matted into the hair and firmly adherent, popularly known as the "milk crust." The irritation caused by this condition often results in a dermatitis of the skin of the scalp.

Seborrhœa requires to be distinguished from psoriasis, a matter of some difficulty when that disease is limited to the scalp. In seborrhœa the scaly area is limited to a single patch, perhaps covering the entire scalp but sometimes only on the vertex: in psoriasis, on the other hand, the patches are multiple and have well-defined margins separated by areas of normal skin, while the scaliness is much more profuse. Ringworm of the scalp is sometimes scaly and might be mistaken for seborrhœa, were it not for the broken hairs which are always in evidence and which on microscopical examination reveal the fungus.

The occurrence of dandruff is at times an indication that the individual's general health is below par, hence, where indicated, tonics should be prescribed. Locally, the treatment is more or less unsatisfactory, the best results being obtained by frequent washing of the head with a bland soap and thoroughly rinsing out the soap before drying the hair. In persons with short hair a daily wash will keep down the dandruff and relieve the itching

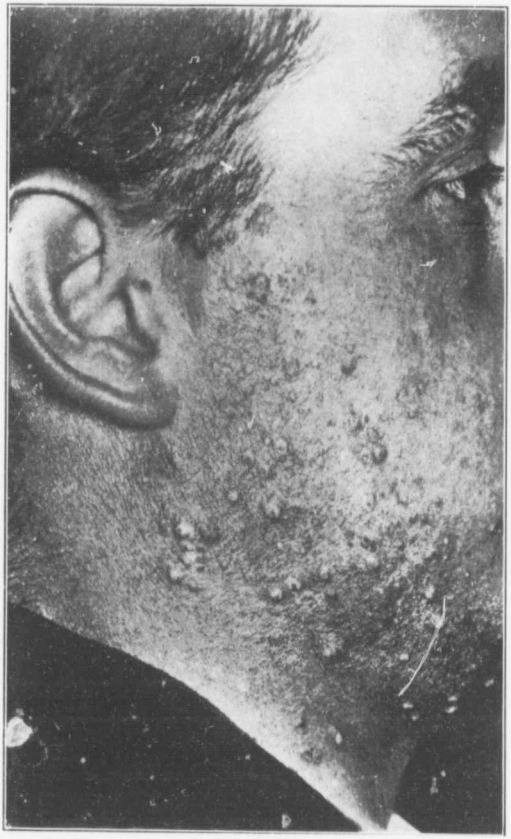
which is often a symptom when the dandruff is allowed to accumulate. In women this is an impossibility on account of the difficulty of drying the long hair, and resort can then be had to lotions, though oily preparations should be avoided. The lotion we use contains resorcin 20 grains, acetic acid 30 minims, rectified spirits 2 drachms, castor oil 3 minims to the ounce of water. The supposed connection between seborrhœa and baldness has always seemed to the writer unlikely, as women who suffer from the former equally with if not in greater proportion than men, are very much less commonly affected with the latter.

SYCOSIS VULGARIS

Sycosis vulgaris is a pustular infection of the hair follicles of the beard and moustache. The pus-producing organism is introduced from without, commonly by means of shaving utensils which have become infected from a previous case, and hence the common name "Barber's Itch."

The disease begins with redness and irritation of the skin of the bearded region of the face, coming on a few hours after exposure. There is considerable soreness and some itching, followed in the course of a day or so by the appearance of small pustules, which can be seen on close examination to correspond to the orifice of the hair follicles, often with a hair in the centre of the pustule. At first the hairs are firmly fixed, but after the disease has lasted for some days the pus infection tends to invade the tissues more deeply, and the sebaceous glands and hair papillæ being involved, the hairs fall or are readily plucked out. The infection spreads rapidly and from a single small area a widespread distribution of the disease may arise, accompanied by considerable tumefaction of the tissues. There is little tendency to healing and untreated cases last indefinitely or until the whole of the bearded region has been invaded, though there is little disposition to spread to the glabrous skin, and the hair of the scalp is never involved.

In the matter of diagnosis the possibility of ringworm and eczema of the bearded region must be considered. Many cases



Sycosis vulgaris. Note the hair in the centre of many pustules.

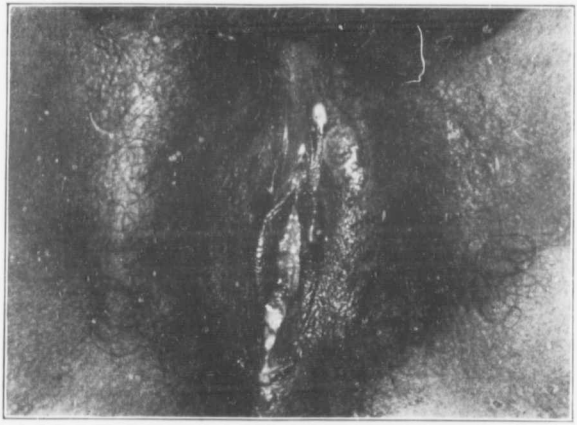
of ringworm present an almost identical picture to sycosis, and reliance must be put on a microscopical examination of the hairs to decide between them. A pustular eczema of the beard is not so easy to differentiate. Stress must be laid on the absence of induration in sycosis as compared to eczema, and on the fact that eczema is rarely limited to the bearded region alone. In eczema one sees a reddened indurated area over which pustules having no special relation to the hair follicles are distributed, in sycosis a diffuse pustular folliculitis about which there is the red inflammatory areola common to all pus infections.

The treatment of old-standing cases is often difficult owing to the impossibility of reaching the deeply seated pus-producing organisms by external applications. It is always possible however by the use of strong germicidal remedies to prevent the spread of the disease, and in time the purulent folliculitis runs its course and dies out. In our experience nothing is so effectual as oleate of mercury ointment used in as strong a form as the patient can bear, beginning with a drachm of the ungt. hydrargyri oleatis to the ounce of any simple ointment and increasing the strength gradually. This should be smeared over the part twice daily. It is most important to have the hair of the beard shaved daily, even though the shaving causes at first considerable bleeding and pain.

SYPHILIS

Syphilis, considered from the point of view of its cutaneous manifestations, is divided into three stages, the first of which comprises the time from the appearance of the primary lesion or chancre until the onset of signs of general systemic infection, a period lasting from six weeks to three months. The secondary stage is characterized by general eruptions over the skin and mucous membranes, with evidence in general glandular enlargement, nocturnal headaches and malaise, that the poison of the disease is circulating throughout the whole body. This stage lasts for a variable length of time, but usually is complete in three years. The tertiary stage is marked by localized eruptions of an ulcerative character.

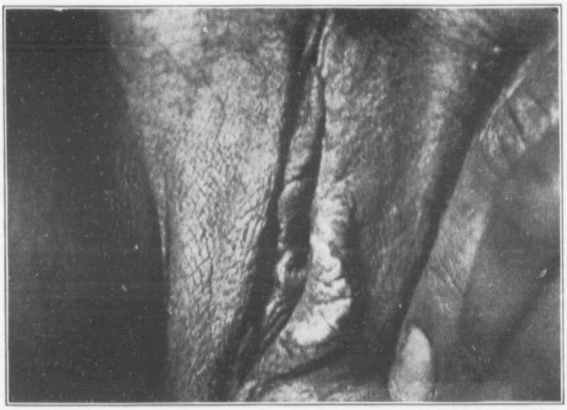
The **secondary** eruptions make their appearance within a few weeks after the initial lesion, and while the latter is still in evidence, and follow roughly a regular sequence. The earliest to show is a macular eruption of a very faint colour, usually most evident over the abdomen and lower parts of the thorax, but occasionally seen first on the lateral aspects of the neck. The faint rose spots which constitute it are often not visible in a bright light but stand out prominently in a subdued light. As the disease progresses, the macules become more sharply defined



Syphilis. Primary. Shows a hard chancre at the upper part of the left labium.

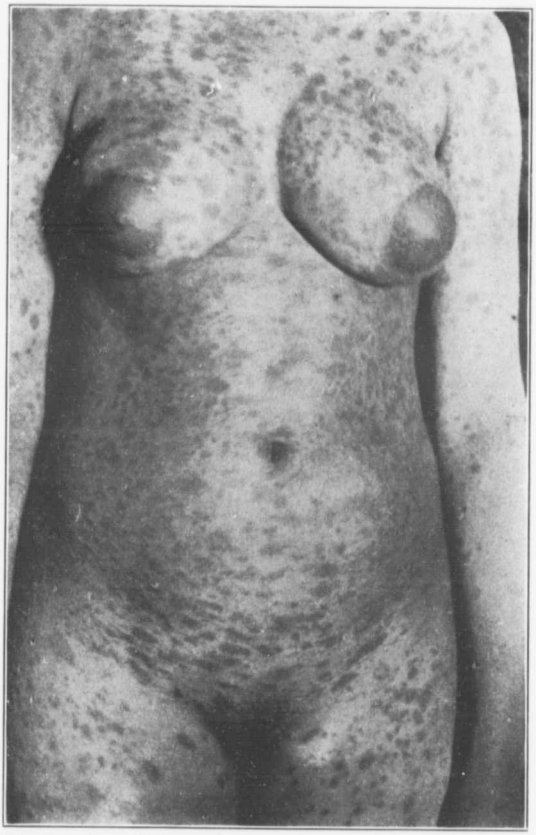
and many of them change into slightly raised, blunt papules, some of which again within a few weeks become invested with a few white scales. As only a small portion of the original macules are concerned in this change, a mixed macular, papular, and papulo-squamous eruption is the one most often seen early in the disease. At this stage and throughout the whole of the secondary period the superficial lymph glands are found enlarged and mucous patches are seen in the mouth and about the genital mucous surfaces. The hair also begins to fall in a characteristic manner, small discrete bald patches forming which

give the scalp the appearance of being spattered with tiny bald areas. Loss of hair may occur in this characteristic manner without the body showing any evidence of an eruption. Besides the forms of eruptions already mentioned, secondary syphilides may be vesicular, pustular, or squamous in character, or combinations of these forms, some of which often closely imitate other skin diseases. One of the most constant characters of the secondary eruptions is pigmentation, usually developing when

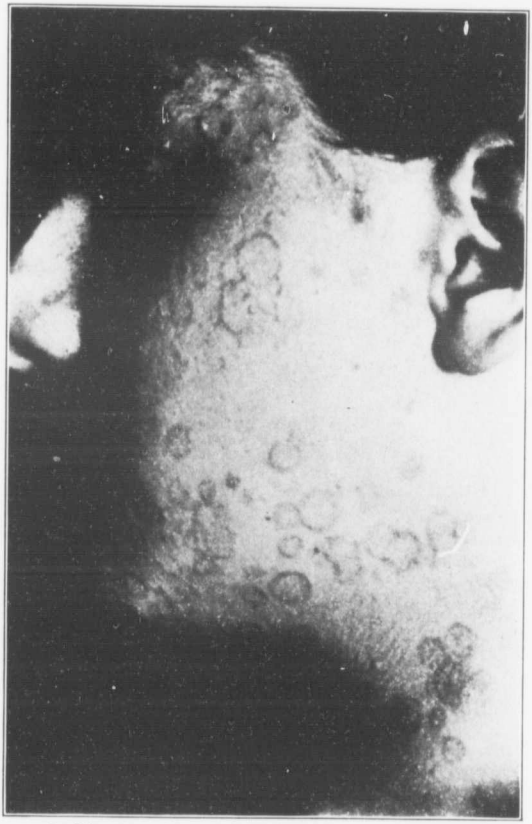


Syphilis. Secondary. Mucous patch on the lower part of the left labium, which has been everted by the finger.

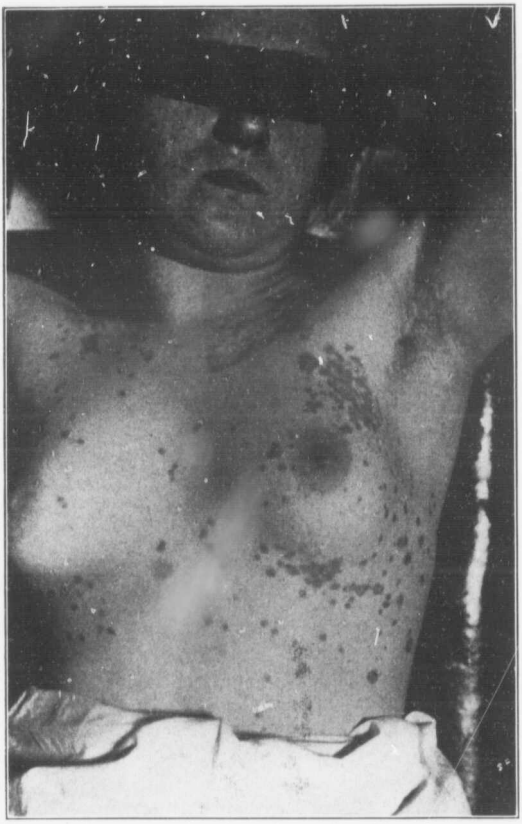
the rash is fading out, but sometimes appearing with it, and now and then occurring alone. The staining is of a brownish or coppery colour and is equally well marked over the body, and not accentuated on the lower extremities as in other diseases in which pigmentation occurs. When it occurs without inflammatory reddening, it is commonly in the form of a cribriform network on the neck, forehead, or sides of the face. Another very noticeable feature in secondary syphilides is their tendency to assume a circinate or gyrate outline, especially in the later manifestations. The late secondaries, too, are less likely to have the



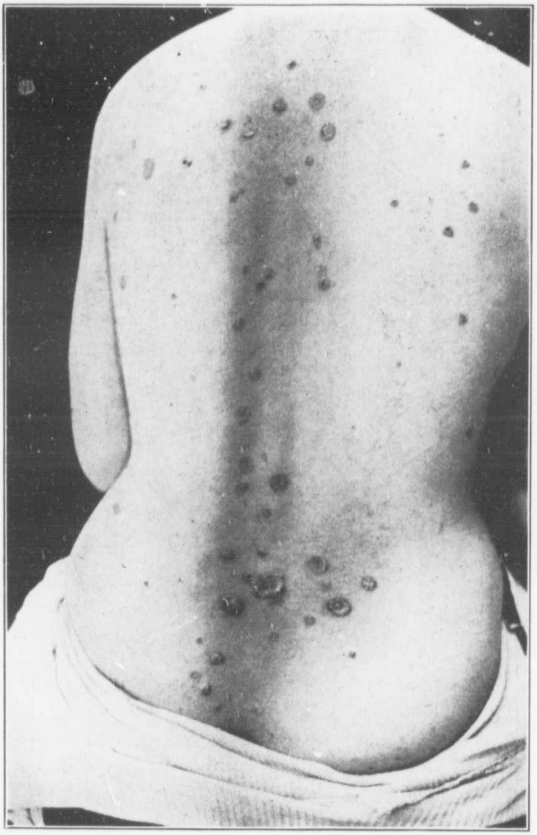
Syphilis. Secondary. Early macular form, more pronounced here than is usual.



Syphilis. Secondary. Early circinate eruption, common form.

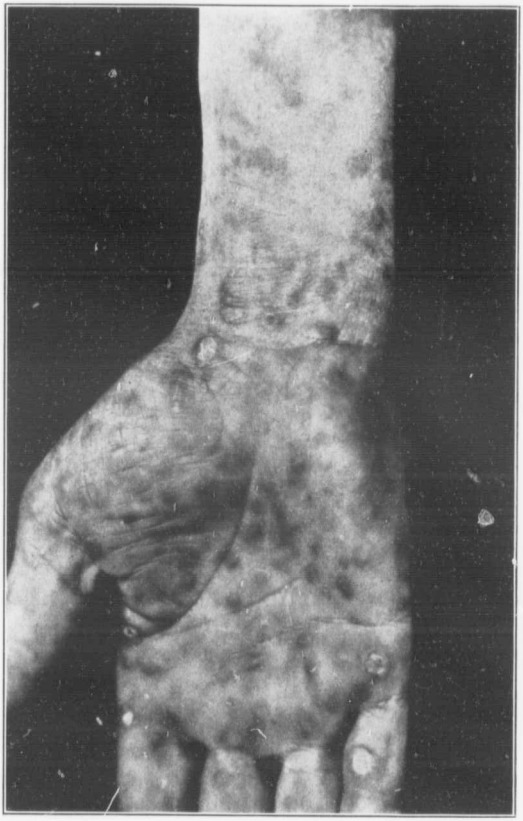


Syphilis. Secondary, showing maculo-papular eruption with tendency to grouping.



Syphilis. Late secondary. Limpet-shell type of lesion, not very common.

Syphilis. Secondary maculo-hæmorrhagic lesions which covered almost the entire body, the hæmorrhagic areas being on the legs, a portion of which is shown here. Rare.

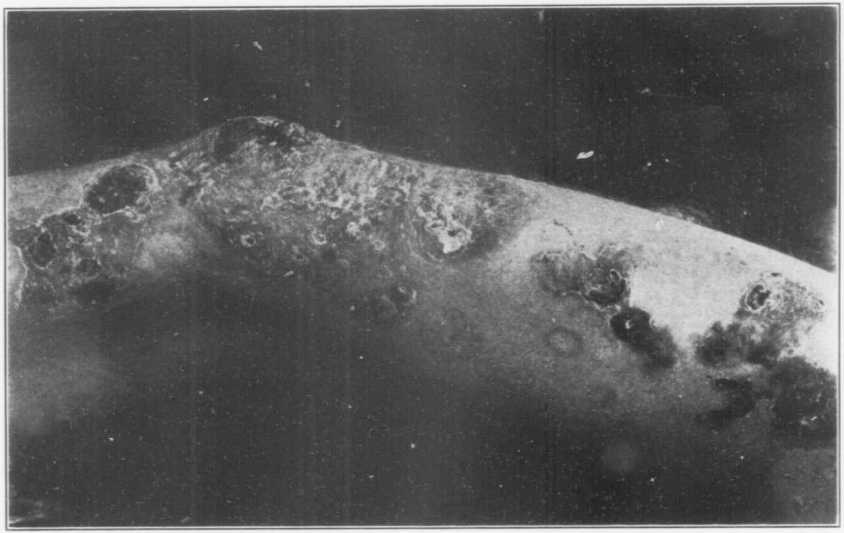


Syphilis. Secondary macular and papulo-squamous lesions on the palm.

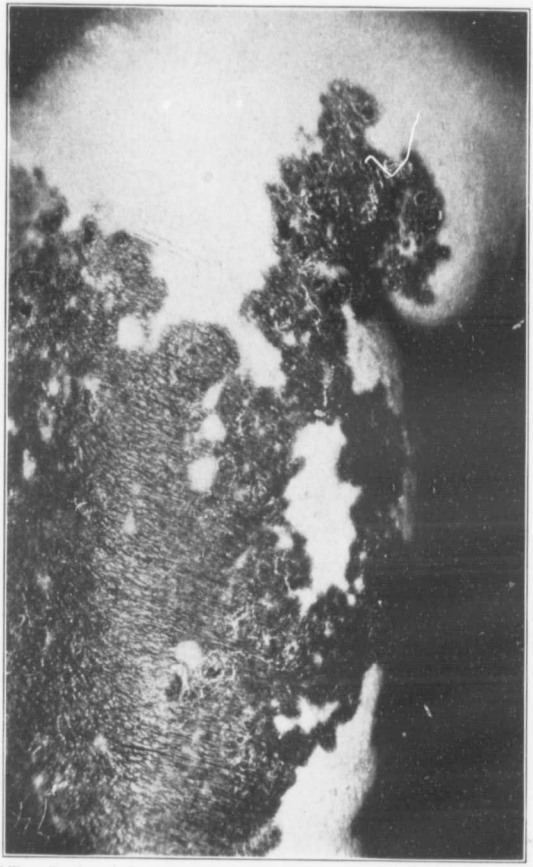
universal distribution of the earlier ones, but have a predilection for certain situations while still remaining roughly symmetrical. Thus the face is almost invariably involved, and the palms of the hands and soles of the feet, regions which escape in most other dermatoses, are quite commonly the seat of the disease.

Throughout the whole of the secondary period, flat, wart-like papules having a moist secreting surface are seen around the anus, on the genitalia, and in situations where there is heat, moisture, and friction, such as the natural clefts of the body. These are known as moist condylomata and are pathognomonic of the disease. Whitish areas, more or less abraded and denuded of epithelium, looking like shallow ulcers and known as mucous patches, occur on the mucous membranes of the lips, mouth, and genitalia.

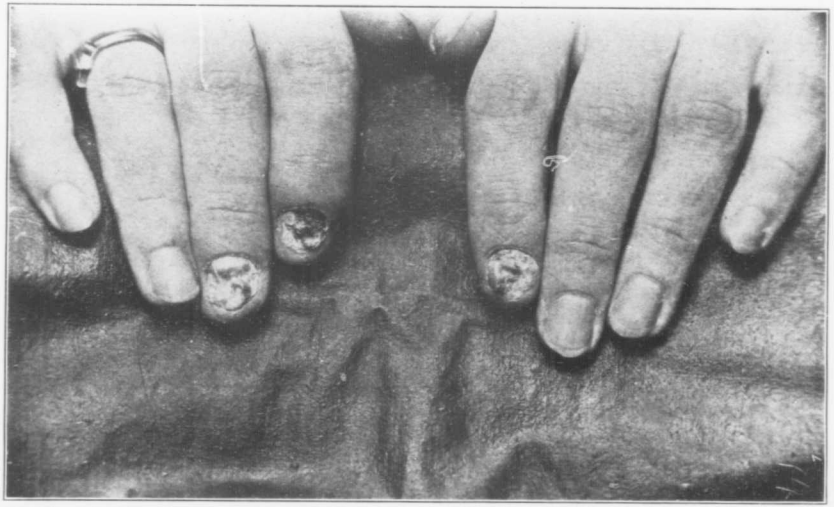
Tertiary eruptions are not symmetrical in distribution, rarely cover more than a small portion of the body and are always ulcerative, producing cicatrices as healing occurs. The most common form is a nodular, creeping eruption, having a more or less wavy outline, spreading at the borders and healing in the central portion. The advancing edge is raised and nodular from the presence of small, irregularly shaped granulomata, which soon break down, leaving an ulcer crusted with dried purulent matter. As this ulcer heals the cicatrices which form may be either so thin as hardly to be distinguishable from the normal skin, or dense, thick, and irregular, depending on the depth to which the ulcer has extended. Tertiary lesions are always sluggish and chronic, and create little discomfort except what may be due to their accidental situation. On the covered parts of the body it is not unusual to find such a lesion that has existed for years and has caused so little inconvenience that it is discovered accidentally by the physician who has been consulted for some other ailment. Some regions seem to be specially prone to tertiary lesions: these are the shoulders, forehead, over the lower ribs at the back, and in the neighbourhood of the larger joints. When the disease attacks the borders of the nose and upper lip there is less tendency to the formation of nodules and much deeper destruction of the underlying tissues, so that



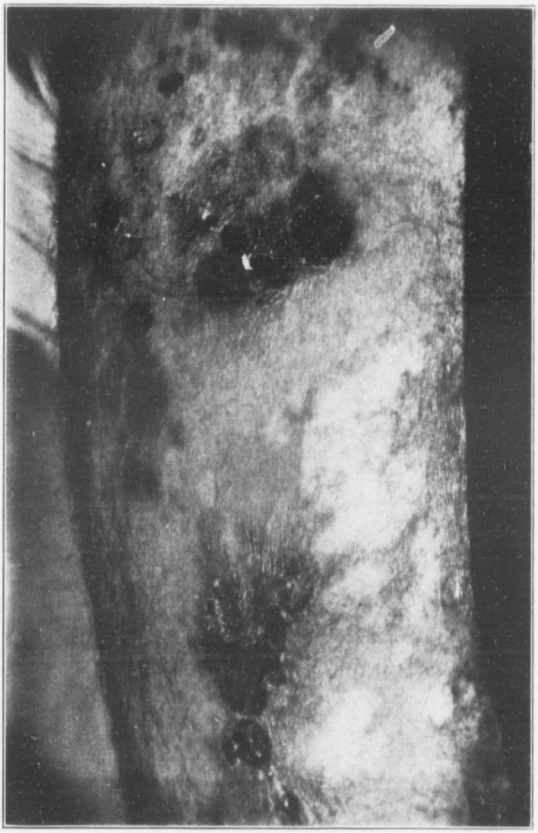
Syphilis. Early tertiary lesions, many crusts covering ulcerated areas.



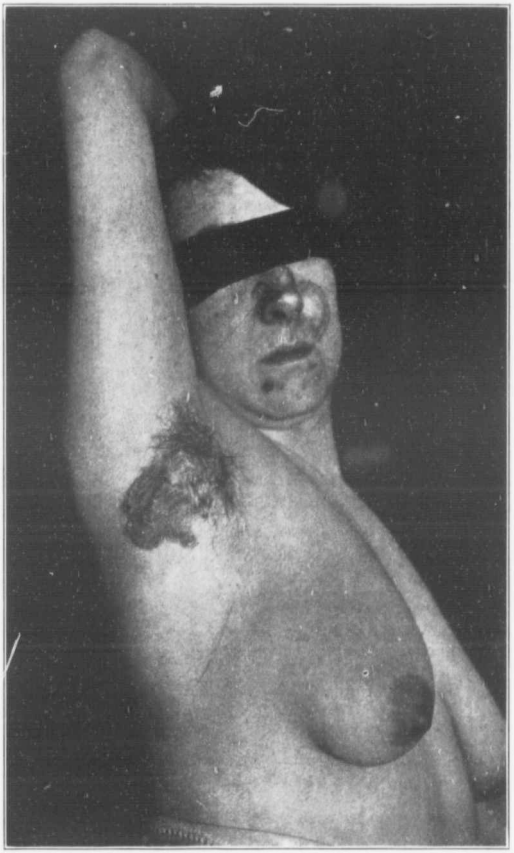
Syphilis. Tertiary lesions with dark brown pigment which persisted after cure of the disease.



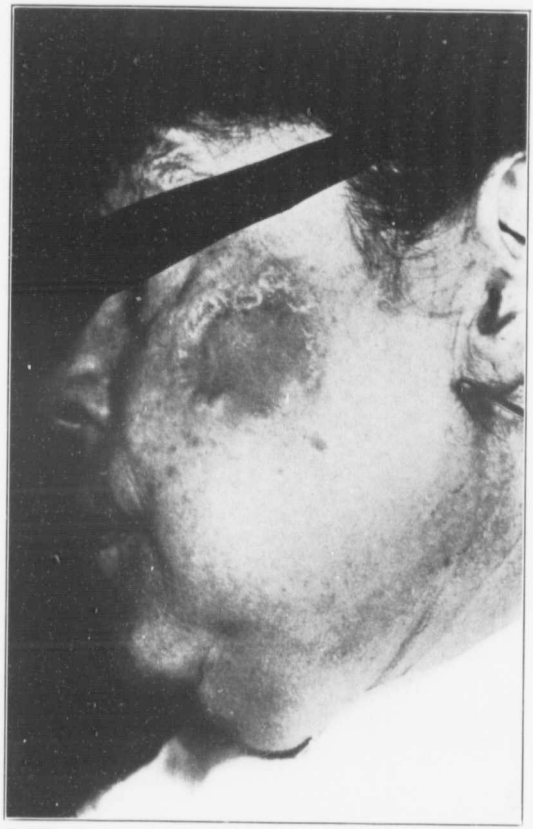
Syphilis. Onychia. These were the only lesions present and they healed rapidly under treatment by salvarsan.



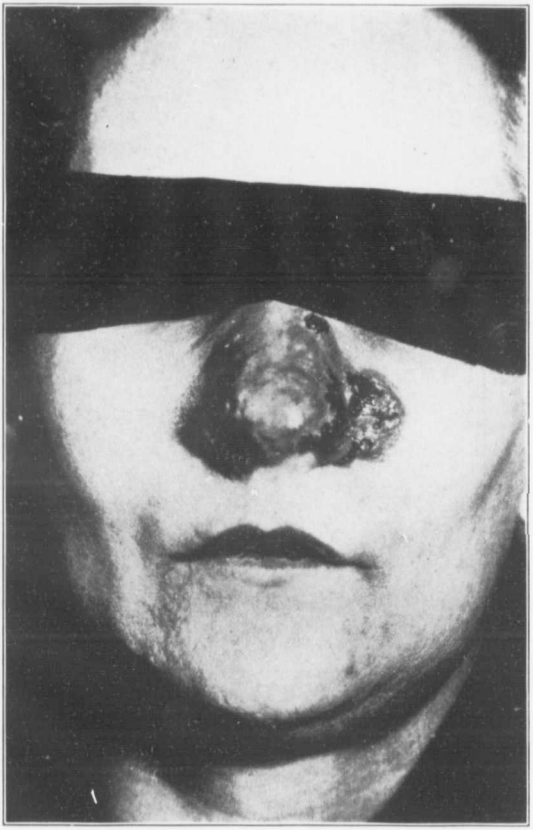
Syphilis. Tertiary ulceration and scars from former lesions.



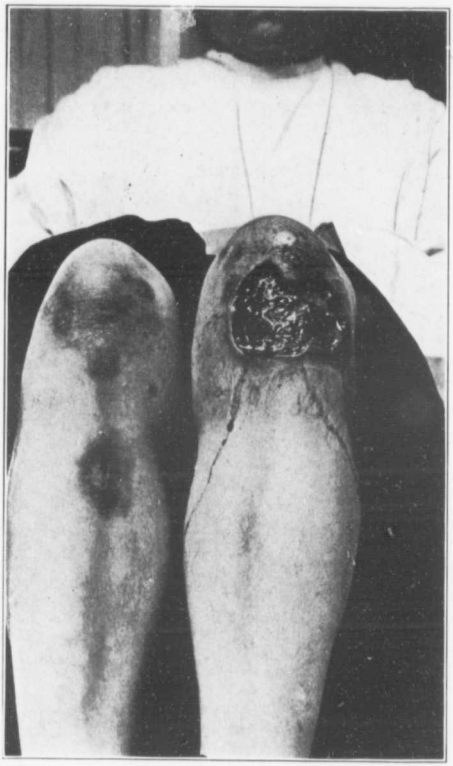
Syphilis. Early tertiary of the serpiginous type seen on the nose, cheek, and axilla.



Syphilis. Tertiary ulcerative lesion which suggested lupus erythematosus.

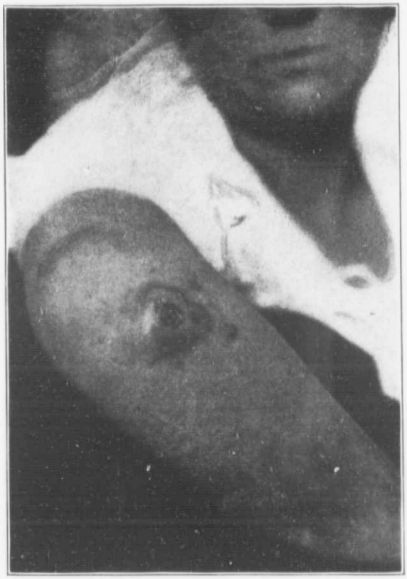


Syphilis. Nodular tertiary ulcerating lesion.



Syphilis. Tertiary. Gummata on the right leg, and ulcer formed by sloughing gumma on the left.

the whole of the alæ nasi may be destroyed and the disfigurement be very great. Another form of tertiary lesion is produced by the sloughing of the skin overlying a subcutaneous gumma or syphilitic granuloma of the soft parts, which results in a deep, punched out, circular, or oval ulcer with undermined edges. After the gumma has broken down and the contents

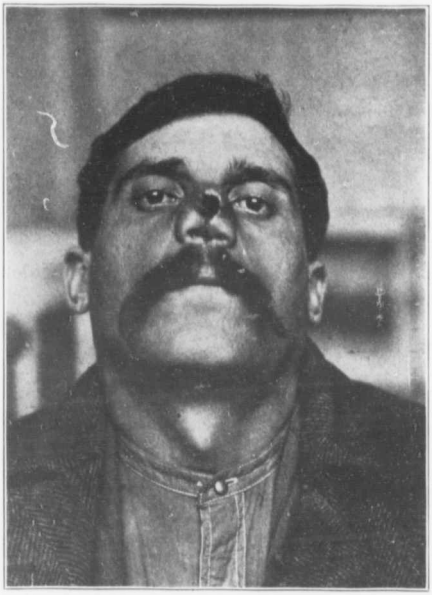


Syphilis. Tertiary. Gumma on the arm; the surface has just broken down.

escaped, the ulcer so formed may spread at the periphery until large areas are involved.

In **Hereditary syphilis** the disease is transmitted to the fetus, which suffers in proportion to the virulence of the parents' infection. The usual history in cases of untreated syphilis is one, at first, of repeated abortions, the product of each succeeding conception being carried by the mother a little longer, until a

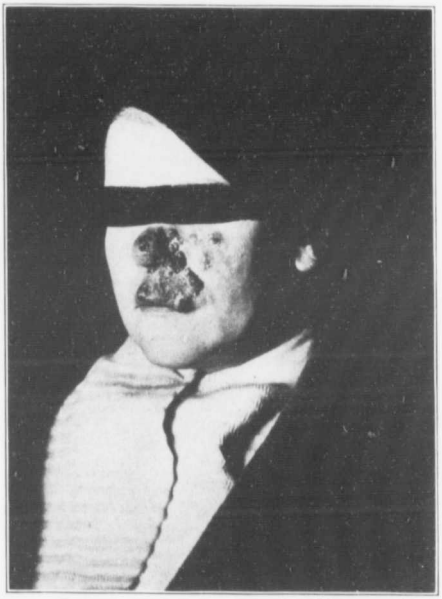
child is still-born at full term. In succeeding pregnancies, as the strength of the virus wanes, a child may be born alive with the secondary eruption fully developed and later others with less and less evidence of the disease, until finally a well-nourished, healthy looking child is born, and the eruption does not appear until weeks or months have passed. This, too, is the rule where



Syphilis. Tertiary. Destructive ulceration of the nose.

the parents have undergone partly successful antisyphilitic treatment, or where from the lapse of time the parental infection is of lower virulence, the disease making its appearance in the child sometime within the first six months of its life. In congenital syphilis the eruption may present any of the forms met with in the acquired disease, but there are several common

enough to deserve special mention. One of these is a bullous or pustular eruption consisting of large shallow, loosely-filled blebs, with cloudy or purulent contents, occurring most thickly about the head and extremities and noticeable by its involvement of the palms and soles. Another is a macular or maculopapular eruption, somewhat darker in colour and more pro-



Syphilis. Tertiary of nodular ulcerating type.

nounced than the similar eruption in the adult, and showing moist papules about the anal region and buttocks. Owing to the liability of infants to develop erythematous eruptions about the buttocks and genitals, syphilitic rashes are often first seen here, and are to be distinguished from the ordinary erythema due to irritating discharges by the presence of slightly raised,

moist, flat papules or shallow ulcerated surfaces, and by the absence of the general hyperæmia. Ulcerative lesions in the form of cracks are common too about the angles of the mouth and nares. In the majority of children with syphilitic eruptions, the general condition gives one a clew to the nature of the rash. There is almost invariably snuffles and the child has a shrivelled

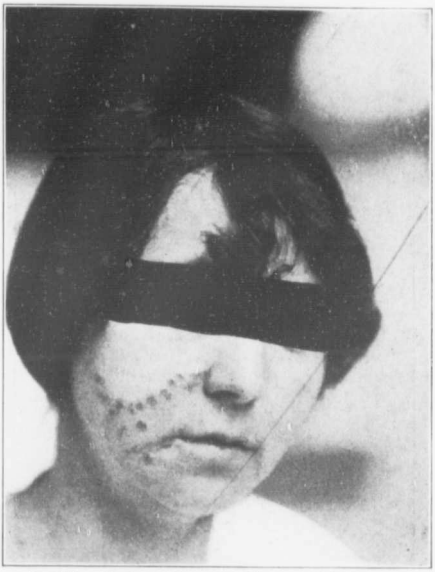
Syphilis. Tertiary. Nodular type.

up and wrinkled appearance with the facies of a very old woman, the skin being dry, inelastic, and yellowish in hue.

In the diagnosis of syphilis the Wassermann test of the blood is of the most importance; as it, however, can only be carried out properly in a well-equipped laboratory, it is not always available. The means of distinguishing between the Hunterian sore and other venereal ulcers is fully described in works on venereal

disease and will not be discussed here. Most of these cases are seen by the dermatologist long after the initial lesion has disappeared, or where there has never been any recognized primary lesion, perhaps because it was extra-genital in situation.

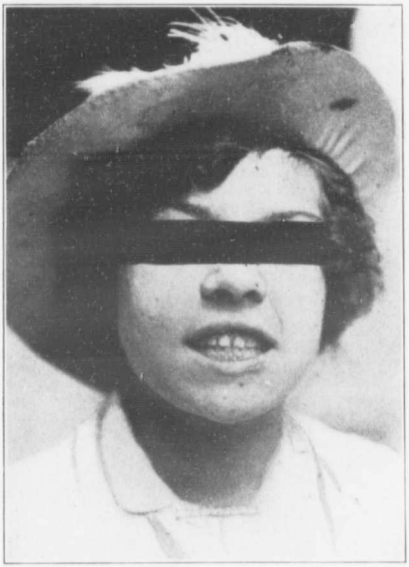
Secondary syphilis of the skin, as has been already pointed out, may simulate almost all of the common dermatoses. It is an ex-



Syphilis. Early tertiary, serpiginous, nodular type.

cellent plan to have in mind the possibility of syphilis in considering the diagnosis of all eruptions which are not, like herpes zoster or purpura, characterized by some prominent feature which labels them definitely. Points which should be given weight as indicative of syphilis are, first, lack of uniformity in the lesions, An eruption which shows maculo-papular, papulo-vesicular, or papulo-pustular elements in an otherwise uniform macular

or papular type of lesion is suggestive. The distribution is often helpful, as the face and especially the forehead is almost always involved (the corona Veneris of the older writers), and the palms and soles are included in a general eruption much more frequently than in other diseases. The colour of many secondary lesions is of a deeper red with more brown in it than is seen in



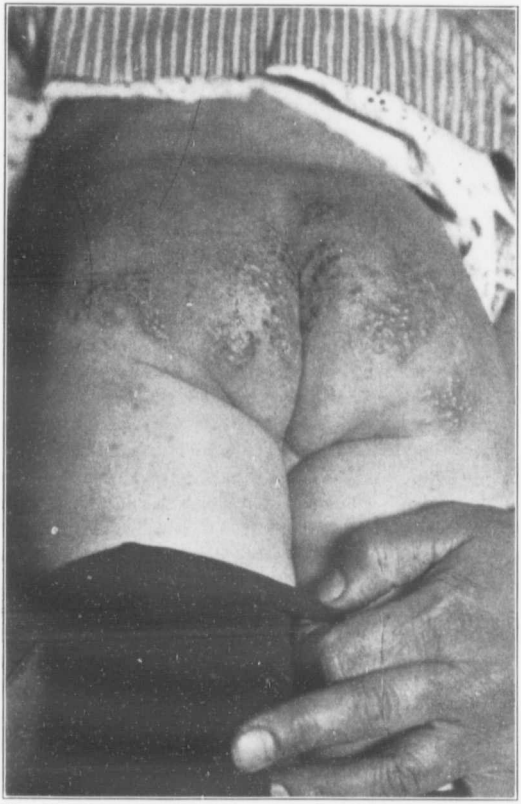
Syphilis. Hereditary. Girl of nineteen showing Hutchison's teeth.

most inflammatory diseases, giving the raw beef appearance, or it may contain sufficient pigment to be of a coppery hue. If, along with one or more of these special features in the distribution or character of the eruption, the patient exhibits the general glandular enlargement, sore throat, mucous patches, or condylomata and nocturnal pains in the limbs and head, a positive diagnosis can be made. It is mostly in the later secon-

daries, when the severity of the constitutional symptoms has abated, that the eruption assumes the circinate or gyrate form which is so characteristic of the disease.

Tertiary lesions of syphilis must be differentiated from the two forms of lupus, malignant disease of the skin, and blastomycetic dermatitis. The lesions produced by lupus erythematosus and tertiary syphilides often bear a very close resemblance to each other, the most striking difference being their rate of extension. Lupus, as compared with syphilis, is of extremely slow growth, ulcerates much less deeply, and is commonly confined to the head or face, showing but a single lesion of the batswing shape. Lupus vulgaris, being a disease of early life, is less likely to be confounded with syphilis, but the tertiary manifestations of the congenital disease are not infrequently, however, because of their occurring as early as the fifteenth year, mistaken for it. In such cases the patient is usually unaware of the congenital taint, and the early age precludes the idea of the acquired disease. In all doubtful cases where a Wassermann test cannot be obtained, a course of iodide of potash will settle the diagnosis, syphilitic lesions rapidly melting away under its influence. One point in connection with diagnosis should not be lost sight of; namely, that tertiary lesions of all sorts may make their appearance after a long period of quiescence, as we have records of cases in which such lesions have cropped up twenty years or more after the last manifestations of the disease in the skin.

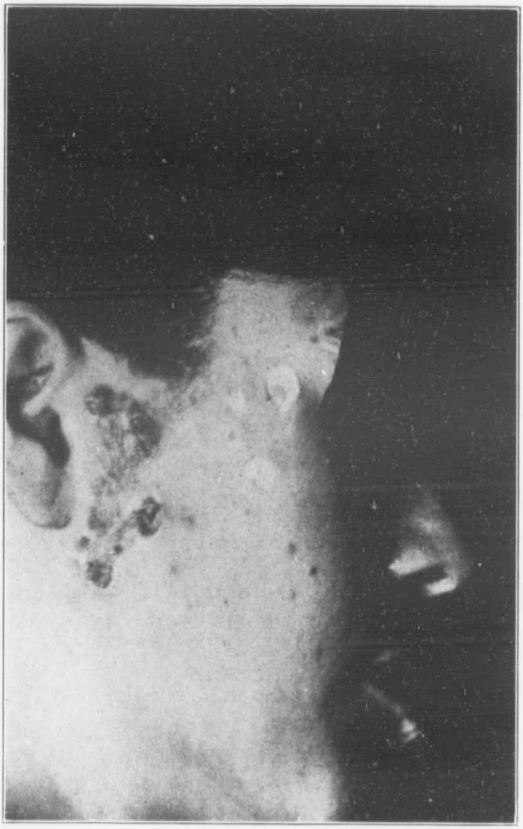
In the diagnosis of hereditary syphilis the family history plays an important part, recurring abortions or the birth of a dead child being strongly suggestive. In cases of known syphilitic parentage, if the child shows no evidence of the disease for six months following its birth, it may be considered to have escaped infection. Generalized or partial eruptions having the characters described in the section on congenital syphilis should always be looked upon with suspicion, whether or not the parents present any evidence or history of disease, and a Wassermann test of the mother's blood should be taken. One evidence of hereditary syphilis which may occasionally prove of value is the occurrence of Hutchison's teeth. Here the permanent teeth, principally



Syphilis. Hereditary. Papulo-vesicular eruption in child of two years who had had antisyphilitic treatment for a few months only after birth.

the upper incisors, are notched and somewhat peg-shaped, the ends of the teeth being slightly narrower than the portion in contact with the gums, but as it is only the permanent teeth that are affected this sign is of no value except in the tertiary lesions.

In the treatment of syphilis three drugs are of unquestioned value, mercury, iodide of potash or soda, and arsenic. The first and second have been in use for many years, the last had fallen into disrepute but has of late been revived by new compounds and new methods of exhibition. Disappearance of the secondary eruption is most quickly effected by the intravenous use of arsenic in the form of salvarsan or one of its homologues combined with the administration of mercury. Diarsenol, which we have used for several years in place of the original salvarsan, has been found quite as effective and if anything less toxic. It is given doses of .3 to .6 gramme, according to the age and vigour of the patient, beginning with the smaller dose and increasing, if it is well borne. From three to six injections are required at intervals of from ten days to two weeks, a Wassermann test being made a month after the last dose. If this is negative, and clinically the eruption has disappeared, its use is discontinued for six months or so, when a second course is given. Mercury is given from the outset and kept up continuously for six months, and after that for twenty days out of each month, until the patient has been under its influence for two years. It may be used in many ways, but in our experience, grey powder (hydrargyrum cum creta) 3 to 6 grains daily has proved most satisfactory. In order to cope with its untoward effect in producing diarrhœa it is used in the form of Hutchison's pill, containing one grain of grey powder to one-fifth grain of Dover's powder (pulvis ipecacuanhæ co.). If the teeth are in good condition and kept so by frequent brushing, it can be taken for long periods without any unpleasant results. Mercury is also given by the mouth in the form of the proto-iodide or the bichloride along with potassium iodide, by inunctions, a method which is specially useful in children, and hypodermically, using the metallic mercury suspended in oil or one of several compounds in oil or water. All these methods



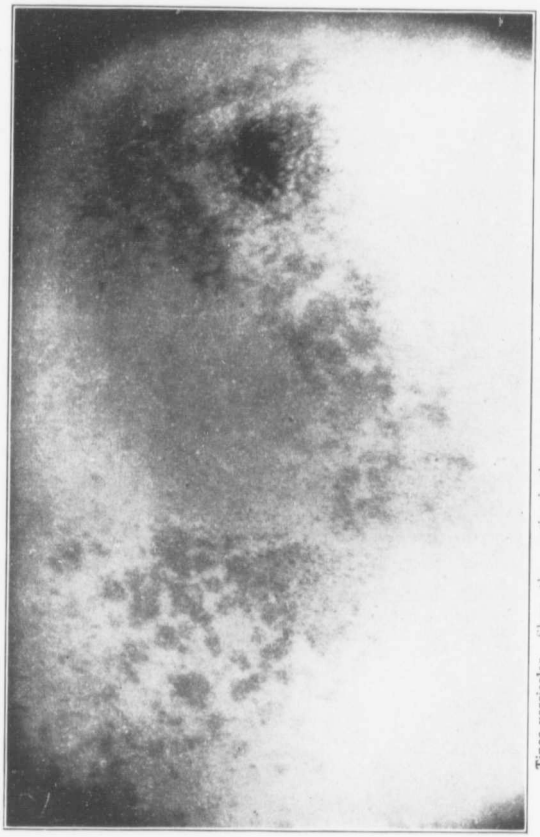
Syphilis. Hereditary. Tertiary, ulcerating lesions at age of nineteen, on the temple and below the mouth. This is the case from which the photo of Hutchison's teeth was taken after cure by salvarsan.

have their advocates, and provided a sufficient amount is introduced into the system without causing any upset, it is of no moment how the result is obtained. Iodide of potash we have found of great service in the nodular tertiary eruptions, which it rapidly resolves if given in large enough doses. It should be given in 20 grain doses in a full tumbler of water, taken after food and in the majority of cases causes no ill effects, even when increased to 30 or more grains at a dose. The nodules rapidly melt away and cicatrization takes place, a complete cure often resulting in from two to three weeks' treatment. The iodides, however, do not prevent recurrence, and diarsenol and mercury require to be given as outlined above to prevent a return of the disease. In syphilitic infants, diarsenol may be given in doses proportionate to the age, by introducing it into the longitudinal sinus through the anterior fontanelle. It is better, perhaps, to keep the disease under control for the first six months by grey powder in $\frac{1}{3}$ grain doses and inunctions of blue ointment (ungt. hydrargyri). Smearing the inside of the child's flannel binder with a mass of ointment the size of a large pea each morning is a simple method of accomplishing the latter. If the mother is able to nurse the child she also should be on antisyphilitic treatment.

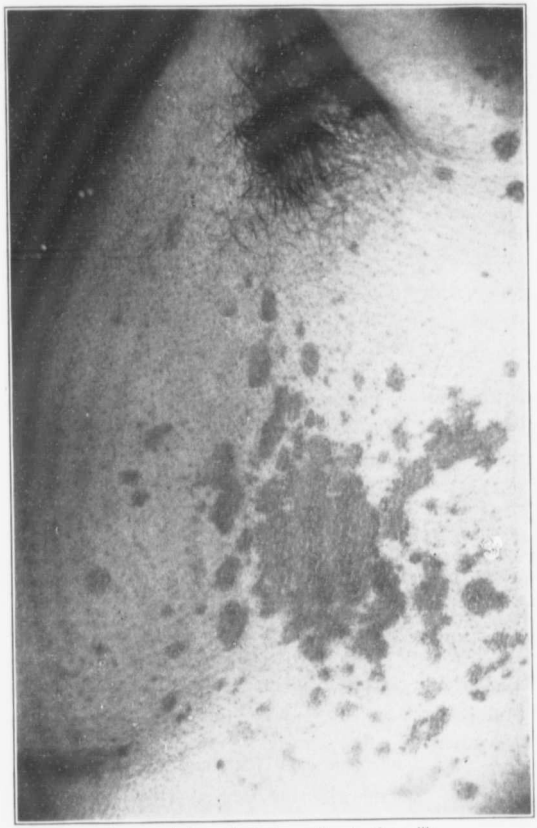
The local treatment depends upon the character of the lesion. The secondaries are better left alone, unless there is irritation, a rare event, when an antipruritic lotion can be prescribed. In the ulcerative lesions of the tertiary stage, the use of ungt. hydrargyri ammoniatum locally is found of value.

TINEA VERSICOLOR

Tinea versicolor is a parasitic disease caused by a vegetable organism which invades only the superficial layers of the skin and causes no symptoms except brownish staining and slight scaliness. The lesions formed by the fungus consist at first of discrete spots up to a dime in size, but as the disease extends the individual spots coalesce to form large stained areas, at the margin of which outlying small islands can always be distin-



Tinea versicolor. Shows the eruption in the most common situation, over the front of the thorax.



Tinea versicolor. Typical eruption in the axilla.

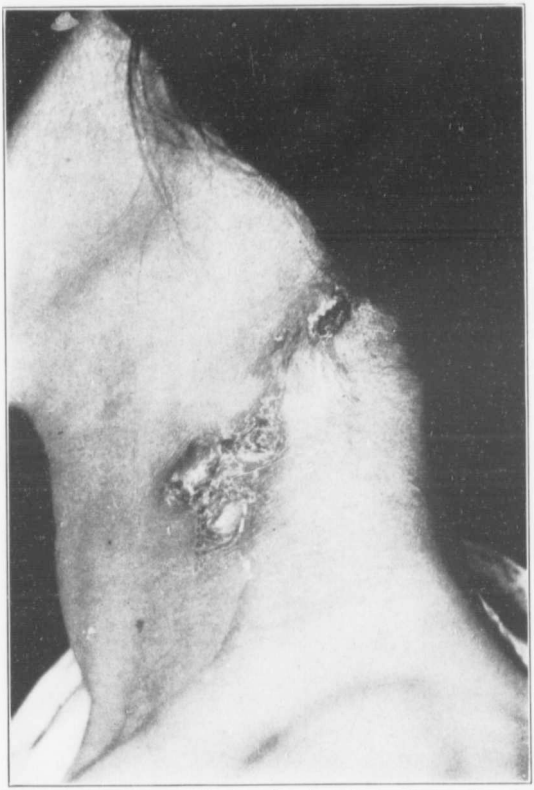
guished. The shoulders and upper part of the thorax are the commonest sites for the disease but it may appear anywhere on the covered parts of the body. Prolonged exposure to sunlight apparently kills the fungus, as it does not extend above the borders of the collar or on to the forearms. The disease is a very common one among people who are not over-particular as to cleanliness, and as it occasions no discomfort and is for the most part invisible, is often allowed to exist for years.

The diagnosis is readily determined by mounting scrapings from the brown patches in liquor potassii and examining them with a high power. The fungus, Microsporon furfur, is closely allied to that of ringworm, showing mycelial threads matted together and containing here and there groups of spores like bunches of grapes, this feature distinguishing it from ringworm where they occur in chains.

Any mild antiseptic vigorously applied to the parts with a stiff nailbrush will destroy the fungus. A solution of hyposulphite of soda, one drachm to the ounce of water, answers especially well, as the solvent effect of the soda on the skin aids in its penetration.

TUBERCULOSIS

Invasion of the skin by the tubercle bacillus produces half a dozen clinical forms of disease, all except two of which are comparatively rare. **Scrofuloderma** is a sluggish form of ulceration involving the skin and underlying tissues, and often arising in the small abscess formed by a suppurating lymph gland. The ulcer so formed is irregular in shape, of a dull red or purplish colour, and exhibits an undermined edge, as the skin is more resistant to the attacks of the bacillus than the soft tissues. Such an ulcer may also arise in situations where there are no glands, the primary lesion being then a nodule or tubercle in the skin. Healing occurs with the formation of thick, irregular cicatrices, which later give rise to considerable disfigurement, as they tend to retain their dark red or purplish colour for years and by contracting distort the surrounding tissues. The disease is met with mostly in children and young adults already

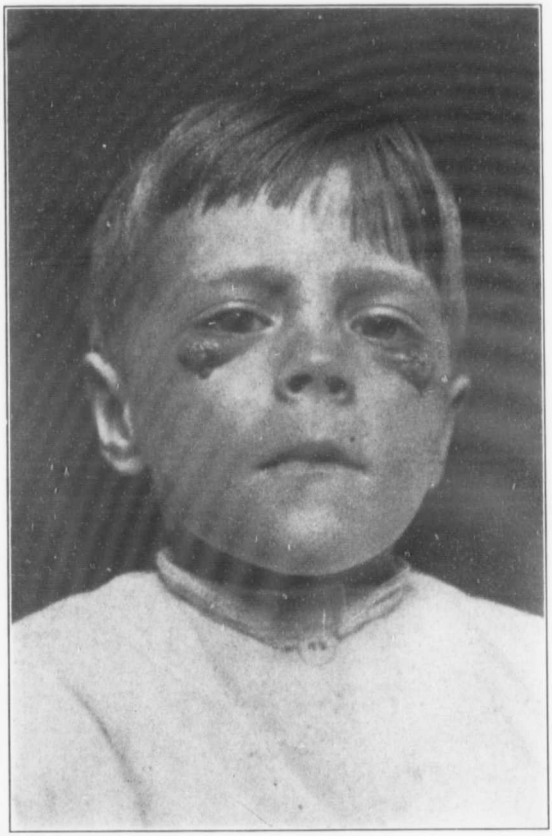


Tuberculosis. Scrofuloderma, showing ulceration following broken down lymph nodes.

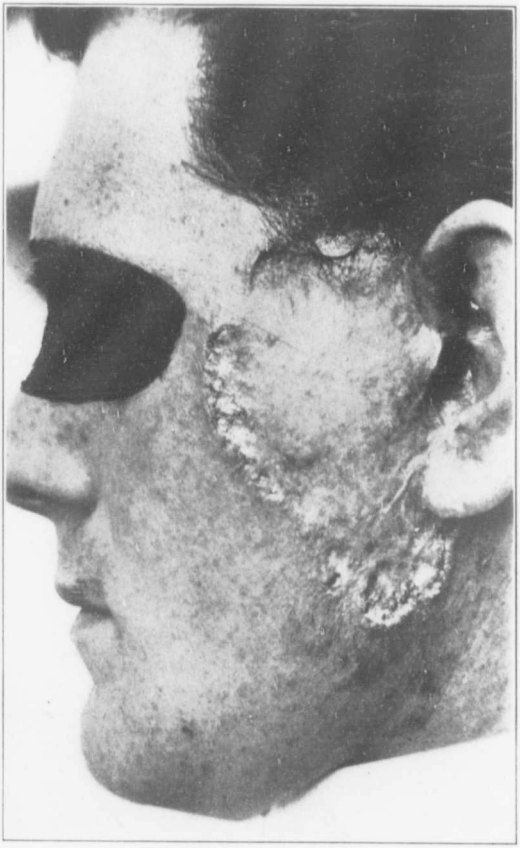
the subject of some other form of tuberculosis, and the face and neck are most liable to be affected, though any part of the body may participate. The age at which it occurs, coupled with the undermining character of the ulceration, serves to distinguish it from other similar affections. Treatment should be carried out on surgical principles, by removal of the diseased tissue and by encouraging the wound to heal with as little disfigurement as possible.

Lupus vulgaris is a chronic, cellular growth of low vitality, tending to break down almost as soon as it appears, and characterized by small nodules or tubercles of a soft jelly-like consistence, pearly grey to bluish in colour, almost translucent, resembling boiled sago grains. These growths are so soft that a blunt-pointed probe can be pushed through them until it meets the resistance of the sound tissues underneath, and, as they break down, leave a pus-crusted ulcer ultimately resulting in thick, dense cicatrices. The disease begins in early life and may last for an indefinite period, becoming quiescent or healed in the centre and slowly extending at the border. While no part of the body is exempt, in the great majority of the cases the face alone is involved, and when, as is commonly the case, it occurs in the neighbourhood of the eyes, nose, or mouth, the contraction of the scars or the deep ulceration causes marked deformity, the whole thickness of the walls of the nose being often destroyed. A single lesion is usually seen, but secondary ones may arise at some distance from the primary one.

The points to be depended upon in diagnosis are the early age at which the disease makes its first appearance, the ulcerative character of the lesion, and the soft, friable nature of the new growth. Lupus erythematosus is often hard to differentiate from it, especially the hypertrophic form of that disease. Lupus vulgaris, however, is more destructive, and the nodules are softer and differ in colour, and the disease occurs in early rather than in middle life. An ulcerative tertiary syphilide is rarely single, extends very much more rapidly, tends to take a crescentic form and is uncommon in early life, except where the disease is hereditary, when other evidences of its nature will be present.



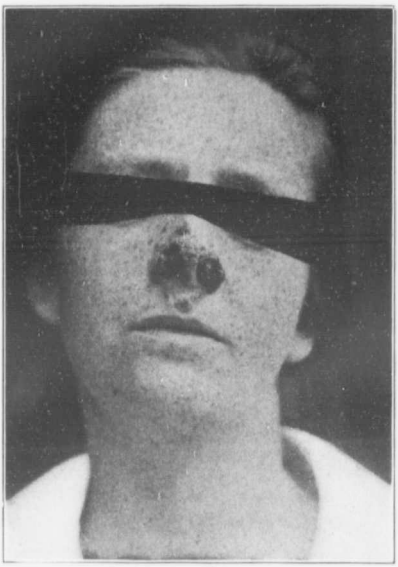
Tuberculosis. Scrofuloderma. Two sluggish abscesses formed as seen here in a child the subject of tuberculosis.



Tuberculosis. Lupus vulgaris.

Tuberculosis. Lupus vulgaris. The little finger had been amputated some years previously under the impression that the disease was carcinoma.

Because of the tuberculous nature of the disease, treatment should be constitutional as well as local, and good nutritious food, an open air life, and everything that tends to increase the resistance of the patient are indicated. Locally, efforts should first be directed to reducing the inflammatory reaction and then to destroying the bacilli by means of strong escharotic or germi-



Tuberculosis. Lupus vulgaris of the nostrils extending on to the mucous membrane.

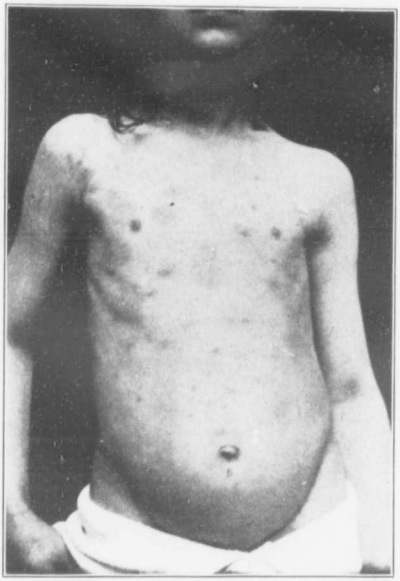
cidal applications. Liquid air, which answers so well in the erythematous lupus, has not proved very satisfactory in our hands. Repeated exposure to X-rays in many cases is found of service, but not invariably so, and it is impossible to tell beforehand whether it will be of benefit; it should only be undertaken by an expert Rœntgenologist. Removal of the active portion of the disease by curetting with a sharp spoon under surgical

anæsthesia is an effective way of dealing with it, but this can rarely be done thoroughly enough to remove all foci of infection at the first attempt, and has to be repeated as the nodules reappear. When hospital facilities are not within reach the repeated application of mild antiseptic ointments to destroy the pyogenic organisms, followed by escharotics, is the best form of treatment to undertake. Of the mild antiseptics, unguentum hydrargyri ammoniatum, unguentum hydrargyri oleatis diluted one half, or salicylic acid, 10 to 15 grains to the ounce, answer the purpose well. As destructive agents, one can use resorcin and beta naphthol paste (see Acne), salicylic acid 60 to 90 grains to the ounce, pyrogallic acid one or two drachms to the ounce, or arsenious acid. The latter is a well-known remedy used in the form of Hebra's ointment, arsenious acid 20 grains, hydrargyri sulphidi rubrum one drachm, to the ounce of unguentum aquæ rosæ. Stelwagon suggests adding 5 to 10 grains of cocaine hydrochlorate to this in order to allay the pain caused by its use.

URTICARIA

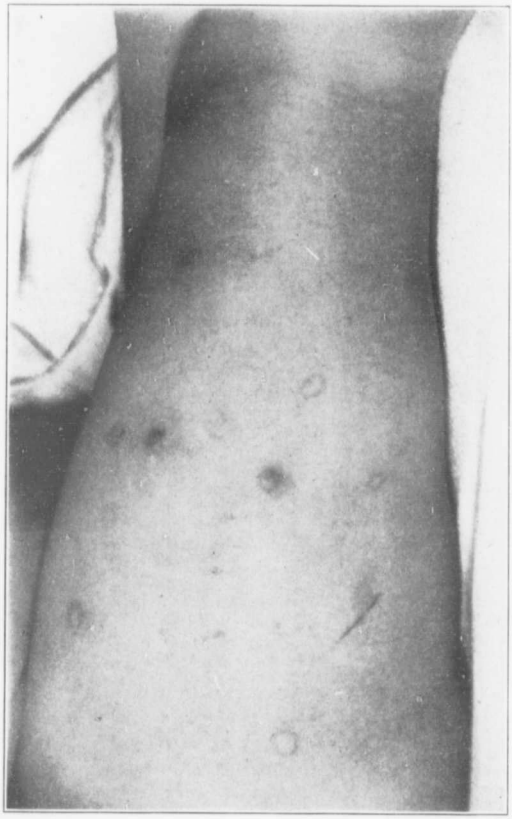
Urticaria, or Hives, is the cutaneous manifestation of a general toxæmia, which may be due to various causes, but is most frequently gastro-intestinal in origin. The skin lesions consist of wheals, slightly raised, pinkish areas of regular or irregular shapes and sizes, few or many in number, fairly sharply defined, but showing a slight pinkish areola about the elevated portion. An identical lesion is produced by the bites of many insects, notably the mosquito. The wheals have no regular distribution, though the feet and hands usually escape, reach their full development in a few minutes, and after lasting for a variable time, commonly several hours, disappear rapidly without leaving any trace except in young children. In these latter each lesion leaves on fading a little, hard, intensely itchy papule, which is often seen surmounted by a blood crust, where the top has been removed by scratching. The disease gives rise to an intolerable itching or burning sensation, which often persists after the efflorescence has disappeared, especially in the papular type, and though each

individual lesion does not last long, a sufferer from the disease is often never entirely free from irritation, as new wheals keep appearing either continuously or in crops. Any slight local disturbance of the circulation of the skin, either by heat, cold, or pressure, may result in a fresh outburst over the part affected. In some individuals, otherwise showing a normal condition of

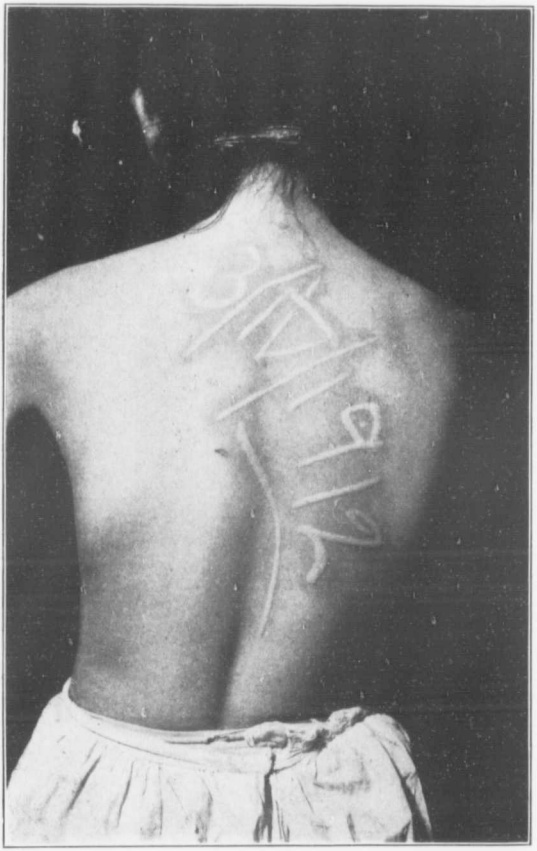


Urticaria. Showing the distribution of the lesions.

their integument, the cutaneous vasomotor nervous system is so sensitive that slight pressure, such as that exerted by scratching, will give rise to wheals corresponding with the lines of pressure, and it is thus possible to draw figures on the skin with a blunt-pointed instrument and have them accurately reproduced by wheals within a few minutes. Such a condition has been called Dermographism or **Urticaria factitia**.



Urticaria. Papules seen after the efflorescences have disappeared in a child of two.



Urticaria factitia.

Urticaria is not difficult of diagnosis when the characteristic lesions are present or when one can get a history of their recent occurrence. It is in long-standing cases, where the scratching has led to secondary infection and the production of purulent sores, that confusion is apt to arise and the primary cause of the trouble to be overlooked. The disease may occur concomitantly with scabies, and the presence of a few wheals may lead one to overlook the presence of the more serious affection. Papular eczema produces great itching and somewhat the same picture as urticaria, but the papules are grouped and not scattered irregularly over the body as in the latter disease.

Treatment is directed towards relief of the itching and removal of the underlying cause. Antipruritic agents are more easy of application in the form of lotions and should be prescribed in this way. Tar and its derivatives are most satisfactory as they are effective and not poisonous, our favorite being liquor carbonis detergens, one or two drachms to the pint of water, sponged over the wheals as often as necessary. Carbolic acid has more lasting effects, but watery solutions are dangerous unless very carefully used. A ten per cent solution of menthol in olive oil relieves the itching but is objectionable on account of its soiling the clothing. Sponging with weak vinegar or soda solutions, or baths made with them, or even of plain water, will give temporary relief. Internally, treatment is to be directed towards removal of the cause, which in children is most frequently a gastro-intestinal toxin, due either to a faulty diet or a special idiosyncrasy to some wholesome form of food. Sugar in excess, eggs, oatmeal, and certain fruits are all objects of suspicion. In our clinic the great increase in the number of cases during the season in which the small fruits are plentiful suggests them as the most frequent factor, and the strawberry is undoubtedly the most common offender in this respect. As a routine procedure one should empty the bowels by a saline purge.

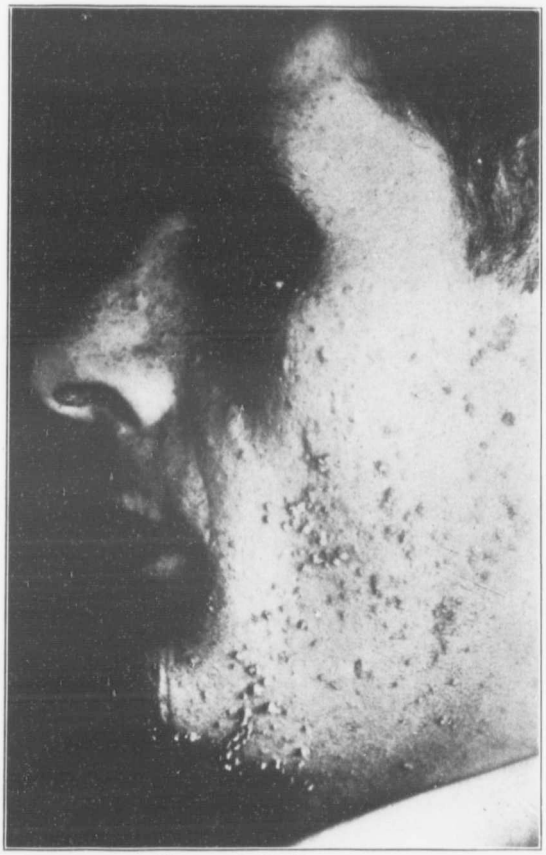
VERRUCA

Verruca or wart, the common variety of which becomes familiar to almost everyone in childhood, is a small tumour consisting of epidermal tissues well supplied by bloodvessels and, though nothing is known of the exciting cause, undoubtedly contagious, in the sense that one such growth may give rise to others. This form, **Verruca vulgaris**, is commonly sessile though occasionally pedunculated, is hard and horny in character, becomes grey or dark brown with age, when its surface often becomes irregular and broken up into segments. Children and young adults are the most frequent sufferers, a single lesion, the " mother wart " often appearing first, followed months later by many smaller ones either in the same region or on the uncovered parts of the body.

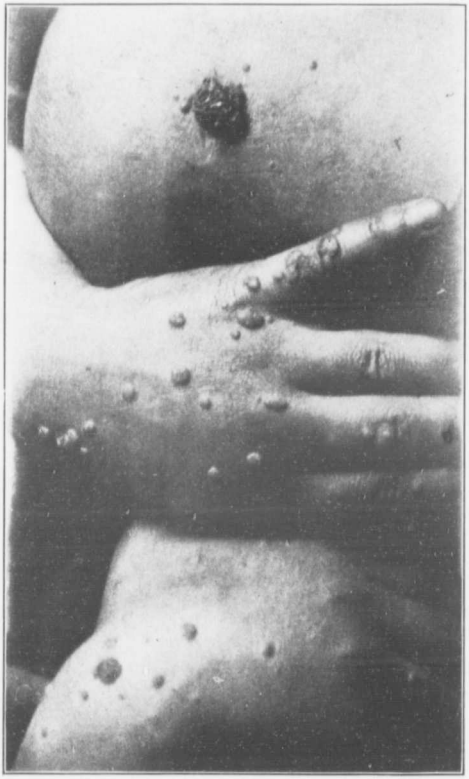
Flat warts, **Verruca plana**, are common in children and the aged and seldom met with during the intervening years. In the old they appear on the face or hands as soft, slightly raised growths, irregular in shape, grey to black in colour, often rough on the surface and reach the size of a dime at times. Besides their disfiguring effect they are of moment from their liability to undergo malignant degeneration. In early life flat warts form small, round or oval, very slightly raised, smooth growths from a pinhead to a lead pencil in diameter, usually present in large numbers on the face, arms, or hands. Often when small they are almost invisible, but as they increase in size the colour, originally slightly deeper than the normal skin, becomes darker.

Pointed warts, **Verruca filiformis**, thread-like in shape, are occasionally seen upon the face, and venereal warts, **Verruca acuminata**, soft cauliflower-like growths, often reaching an inch or more in length, are seen about the mucous membrane and skin of the genitals, especially in women suffering from an irritating discharge.

While many dermatologists express faith in the internal treatment of warts, their well-known spontaneous disappearance at times renders one sceptical of reported results from arsenic in small doses, or daily purgation with Epsom salts, the favourite remedies. Locally the common variety can be removed by



Verruca. Small filiform type.



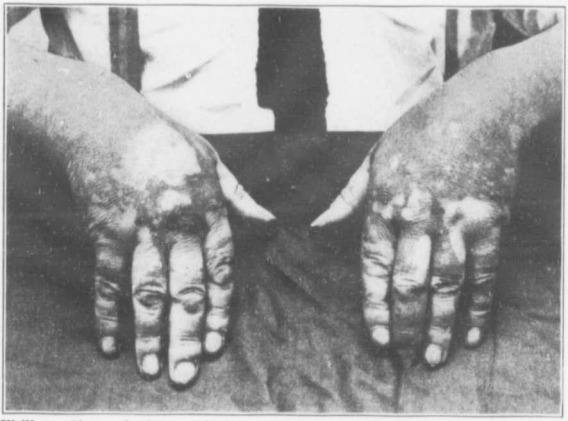
Verruca. Vulgaris, showing mother-wart on the knee and a crop of more recently developed ones on the hands.

Vitiligo. Lower arm in a well-marked case.

excision, caustics, electrolysis, or freezing. Freezing by means of liquid air or carbon dioxide snow we have found most satisfactory in the treatment both of senile warts and the commoner forms, but when these agents are not obtainable, the common form can be removed by daily applications of acid nitrate of mercury, which produces a small abscess about the base of the wart, enabling one to pick it out entire. For the flat forms seen in early life an ointment containing from 10 to 30 grains of salicylic acid to the ounce is often of value.

VITILIGO

Vitiligo, the opposite condition to chloasma, is a loss of all pigment in the skin, rendering the part white. The disease is



Vitiligo. Shows the increased pigmentation in the neighbourhood of the patches.

generally seen first about the backs of the hands and face in the form of small oval or round spots of milky whiteness with accentuation of the normal amount of pigment at their margins. The spots slowly increase in size and become irregular in shape, but the general distribution remains roughly symmetrical. Apart

from the loss of pigment no change occurs in the skin of the affected parts.

In persons with a very pale skin the contrast between the white patches and the surrounding pigmented areas may lead to a mistaken diagnosis of chloasma, especially during the summer, when the normal pigment is increased. There is no form of treatment of any value. If it is desired to remove temporarily the disfigurement caused by the disease, one may try carefully painting the white patches with a stain made of a one per cent solution of chrysarobin in alcohol, until the desired colour is reached.

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