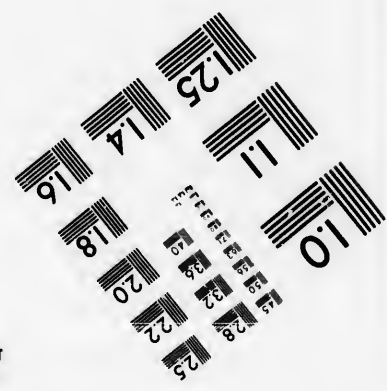
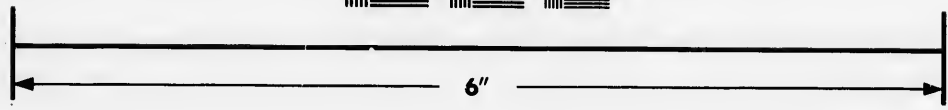
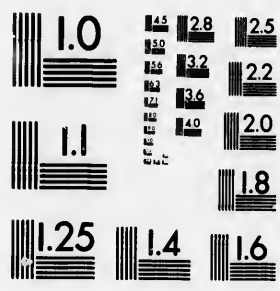


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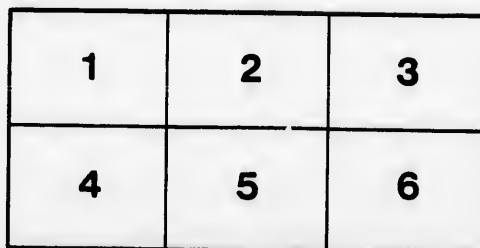
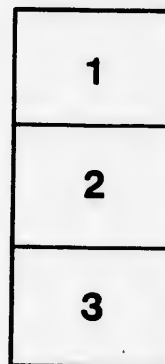
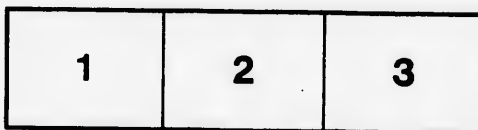
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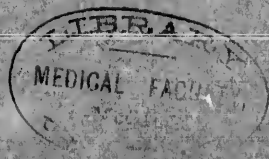
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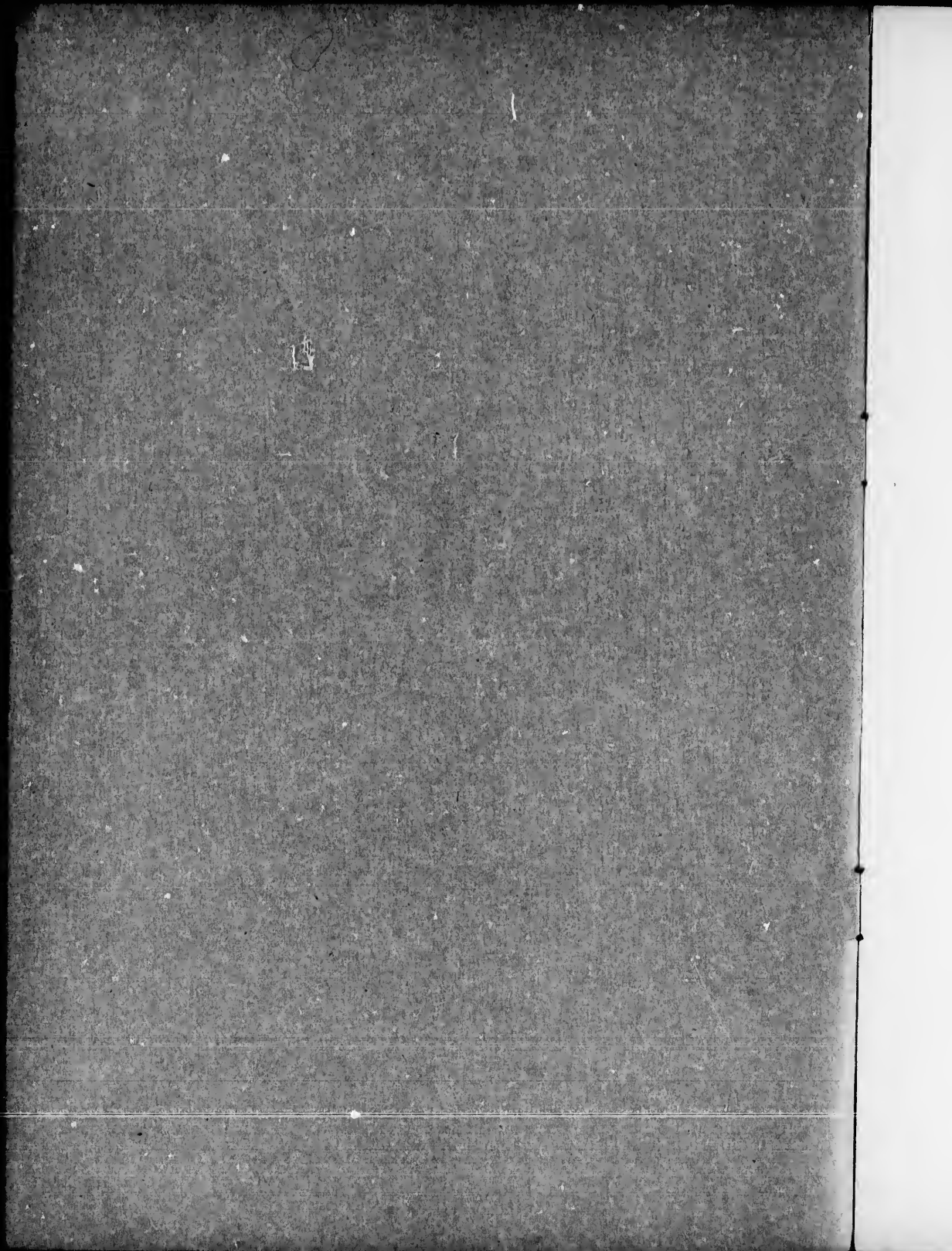
**THE TREATMENT OF MALIGNANT DISEASES OF THE SKIN.**

BY

**FRANCIS SHEPHERD, M.D., C.M.**  
Professor of Anatomy and Lecturer on Diseases of the Skin in McGill University; Surgeon to the Montreal General Hospital.

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## THE TREATMENT OF MALIGNANT DISEASES OF THE SKIN.<sup>1</sup>

BY FRANCIS SHEPHERD, M.D., C.M.,

Professor of Anatomy and Lecturer on Diseases of the Skin in McGill University;  
Surgeon to the Montreal General Hospital.

TO treat very fully this subject would require more time than the Association would be prepared to allow; that is, if all the methods of treatment of malignant disease were discussed. So I shall not attempt any elaborate dissertation but only speak of the practical points as seen from a surgical standpoint.

As a surgeon who has had to treat all kinds of malignant disease, wherever situated, treatment by excision of the growth and the removal of the lymphatic channels and the adjacent lymphatic glands, seems to be the most scientific and the best procedure in the majority of cases, but in certain forms of malignant disease of the skin, especially where it is superficial, curetting, actual cautery, and the subsequent application of caustics is of benefit. We all now believe in the local origin of cancer, and also that wherever found it should immediately be got rid of by whatever means seems best to the medical man in charge, whether by knife, caustics, curetting, or a combination of methods. The disease being in the first instance local, it naturally follows that the treatment should be local; constitutional treatment other than that needed to support the patient is of no avail. Although many remedies have been recommended from time to time, all have proved to be broken reeds, and how could we expect otherwise? It is just as futile to attempt to treat carcinoma by constitutional measures as it is to thus treat stone in the kidney or bladder. The only hope of radical cure lies in early and complete removal.

As I intimated above, there are two methods of local treatment, by excision and by chemical means; both methods have their ardent advocates. I, as a surgeon, favor excision in the great majority of cases, though I think some cases are suitable for treatment by caustics. In all cases of carcinoma of the skin and elsewhere, it is most important to remove the lymph-channels and lymphatic glands in the neighborhood, for instance in epithelioma of the lip; mere wide removal of the local

<sup>1</sup> Read before the American Dermatological Association at Washington, D. C., May 2, 1900.

growth is not sufficient, but it is necessary to thoroughly clear out the contents of the submaxillary triangle on the same side in which the disease of the lip is situated. I have seen not a few cases in which the growth has been thoroughly removed, by knife or caustics, remain perfectly free for a year or more, and after this the patients may return with extension of the disease to the glands in the submaxillary space; in some cases the disease was not confined to this region but had extended to the carotid glands. The formidable cutting operation which this extension involves is one of considerable danger to the patient and gives but little hope of ultimate success. Had it been undertaken in the first instance, the chances of the patient would have been much increased. Oftentimes it is impossible to detect slight enlargement of the submaxillary lymphatics without opening up the submaxillary space and even if the glands are not specially affected, early removal of the glands is good prophylactic treatment and renders the patient's future much more safe.

The weak part of the treatment by caustics is that it postpones the removal of the lymphatic tissue and glands in the neighborhood. I believe that there may be infection of the glands, and yet the microscope, not be able to detect it, and that in all cases as a precautionary measure, if for nothing else, all the neighboring glands and lymphatic tissue should be as far as possible excised in all cases of malignant disease, especially when it occurs in such places as the tongue, the lips, the penis, the scrotum, vulva, etc.

The magnificent results which surgeons have, in the last few years, achieved in operations for cancer of the breast, have been due altogether to the recognition that cancer is first a local disease, and therefore must be early and completely removed; and secondly, that it spreads by the lymphatics. So now in every case where cancer of the breast is even suspected, not only is the breast removed but also the two pectoral muscles which contain lymphatic vessels, and all the axillary lymphatics with their glands; in fact, the only structures left in the axilla are the arteries, veins, and nerves. Should the axillary glands be infiltrated the clavicle is divided and the supraclavicular glands and tissues are carefully removed. By this means a large proportion of cases which would previously have been regarded as hopeless, are now enjoying robust health and are useful members of society. In Paget's disease of the nipple I should advise a radical operation, namely, the removal of the whole breast, for in those cases we cannot afford to take any chances in the hope that milder measures may cure the disease; if these milder measures fail and recurrence takes place, then the chances of the patient's getting *cured* of the disease are much



less. In cases where the skin is loose and can easily be excised the removal of the growth by excision is undoubtedly the only method which should be employed.

In cancer of the penis, the removal of the lymphatic glands in the groin is most important, as the lymphatic trunks in the skin of the penis so rapidly carry infection to the nodes. Should the disease affect the glans penis the case is more hopeless, for the lymphatics of the solid part of the penis connect with the internal iliac glands, and, hence, extirpation of the affected glands is practically an impossibility. In such cases early removal of the entire penis may prolong the patient's life for some time, if it does not prevent any return of the disease.

I admit that there are certain malignant ulcerations of the skin which, if seen early, may be successfully treated by caustics, especially in those slow-growing forms which are seen in regions somewhat removed from glands, such as on the nose, forehead, cheeks, temples, etc.; in cases of rodent ulcer, where the disease is of slow growth and the glands in the neighborhood do not become affected rapidly, and where the ulceration is superficial, then other means than excision by the knife may be employed.

Caustics are also most useful when the disease has affected the bone. Free curetting and the after application of caustics, such as the acid nitrate of mercury, or the application of the actual cautery, have in many cases proved satisfactory in my own experience. In cases of epithelioma engrafted upon old lupus, curetting and cauterization has, when the affection is somewhat superficial, given excellent results. Early cases of malignant ulceration do well with caustics, but unfortunately we do not very often see such cases; when the ulcer is deep and circumscribed, wide excision by the knife, in my opinion, gives the best results and causes but little deformity if followed by skin-grafting after Thiersch's method: or, better still, by the transplantation of the whole thickness of the skin.

I fear surgeons and dermatologists will never agree entirely as to the treatment of malignant ulceration of the skin—the one advocating the knife in every case and the other the proper application of caustics. No doubt the truth lies between the two. Surgeons are opposed to caustics because so many cases of malignant disease come under their care which have been improperly treated by quacks, and, hence, they condemn *in toto* such forms of treatment; but I am sure if caustics be properly applied, the opinions of surgeons would change. Dr. A. R. Robinson says truly that very few surgeons have ever used caustics,

and when they have they have used them in improperly, and consequently the result has generally been failure.

I confess, my experience with caustic pastes has been small and that by training and tradition my preference has been for the knife. I still believe that cancer of the breast, lip (other than extensive superficial areas), penis, scrotum, vulva, etc., are best treated by free excision with, at the same time, thorough removal of the lymphatic glands and tissue in the neighborhood. As I said above, there are early conditions when cancer in the glands cannot be detected by the microscope nor can the glands themselves be said to be enlarged, yet in there may be a few cancer cells, which many months afterwards may develop, grow, and multiply rapidly.

Parenchymatous injections of alcohol, nitrate of silver, hydrochloric acid, acetic acid, chloride of zinc, and other substances, have been used from time to time, but the results generally have not been encouraging, the subsequent gangrene, sloughing, and suppuration being a source of danger. The good results obtained by the promoters of these methods have been more manifest than when this mode of treatment has been made use of by others. Lassar has reported cases of cure of cancer by the internal use of arsenic while at the same time it is injected into the growth.

The use of toxins obtained from cancerous growths, first advocated by Adamkiewicz in 1893, has not had any success when employed by others, and has been practically discarded by the profession. The toxins of erysipelas, as advocated by Coley, have been more successful in sarcoma than in carcinoma.

If caustics are employed in the treatment of cancerous growths, they should be used very thoroughly, no playing with carbolic acid, nitrate of silver, and other mild caustics; they only do harm. Chloride of zinc, arsenious acid, caustic potash, and pyrogallic acid are the chief caustics used. Ravogli of Cincinnati advocates formaldehyde in strength from 4-40 p. c., increasing the percentage gradually.

Caustic potash is very severe, but answers well in many cases. It may be used in solid thick or saturated solution. Chloride of zinc is the favorite caustic with many; it is used in the form of a paste, spread on lint, and should be left on the diseased part four to six hours. It is generally employed with arsenic, as Bougard's paste; Crocker recommends its use with opium and hydrochloric acid.

Arsenious acid is perhaps the most valuable caustic of them all, especially in epithelioma. Marsden's paste is made from two parts of the acid and one of gum acacia. Robinson holds that the strength and duration of the application should vary according to the cancer to be

treated; he never uses the paste weaker than equal parts. The paste should not be applied to normal epidermis, but if the cancer is deep the skin should be first destroyed by erosion or caustic potash and then the paste applied. The paste should always cover an area immediately beyond the apparent limit of the tumor and should be left on eight to twenty hours (Robinson).

Many believe the action of arsenic is elective in character and that the best results are obtained with the least destruction of normal tissue, that inflammation may be produced which will destroy the cancer cells but not normal tissue. If, when the paste is removed, the destruction of the growth has not been sufficient, the paste should be reapplied until the desired result is obtained, and then the resulting ulcer should be treated as any other simple ulcer would be.

Should the disease to be acted on be in a state of ulceration, curettage previous to the application of the arsenious paste is a good procedure and hastens the action of the caustic.

Electrolysis has been used by some to disperse small cancerous nodules, but I have had no experience of it. Dr. G. B. Massey (*Medical Record*, April 7, 1900) treats carcinoma and sarcoma by a method which he says involves "the cataphoric diffusion of nascent salts of mercury, inserted by a gold anode into the growth while the patient is under an anesthetic." The process lasts from two to two and one-half hours. He claims to have cured absolutely six and possibly two out of thirty inoperable cases submitted to him. The process acts much like caustics, the immediate effect being the production of an area of necrosis "beyond which extends a zone of sterilization where the malignant germs are killed without destruction of normal tissue." The method, as far as I know, has not been tasted by others, though Dr. Massey has been employing it since 1893.

Treatment by aniline dyes, such as methylene blue and pyocyanin, are recommended by some, and cures by means of these measures have been reported, and in some cases where absolute cure did not result it was claimed that the growth was arrested and the pain relieved.

*Sarcoma of the Skin.*—When single and localized, early and complete excision is the best treatment. In this way, by timely removal, the disease can be prevented spreading to other parts. In cases of multiple non-pigmented sarcoma, the hypodermic injections of arsenic, as introduced by Köbner, has been successful in many cases. Fowler's solution is usually employed diluted one-half of distilled water. Of this solution,  $2\frac{1}{2}$  to 4 drops are injected once a day and gradually raised in quantity up to 9 or 10 drops; most of these cases were months under treatment.

Attacks of erysipelas have occasionally caused sarcomata to disappear; Coley has inoculated, with success in some cases, a combined toxine of erysipelas and the bacillus prodigiosus. It is more successful in cases of spindle-celled sarcoma; in carcinoma the results have not been encouraging. I have used these toxins in many cases of sarcomata without any other result than getting a very violent reaction.

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