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THE MANITOBA AND WEST CANADA

# LANCET

*A Journal of Medicine, Surgery, Physiology, Chemistry, Materia Medica and Scientific News, being the journal of the Winnipeg and Manitoba Medical Associations.*

Published Monthly. Subscription \$1 per annum in advance.

VOL. 6.

WINNIPEG, SEPTEMBER, 1898.

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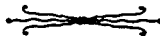
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## ORIGINAL ARTICLES.

### CASES OF APPENDICITIS.

H. H. CHOW, M. D.

I offer brief clinical histories of some cases of appendicitis presenting unusual features. The majority of cases of this disease are easily diagnosed but occasionally great difficulty may be found in reaching a conclusion as to the character of the changes taking place in acute inflammatory attacks within the abdominal cavity. A rough and ready rule has been enunciated by several writers as follows: "In all cases of inflammation in the peritoneal cavity where no other cause is apparent diagnose appendicitis." My experience would certainly justify the injunction, "suspect appendicitis" in all such cases.

H. E., a stout healthy man of 55 years was seized on Monday night with the ordinary symptoms of appendicitis. The next day he was removed to the Winnipeg General Hospital. By Wednesday all signs had apparently ceased. The temperature was normal, the pain gone, the tenderness rapidly disappearing, the appetite returning. On account of the thick layer of subcutaneous tissue no mass had been made out. On Thursday and Friday his condition steadily improved and I promised that he should leave the hospital in a couple of days. While at dinner on Friday evening I received a telephone message that the patient had faecal vom-

iting. On hurrying to the hospital I found that he had had several attacks of vomiting of thin foul-smelling faecal matter. As quickly as possible I arranged to operate and with the assistance of Drs. Blanchard and England opened a large abscess containing nearly a quart of pus. Patient made a rapid recovery. The thick abdominal wall hid the abscess, the complete cessation of all symptoms for two days and a half lulled my anxiety and yet the pus was steadily increasing in amount until by its pressure intestinal obstruction was produced.

W. S. C., a banker, had been confined to bed for ten days with slight abdominal pain and tenderness in the umbilical region and with a continuous but slight range of temperature. His appetite had remained good and his bowels were readily moved by injection. On Friday morning tympanites began and on attempting to use the enema it was found that the bowel would not retain more than two or three ounces of fluid. I saw him first on Friday evening and found him suffering with extreme abdominal distension which gave a clear percussion note everywhere. There was no one point on the abdomen more tender than another and the statement was made that all pain and tenderness before my visit had been around the navel and never in the right ileac region. A rectal examination revealed a large elastic mass between the bowel and bladder which completely closed the lumen of



the intestine. Early Saturday morning assisted by Drs. Blanchard, England and Hutton I opened the abdomen. The bowels were found universally adherent by recent lymph-exudate. By careful separation of adhesions I reached the pelvic mass which proved, as expected, to be a large collection of pus. The abscess cavity extended into both ileac regions. After wiping out very thoroughly these regions I found a large opening in the calcum where the appendix had sloughed off. Because of the adhesions it was impossible to bring the calcum to the surface and efforts to close the opening in situ proved unavailing. Drainage by iodoform gauze and glass tubes was provided not only in the original central incision but also through a secondary opening in the right side. The contents of the bowel were poured through the median line for ten days when the fistula closed. The patient now weighs more than ever before and is able to take athletic exercise freely.

J. M., age 12 began his illness with vomiting, abdominal pain and rise of temperature. I saw him repeatedly in consultation with Drs. Blanchard and Macdonnell and we all agreed that it was not appendicitis. The pain was in the *left hypochondriac* region. Pressure, even though quite deep, in the right ileac region caused no discomfort there but produced pain high up on the left side. While uncertain as to the exact diagnosis, pain in micturition developed and a rectal examination revealed a mass in the pelvis. Previous examination of the lower bowel had proved negative. We decided to operate on the following day but shortly after the above examination a severe chill and violent pain came on and at Dr. Blanchard's request I operated at once. Pus poured through the wound as soon as the peritoneum was opened. The appendix was found sloughed in two pieces, the outer being held in position by a very small piece of mesentery. A faecal mass was found free among the intestines. The patient is now in the east recuperating after the severe illness through which he passed.

S. T., age 14 was taken down on Saturday with the ordinary symptoms of appendicitis. For a week there appeared to be no reason for surgical interference. The temperature only once went above 101° the pulse never reached 100. There were no chills, no mass could be felt in the right ileac region and his general condition appeared excellent. He then began to complain of rectal tenesmus and mucus discharges from the anus. An examination of the lower bowel disclosed a small swelling in front of the rectum. The following day the mass was larger and I therefore transferred him to the Winnipeg General Hospital for operation. On Monday I opened the peritoneal cavity and found four or five small collections of pus in the pelvis. He has made an uninterrupted recovery and will get out of bed to-day.

Dr. J. W. Macdonald in his recent work, "A Clinical Text-book of Surgical Diagnosis and Treatment" says "It is customary to mention palpation by the rectum as a means of detecting a tumor. I have never been able to derive any information from this method and have long ceased to employ it." Such a statement seems to be unwarranted in view of the last three cases which I report. In each of these cases, unusual in other respects, the real clue to the diagnosis was given by the rectal examination. I could easily add to these cases, the histories of other patients where while the symptoms pointed to appendicitis, the only tumor which could be discovered was found on examination of the lower bowel. I do not think for a moment that this is the ordinary site for tumor but am firmly convinced that increased grounds for diagnosis can often be found by examining the rectum.



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**THE MEDICINAL TREATMENT OF  
TUBERCULOSIS.**

By HECTOR MACKENZIE, M. D., F. R. C. P.,  
Assistant Physician to St. Thoma's Hospital, and  
to the Brompton Hospital for Consumption and  
Diseases of the Chest; Lecturer on Pharmacology  
and Therapeutics at St. Thoma's Hospital.

At the present day the tendency is rather to make too little than too much of medicinal treatment in tuberculosis. Climate, hygiene and diet are remedial agents which are far more powerful than any drugs, but an important lesson to be learnt from out-patient practice at a large hospital for consumption is that medicine can do a good deal to influence the course of the disease and to improve the patient's condition under very unsatisfactory circumstances as to food, climate and general environment. Drugs may become unnecessary when other powerful influences such as those mentioned can be brought to bear on the disease, but the usefulness of medicines is undoubted with the ordinary conditions under which the disease is met with in this country.

The discovery of the bacillus tuberculosis by Koch was immediately followed by attempts to apply this discovery to therapeutic purposes. The idea which first suggested itself was to administer various substances possessed of antiseptic or bactericidal properties, in the hope that they might kill the bacillus in the body. But although a large number of substances were proved to be able to kill or attenuate tubercle bacilli as cultivated in artificial media, it was found to be a very different matter when they were employed to attack the bacilli in the body of an animal. Little help in treatment has so far been afforded by the attempts to treat the disease in this way.

Dr. Sims Woodhead has elsewhere described the efforts which Koch and others have been making to obtain something of the nature of an antitoxin. All we know of the disease is not very encouraging to the hope that an efficient antitoxin will be obtained. In the case of some diseases, such as the specific fevers, the individual acquires immunity through successfully passing through an attack of the disease. So far is this from

holding in the case of tuberculosis that the reverse might be asserted with truth—namely, that susceptibility is increased once the bacillus acquires a successful footing in the body.

Neither in the local and chronic nor in the general and acute forms of the disease does any sign of immunization ordinarily appear. Koch believes, however, that in certain cases of acute miliary tuberculosis an immunization against the bacilli does occur, although too late to be of benefit to the body attacked. He has pointed out that in the course of acute miliary tuberculosis a certain stage sometimes occurs in which the number of stainable bacilli diminishes, a fact which is the more remarkable because ordinarily dead bacilli are absorbed very slowly indeed. This disappearance of a large number of the bacilli is looked on by Koch as a sign of immunization resulting from a rapid inundating of the body with micro-organisms which have been absorbed or digested. He infers that the reason immunity does not ordinarily occur is because the bacilli attain their development only in small numbers in the body, being there environed by dead tissues, and only becoming absorbed long after when they are dead and are profoundly altered, or, as more commonly occurs, being eliminated unchanged from the body without any absorption at all.

Working out this idea Koch was led to the discovery of the various forms of tuberculin elsewhere described. The failure of the old tuberculin as a curative agent is now a matter of ancient history, nor can it be said that the reports as to a curative action of Tuberculin, R. are at present any more encouraging than those of the older product, while both local and general reactions have been frequently met with after treatment with the newer tuberculin.

It is not necessary to add anything to what Dr. Sims Woodhead has said as to the use of anti-tuberculous serum, which is still in the experimental stage. The results so far obtained are not sufficiently conclusive to justify an extended use of any of the sera so far prepared. For the present we must be contented with simpler remedies, and, accordingly, we propose to give a short review of the principal medicinal agents which are now in use.

In the medicinal treatment of pulmonary and other forms of tuberculosis, each case must be carefully considered in all its bearings. Frequently at the time the patient seeks advice the appetite is poor, the digestive powers are weak, and the bowels act irregularly. In such cases great good can often be done by the administration of an alkali in combination with a bitter infusion before meals. A mixture containing 15 grains of bicarbonate of soda and 3 minims of dilute hydrocyanic acid to an ounce of compound infusion of gentian is largely prescribed at the Brompton Hospital. A simple mixture of this kind often does much to restore the appetite and improve the powers of digestion, and thus paves the way for other remedies.

The bowels are often constipated and an occasional aperient is necessary. Aloes and cascara sagrada are the most useful remedies, and pills containing one or other of these ingredients in combination with nux vomica and belladonna may be prescribed, to be taken at bedtime. If the bowels are loose the subnitrate, the subgallate, or the carbonate of bismuth may be ordered along with a few drops of tincture of opium, or of the tincture of chloroform and morphine. On the whole, except in the later stages, and when ulceration of the intestine has occurred, constipation is more usual than diarrhoea.

Cod-liver oil has now for half a century played a leading part in the treatment of tubercular diseases in general and pulmonary tuberculosis in particular. Although used as long ago as 1772 in the Manchester Infirmary as a remedy for chronic rheumatism, it was not until about the year 1841 that it really came within the sphere of practical therapeutics, when Dr. Hughes Bennett, of Edinburgh, advocated its employment in the treatment of gout, rheumatism and scrofula. How little was known of it previously is shown by the fact that a writer in the *London Medical Gazette* in 1839, referring to the use of *oleum jecoris aselli* in Berlin, said it was unknown to what ingredient ass' liver oil owed its efficiency, but perhaps it was to the presence of a small quantity of creosote!

Cod-liver oil improves the condition of the blood, and patients previously anæmic often

regain a healthy color under its administration. It promotes nutrition and metabolism, and has a tendency to cause the deposition or formation of fat in the body. Its action in tuberculosis is probably altogether an indirect one, depending on the improved condition of the blood and general nutrition which it brings about. Dr. C. J. B. Williams from an experience of forty years, concluded that cod-liver oil was a most powerful agent in the treatment of phthisis. In the first decade of this period of forty years the beneficial effects of treatment were very limited, and were chiefly confined to incipient cases, life being rarely prolonged beyond the duration of two years. In the next decade a marked improvement took place, apparently in connection with a more liberal diet and the use of mild alterative tonics. During the latter twenty years, with the introduction of cod-liver oil, the average duration of life in phthisis was quadrupled raised from two to eight years.

It is generally in text-books that cod-liver oil consists of olein, palmitin, and stearin, with traces of iodides and biliary principles. The glycerides mentioned are those which form other animal fats, such as mutton suet, goose grease, or lard, the firmer fats having a larger proportion of palmitin and stearin, the softer more olein. The question at once arises. Why, if cod-liver oil consists of the same bodies as other animal fats, should it be therapeutically so much their superior? Very various answers have been given to this question. Some have said that on account of the presence of biliary principles, cod-liver oil is more easily assimilated and digested than the other fats. It is contended, however, that neither bile pigments nor bile acids are really present, and that the play of colors observed when a drop of sulphuric acid is added to a few drops of the oil on a porcelain slab is due to the presence of cholesterolin, a peculiar pigment called lipochrome, and fatty acids.

Others, again, have alleged that the beneficial action of the oil is due to the iodine it contains; but the quantity actually present is extremely minute, never exceeding one part in two thousand, and it is extremely unlikely that such small quantities of iodine could impart any special virtues. Still another

view is that the oil contains certain active principles, which some have actually attempted to separate from the oil itself.

Certain researches by Heyerdahl seem to show that cod-liver oil has a much more complex composition than was previously believed, and that there is neither olein nor stearin in the oil, and only four per cent. of palmitin, while two very unstable glycerines, which have been called therapin and jecolein are each present to the extent of twenty per cent. The composition of cod-liver oil is therefore something *sui generis*.

There is, unfortunately, a great tendency in cod-liver oil to the formation of hydroxy-acids, bodies not only actually injurious in themselves, and very apt to set up gastric disturbances, but imparting to the oil a nauseous taste.

It is very important, therefore, that great care should be exercised in the manufacture of the oil, and that the livers used should be fresh and carefully selected. The best oil will, however, become rancid when exposed to the air for some length of time.

At the present day cod-liver oil is probably in much less favor as a remedy than it was formerly. The amount of oil consumed by the patients at the Brompton Hospital has greatly diminished, and the quantity used by others than hospital patients has probably become still more restricted. I am, however, old-fashioned enough to believe that it is one of the best remedies we possess for the treatment of chronic cases.

The dose and mode of administration are matters of considerable importance. As to the dose, opinions have varied considerably. The practice at the Brompton Hospital is ordinarily to give it in doses of one or two teaspoonfuls twice a day. Larger doses are seldom given. Jaccoud was of the opinion that the best results were obtained by the administration of doses of from two to three tablespoonfuls three times a day. We do not consider that such large doses are necessary or beneficial. The oil should not be given on an empty stomach, but either along with or after food. Some patients can be induced to take the oil with orange wine when they will not take it by itself.

A great variety of modes of administration have at one time or another been introduced.

Flavorings such as eucalyptus, cocoa, anise, etc., have been added, but were not found to improve it. It has been made into a liniment with limewater and syrup, into a jelly with gelatine, or into a compound with iron, ozone, chloral, or creosote: but all of these have proved unpalatable. Two forms of preparation have met with great success—at all events, as far as the manufactureres are concerned. These are emulsions with gum acacia, tragacanth, sugar, hyphosphites and water, and mixtures with malt extract. The former contain at the most sixty-six per cent. of oil, but frequently not more than fifty per cent., and sometimes not more than twenty-five per cent. The latter contain from fifteen to thirty five per cent. of oil, with malt extract and water. Some of these are erroneously called solutions, because the separate globules of oil cannot be detected with the microscope. This depends, however, on the fact that the index of refraction of the oil and that of the malt extract are nearly the same. The addition of osmic acid will at once show that there is no real solution.

Many patients will take emulsions who will not take the plain oil, but, on the other hand, some much prefer a pure oil to any emulsion. It should always be pointed out to patients that the dose of the emulsion is twice as much as that of the oil. Apart from the question of palatability, there is no reason to suppose that an emulsion has any advantage over the unsophisticated oil, and the question of palatability must be left to the patient to decide. The preparations with malt extract stand on a somewhat different footing from emulsions, for malt extract has some nutritive value which gum, sugar, and water do not possess. Malt extract, moreover, fairly well masks the taste of the oil. The only objection is that the preparation is generally so dilute in cod-liver oil that a tablespoonful is probably the equivalent of a teaspoonful of the oil.

Malt extract alone cannot be regarded as a satisfactory substitute for cod-liver oil, but on account of the diastase it contains, it helps to digest starchy food, and if taken with meals may be useful when the digestive powers are weak.

Glycerine has some nutritive value, but

although sometimes given instead of oil, forms a poor substitute for it. It may, however, be given occasionally during hot weather, when oil is apt to disagree. One to four drachms may be taken three times a day.

Among other substitutes for cod-liver oil, pancreatic emulsion and petroleum emulsion may be mentioned. The former is fairly palatable, and the latter is tasteless; and both appear to exert a favorable influence over nutrition. The petroleum emulsion seems to have a soothing action on the irritable pharyngeal condition, and, in this way, helps to relieve cough, and in some cases, it certainly appears to assist digestion.

Creosote, although discovered in 1830, did not attract much attention as a remedy for tuberculosis until 1877, when Bouchard and Gimbert published their paper on the use of creosote in the treatment of pulmonary phthisis. They insisted that only beechwood creosote should be used, and attributed the indifference with which the drug had previously been regarded to the impure form in which it had been employed, and to the attempts to use a very feebly volatile body by inhalation.

When creosote was administered internally, Bouchard and Gimbert observed first a diminution of the expectoration and cough, and later a return or improvement in the appetite, a diminution or cessation of the fever, and a return of strength. Night sweats also gradually disappear after some weeks of treatment. Their observations have been amply confirmed by later experience.

Professor Sommerbrodt in 1877 published the results of the treatment of some 5,000 patients with creosote, and concluded that the drug was possessed of a specific action in tuberculosis. He obtained the best results in young subjects and in early cases, and he advocated the employment of gradually increasing doses.

While few probably are prepared to admit that creosote has a specific action, most of those who have had a large experience of the drug will admit that it has very valuable properties in the treatment of tuberculosis. The purest beech creosote should be employed. It should at first be given, prefer-

ably in the form of capsules, in doses of 1 to 5 minims; three times a day. The dose may be increased to 10 or 15 minims. If under its administration the appetite comes back, the cough and expectoration diminish, the fever abates, the night sweats cease, strength returns, and nutrition improves, the object with which the drug has been given will be attained, and happily these are the effects which are often observed.

The remedy should be taken after food. It has a disagreeable taste, and, if it is not administered in the form of capsules, it may be given in milk, which is perhaps one of the best vehicles. Dr. Clifford Beale has lately been giving creosote dissolved in cod-liver oil, in which form he has found it to be well tolerated. Beginning with doses of 3 to 5 minims, he has gone up to doses of 50 or 60 minims three times a day, and speaks favorably of the effect of such large doses on the condition of the patient.

Guaiacol has of late years come into favor as a substitute for creosote, of which, indeed it is the principal constituent.

Guaiacol is a methyl ether of pyrocatechin and, as ordinarily met with, is a colorless highly refractory liquid, freely soluble in oils and ethers, but sparingly so in water. Its taste and odor are less disagreeable than those of creosote. It is given in the same doses and mode as creosote. Apart from the fact that it is more readily borne by the stomach—certainly a very important matter—it does not appear to have any very special advantages over creosote, while it is much more expensive.

Guaiacol has recently been given in very large doses—60 minims three times a day—by Dr. Edwards Squire, in the form of capsules, or as an emulsion with glycerine and tincture of orange, not only without tonic effects, but with apparent benefit, although the patients complained of the emulsion burning their throats, and sometimes objected to swallowing so many capsules.

Two additional modes of administering guaiacol may be mentioned. First, it may be used as a local application to the skin; or, secondly, it may be administered hypodermically. Guaiacol when painted on the skin appears to be freely absorbed. Applications of 10 to 60 minims may be made at

intervals of two or three days, the remedy being used either undiluted or mixed with glycerine, olive oil, or tincture of iodine. The hypodermic method of administration is painful. From 1 to 7 minims are injected deeply into the subcutaneous tissue. Neither of these methods appears to have any special advantages, but they may be useful in exceptional cases when the ordinary mode of administration upsets the stomach.

Creosotal or creosote carbonate and guaiacol carbonate have also been introduced as substitutes for creosote and guaiacol respectively.

Creosotal slowly breaks up in the intestine into creosote, of which it contains 92 per cent., and carbonic acid. It is like creosote, liquid, but has little taste, and, as a rule, causes little or no gastric disturbance. Five-minim doses may be given to begin with, but the dose has sometimes been increased to 30 or 100 minims three times a day. A palatable mode of administration is to drop it into the well-beaten yolk of an egg this being taken after meals. Its therapeutic effects are the same as those of creosote itself.

Guaiacol carbonate is a tasteless powder, and would probably have met with much more favor than it has done were it less expensive. It may be given in doses of 5 to 15 grains three times a day.

Various other preparations of creosote and guaiacol have from time to time been introduced. One of the latest of these is a combination of iodine and guaiacol introduced by Coronedi (*Atti d. Accad. Med. Fis. Fiorent.*, July, 1897), under the name of iodo-guaiacol camphorate. P. Bacialli (*Boll. d. Sci. Ned. d. Bologna*, s. vii., vol. ix., March, 1898), has reported favorable on the effects of this remedy administered hypodermically.

Benzosol, a finely granular, insoluble, tasteless powder, containing 54 per cent. of guaiacol, may be given, in doses varying from 4 to 60 grains, in all conditions where guaiacol is indicated.

Guriacolate of piperidine, which resolves itself into guaiacol and piperidine in the duodenum, has been tried and recommended as safe, well borne by the stomach, and free from unpleasant effects. As is the case with guaiacol itself, the patients, while under its influence, improve in appetite and general

strength. The dose may be gradually increased from 5 grains to start with, three times a day, up to 25 grains. The principal objection to it is its expense.

Intratracheal injections of guaiacol and menthol (1 drachm of a solution consisting of guaiacol 2, menthol 10, olive oil 88), although beneficial in bronchiectasis and fetid bronchitis, have not proved specially useful in phthisis.

Among constitutional remedies, those known as alteratives hold a high position. Arsenic has been employed in the treatment of tuberculosis from very early times, and few drugs are believed to be more useful at the present day. Given in small doses, 2 to 3 minims of Fowler's solution, after meals, it acts as a tonic, enhances the beneficial action of cod-liver oil, and improves the condition of the blood and general nutrition. In this connection it may be mentioned that the arsenical mineral waters of Mont Dore have long been held in high repute in the treatment of phthisis.

Iron, although largely used, especially when anemia is a marked symptom, is in our experience not so valuable as arsenic. If there is a tendency to hæmoptysis it appears to increase it, and when there is anæmia depending on tuberculosis, iron does not seem to improve matters. In any case the neutral preparations are better borne than the astringent. Pyrexia is regarded as a contra-indication to the use of iron.

Sulphur and its compounds, sulphurous acid and sulphuretted hydrogen, are remedies which have at one time or other been in vogue, and, although little used at the present time, may again enjoy a measure of popularity. Inhalations of sulphurous acid were advocated as recently as 1887 by Dr. Auricl, who published an account of seventy cases so treated by him, and concluded that great benefit had resulted. Similarly, inhalations of sulphuretted hydrogen gas have been employed with some show of benefit. One of the most curious methods of treatment which has ever been devised was that of Dr. Bergeon (1886), of injecting into the rectum a mixture of carbonic acid gas and sulphuretted hydrogen. It had been shown by Claude Bernard that sulphuretted hydrogen introduced into the rectum is rapidly eliminated by the lungs, and Dr. Bergeon

dreamed that in this way he would be able to attack the tubercle bacillus *in situ*. The method had an extensive trial, and many reported favorably as to its effects; but experience failed to prove that any lasting benefit resulted, and it has fallen entirely into disuse.

Mineral waters containing sulphur, like those containing arsenic, have been highly recommended in the treatment of tuberculosis; but although the waters of Les Eaux Bonnes are in high repute in France for this purpose, the waters of Harrogate and Strathpeffer are not much resorted to by tuberculosis patients in this country.

Hypophosphites of lime, soda, etc., are often given, but there is little evidence that they have any special action. A largely used proprietary preparation which contains small doses of the hypophosphites probably owes most of its popularity to its palatability and the persistent advertising which keeps its name constantly before the public and the medical profession.

Quinine and Strychnine or *nux vomica* are useful tonics, and are often given in combination with other remedies, as in the well-known Easton's syrup.

Nuclein and the so-called nucleinic acid prepared from yeast have received a good deal of attention in America. Sixty to eighty minims of a 1 per cent. solution of nucleinic acid are administered by hypodermic injection daily, and the same preparation has been given by the mouth in larger doses. Vaughan and others who have used it largely have published some very favorable results. A recent method of treatment associated with the name of a French physician, and alleged to be equally efficacious in cancer and in tubercle, appears to be nothing more or less than treatment with nuclein.

It is possible to refer to all the drugs which have been used in the treatment of phthisis. Oil of cloves, oil of cinnamon, oil of peppermint, ichthyol, garlic and cinnamic acid are a few of those which have recently enjoyed a measure of support. The oils of cloves, cinnamon, and peppermint may be given in the form of capsules in doses of 5 to 30 minims, or they may be dropped on the sponge of an oro-nasal inhaler and used as inhalations. Ichthyol, a bituminous sub-

stance containing a large amount of sulphur, on which its efficacy probably depends, is given in doses of 20 to 60 grains a day, preferably in the form of keratin-coated pills, the outer covering of which will not dissolve until the intestine is reached. Garlic may be given in the form of powder, in capsules, in doses of 3 to 10 grains, or in the form of the *syrupus allii* (U.S.P.), in doses of 1 to 4 drachms.

Cinnamic acid has been recommended by Heusser as innocuous, and although not a specific, as capable of curing a considerable number of cases of tuberculosis. It is employed in the form of a 5 per cent. emulsion, of which  $1\frac{1}{2}$  minims or more are given by subcutaneous injection in the gluteal region, the maximum dose being 15 minims.

We may conclude with a few remarks on the medical treatment of various complications of pulmonary or other forms of tuberculosis.

(1) *Fever*. Extended investigations have been made as to the effect of all the well-known antipyretic drugs in reducing fever in tuberculosis. Neither antipyrin, phenacetin, acetanilide, quinine, nor other similar drug, appears to have any permanently beneficial effect on the course of the temperature, while with general treatment a subsidence of fever will often follow.

(2) *Fever* is often accompanied by a troublesome symptom—namely, *sweating at night*. In such cases the temperature and ventilation of the bedroom and the amount of the bedclothes must be regulated. When profuse perspiration occur, changing the night-dress, rubbing the patient down with a dry towel, and the administration of some food and stimulant, are useful measures to employ.

There are various remedies which are more or less successful in checking night sweats. Oxide of zinc in doses of 5 grains in pill form, half a grain of the extract or 15 minims of the tincture of belladonna (B. P. 1885), 1-100 gr. of atropine, half a grain of extract of *nux vomica*, 1-20 gr. of strychnine 1-12 gr. of agaricin, 1-60 gr. of picrotoxin, and 20 grains of camphoric acid, are among the remedies that have been found useful. They may be given either singly or in combination. I generally commence with oxide

of zinc, which, on the whole, I have found the most satisfactory.

(3) *Hæmoptysis*. It must be borne in mind that in most cases hæmoptysis tends to subside of its own accord, and that quiet and rest are what, as a rule, the patient most requires. A hypodermic injection of morphia (gr.  $\frac{1}{4}$ ) will generally fulfil all the indications. The diet should be plain and no stimulants should be allowed.

Hæmostatics such as hamamelis and ergot are sometimes employed. It is difficult to explain how they act, and it is likely that the esteem in which they are held is due to the natural cessation of the hæmorrhage already referred to. Tincture of hamamelis is used in doses of 20 or 60 minims, and ergot is best given in the form of hypodermic injection (1 or 2 grains of ergotin in solution).

When the bleeding is profuse and continued, sometimes depressants such as antimony may be cautiously given, a dose of 1-60 gr. being repeated every half-hour until some effect is produced.

(4) *Cough*. Space will permit only a very brief reference to the treatment of this frequent and troublesome complication of pulmonary tuberculosis. Our endeavor to treat the cough must be guided by a knowledge of the condition on which the cough depends. If there is active secretion from the bronchi or from the wall of cavities, or if breaking down of lung tissue is going on, expectoration is a necessity. In such cases opiates should be avoided, and in all cases they should be given with great care. Cough mixtures and linctus are generally apt to spoil the appetite, and remedies should be as simple as possible. Lozenges of gum acacia and liquorice are much used at the Brompton Hospital. Certain dry inhalations given on inhalation respirators are very useful where the cough depends on an irritable condition of the mucous membrane. Twenty drops of a saturated alcoholic solution of menthol, or a similar quantity of a mixture consisting of equal parts of creosote or guaiacol and spirit of chloroform, are examples of dry inhalations which have been found useful. Menthol is often used in the form of a lozenge or pastille. When there is laryngeal catarrh the use of a steam inhaler containing a drachm of compound tincture

of benzoin to a pint of water at 140° F. sometimes affords relief. When there is excessive secretion, belladonna or codeine may be cautiously used.—*The Practitioner* (*Special Tuberculosis number, June, 1898.*)

#### THE CAUTERY IN THE REMOVAL OF THE APPENDIX.

Dr. A. J. C. Skene, in the *New York Medical Journal*, discusses this subject. He says: "For the first time in the history of appendicectomy the method of operating with the electric hæmostatic forceps was used. This departure from the current methods of ligature, suture, cauterization, invagination and others, is the logical outcome of the success of his practice when operating upon the pelvic viscera. All the other steps of the operation were such as are advertised by surgeons generally. The incision was the ordinary one over McBurney's point, two inches in length. On inspection, both the appendix and the meso-appendix were found to be much enlarged and thickened, and superficially traversed by numerous dilated blood vessels. There were no adhesions. The first grasp of the forceps was upon the meso-appendix close to its mesenteric attachment. A current which heated the forceps to 180° F. was then induced for half a minute. Upon the removal of the forceps the tissues were found to be not charred but dried, having the appearance of white horny matter. Scissors were used to bisect this desiccated area. A second seizure was made upon the appendix itself close to the caput coli, and the same current continued for ninety seconds. The forceps was then removed and the tissue divided in the line of the desiccated area away from the caput. The same result was manifested. No charred tissue, no bleeding, and, more important than all, no escape of the contents of the appendix. The tissues had been simply dried out. Just at this point a rather violent attack of retching came upon the patient, which continued for nearly a minute, yet without inducing any change whatever in the stump. All the severe pressure and strain had not forced even a speck of blood or serum into



the compressed area. The abdominal cavity was left perfectly free from any foreign matter whatever. Sutures and dressing as usual. Time of operation, fifteen minutes."

#### THE SAFEST PRACTITIONER.

Which are the safest practitioners of medicine, the old with all their clinical experience, or the young with the latest theories with very little clinical experience? It is true the young will rush in where the old would fear to tread. It is true that the young, just out of college, have more faith in the efficacy of drugs than the old. It is true, also, that the young think the old are antiquated and behind the times. I regret to say that the young in many instances think themselves superior in the way of medical lore than the old with all their clinical bed-side experience and reading.

Of course, this flattering satisfaction in their own minds is their capital in stock. The old have tried every drug and means in the way of treatment and held to those which gave the most satisfaction. It is true the old have borne the brunt and responsibility of the profession and handed it down unsullied to the young in its present progressed state. The old we should honor for this alone. Many of the old have been in the medical field in epidemics and epidemics of cholera, yellow fever and small pox, they have stood by and administered to the sufferings on the field of battle when it tried men's souls, and they have treated diseases peculiar to every climate in our common country. Shall we then say that they are antiquated and behind the times? No, a thousand times no. The old's life-time clinical experience at the bed side of the sick and afflicted is a thousand times more valuable to the practitioner of medicine than the young's college book lore. It must not be forgotten, too, that the old have been students of medicine their life-time, not only experimental students, but students of books and journals. We may say truthfully that the more experience a physician has had, the more capable he will be to practice successfully his profession. Of this the young will be, we hope, fully convinced,

when the silver gray is beginning to bedeck their heads, the deep wrinkles of professional responsibilities begin to furrow their faces, and when their straight forms will become a little more crooked.—*Charlotte Medical Journal.*

#### REPAIR OF MUSCLE BY WIRE.

Lucas-Championniere contributes an article on his method of repairing ruptured muscle by means of wire in a manner very similar to that employed by him in fractures of the patella. A man, aged fifty, was admitted to the Beaujon Hospital under his care with the following history:—A long, heavy ladder blown over by a gust of wind struck the patient across the left thigh. Very shortly after there was extreme swelling of the part, but careful examination showed that there was no fracture. Notwithstanding this, there was complete inability to move the limb. In a fortnight's time it was possible to diagnose rupture of the triceps tendon above the patella, accompanied by considerable laceration of the muscle tissue, and there still remained considerable effusion of blood into the thigh.

There was a marked hollow immediately above the patella, which became more evident on making any attempt to raise the limb, which attempt was always futile. It was easy to ascertain the absence of any fracture of the patella. Lucas-Championniere decided to operate, and found on cutting down that there remained only a short tongue of fibrous tissue representing the triceps tendon at its insertion to the patella: above, the muscle was irregularly torn and retracted. There was an opening into the synovial sac of the knee, and the articulation was filled with blood clot. The writer proceeded by inserting two silver wires into the patella and carrying them from there to the triceps tendon above, though he feared that the least traction would cause them to tear away from the latter. The patient healed rapidly, but a month later, after leaving the hospital he was taken with some kind of convulsive seizure, as the result of which there was a repetition of all the symptoms in the injured limb. Lucas-Championniere cut down on the knee a second time above the

cicatrix of the former operation. He found that the silver wires had not cut the tissue, but having become untwisted they had given. With the view of avoiding repetition of this accident he devised the following proceeding.

Above the level of the stump of torn triceps muscle and tendon he threaded a strong piece of silver wire perpendicularly to the muscular fibres in such a manner that it could not possibly give. Then, to parallel pieces of silver wire were passed through the patella and drawn upwards so as to pass over the first transverse wire. Thus, by means of a bony base below and a metallic above, he was able to exert sufficient traction to bring the patella and the triceps tendon into approximation, these in their turn being sutured with catgut. To prevent any entanglement of the wires, they were carefully doubled on themselves. Healing was rapid, and the patient left the hospital in three weeks, but was seen again seven months after the operation, when it was found he could walk perfectly; extension of the limb was complete, there was no pain, and the knee presented no abnormal characters. On examination by the radiograph it was discovered that the silver wires were broken, from which fact the writer draws the following conclusions:—That in suturing the muscle and tendon by a silver wire healing results by fibrous union brought about by means of the wire acting mechanically. Should it be necessary to keep the wires permanently in place it is better to employ platinum rather than silver.

#### INHERITED TRAITS.

The scientific study of heredity is considered a recent departure, but, like many other novelties, is only the rounding of a cycle. Moses evidently regarded the transmission of diseases and deformities very seriously, as we find from the care with which he regulated the marriages of the priesthood. The directions in Leviticus xxi. clearly show the precautions taken to keep pure the blood of the tribe destined to perform the sacred offices.

The children of Israel have ever since jealously guarded the purity of their descent,

and remain, among the changing types of the world, a distinct people whose characteristics are everywhere recognised.

Other races have profited little by the lawgiver's precepts regarding heredity, and give so little study to the subject that its only modern data must be sought in the text-books of medicine and its cognate sciences. The meagre literature of this topic calls for additions to our stock of information, and mere conjecture is valueless.

Certain diseases are clearly proved hereditary to a frightful degree; of these, consumption, scrofula, insanity, gout, defects of vision, are well-attested instances. Others are undeniably repeated in many families; for example, a mother who suffered from attacks of erysipelas transmitted the predisposition to five of her thirteen children, one dying from a severe form of the disease, and at least two of the grandchildren have the unpleasant legacy.

Dr. A. Barkan mentions a Parisian family that in the sixteenth century had night-blindness which has developed in a number of the descendants,

Dr. Kerr, of Pasadena, recently published strong evidence proving the hereditary nature of neuralgia, which he thinks as transmissible as scrofula.

These may be sufficient illustrations of inherited misfortune, and the question may arise, "Of what benefit is this melancholy knowledge?"

Much may be done to avert ill consequences when we know the liability of children to certain diseases; for instance, a lad of twelve years old, whose mother, grandmother, and half-a-dozen uncles and aunts died of phthisis, began to droop with lung trouble. He was placed in careful hands for a year, outdoor exercise and nourishing food were abundantly supplied, and with but little medical treatment he rallied, and is now at twenty-six a healthy man. The influence of active pursuits, pure air, and proper climate is wonderful in its power to check incipient pulmonary disease.

Formerly, the delicate son, in mistaken kindness, was given a sedentary occupation, and the vigorous boy sent to the farm; wiser judgement now reverses the decision.

The practical gains of a knowledge of heredity might be shown in choice of location for a new home. Those who fear a consumptive taint should avoid the harsh winds of the coast, while the off-spring of neuralgia parents will do well to shun both the dampness of the ocean climate and the malaria of the river valleys.

Physical ailments are not the only ones to which a study of our subject may apply. Children oftenshow that a moral defect has been handed down, and a greater solicitude is felt than for a mere corporeal malady.

Some children inherit violent tempers which threaten the happiness of themselves and all concerned with them. The patient and long-continued efforts of parents may enable the child to subdue this besetting sin and save him from unavailing regrets for words or deeds of passion. Of course as years of responsibility are reached, the struggle devolves upon the individual who is the unfortunate heir of evil predisposition, and in most cases he is able to conquer himself.

#### FORCIBLE STRAIGHTENING OF SPINAL CURVATURES DURING COMPLETE ANESTHESIA.

Dr. John Ridlon (Jour. Am. Med. Assn.)

From his experience, and from a study of the reports from abroad, the author is inclined to the following conclusions:

1. Cases of scoliosis can be safely attempted, and can always be somewhat and often greatly improved by this method of treatment; and no unpleasant results are to be anticipated. It is best to straighten by horizontal traction and counter-traction and by a rotary pressure upon the curvature. During the process of straightening—that is to say, between the operations—patients should wear permanent plaster jackets, extra long, and remain in bed. The jackets will best be put on during suspension from the feet or knees, and complete anesthesia must be maintained until the plaster has set. The feet or knees should be protected from constriction during suspension by plaster stockings applied the day before the operation.

2. In cases of tubercular spondylitis, old cases, where the inflammatory process has ceased and ankylosis has resulted, should be left alone. Any gain in such cases is doubtful, and if accomplished is had at a great risk.

3. Recent cases of tubercular spondylitis can be readily straightened, often at a single operation, and at no greater risk than is encountered in straightening similar deformities at the knee and hip.

4. In older cases of tubercular spondylitis, not yet ankylosed, but in which structural shortening has taken place in the soft parts, repeated efforts at straightening should be made in place of reducing the whole deformity at one sitting.

5. Plaster jackets are best applied with the patient in the prone horizontal posture in young children, when the deformity is below the ninth or tenth dorsal vertebra: in all other cases it is best to suspend the patient by the feet or knees. In all cases where the disease is at or above the ninth dorsal vertebra the head should be inclined in the plaster dressing. Pads of felt, at least three-fourths of an inch thick, should be placed on each side of the spinous processes at the region of the disease.

6. All cases should be kept recumbent for a long time, many months, after the spine has been straightened.

7. The plaster jacket and the steel brace are found to have the same faults and failings as in their use in acutely progressive cases of spondylitis that have not been subjected to forced straightening—that is to say, they cannot be absolutely depended upon to prevent some degree of return of the deformity, and they may cause pressure sores.

8. The dangers from forcible correction of spinal deformities in cases of Pott's disease are tubercular meningitis and general tuberculosis from dissemination of the tubercular infection.

9. The advantages of this method of treatment are obvious: the reduction or abolition of an unsightly deformity; but no diminution of the duration of treatment over the ordinary methods by rest and immobilization is to be anticipated.

## THE GOLD PREPARATIONS IN SOME SKIN DISEASES AND SYPHILIS.

A. H. OHMANN-DUMESNIL, A. M., M. D.

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There are so many preparations of a novel nature, or which are merely revivals of old ones in a new form, being daily offered to the medical practitioner that he is often at loss whether to use any of them. Not content with the inherent qualities of these preparations, their promoters either vaunt them as universal panaceas or construct the reading matter so clumsily that one naturally inclined to test the efficacy of the drugs calmly puts them aside until such evidence is forthcoming as will prove convincing and be clearly set forth. It is for this reason that clinical experience is so valuable when based upon careful observation and a knowledge of the conditions present.

Our knowledge of the therapeutical action of gold has, up to within a few years, been based upon the hypothetical dicta of the alchemists. Gradually the matter was taken up again, at first by the Arabian physicians and afterwards in Europe. Once more it fell into disuse, and was rescued from oblivion by Hahnemann, who introduced it in his pharmacopœia. However, this did not give it much of an impulse, and it is only of late years that this metal has undergone any serious investigation concerning its therapeutical properties. Among American investigators Bartholow, Heneage Gibbs, and Shurley are the most prominent. Dr. Shtcherbok has made thorough investigations also.

The most active salt of gold is the bromide, and it is particularly so upon the nervous structure, but small doses being necessary to produce effects. The action of gold is essentially that of an alterative. It has no cumulative effect; but when toxic doses are administered, mental excitement, amounting to delirium at times, manifests itself. A prominent symptom of its excessive action is an excessive flow of saliva, the so-called *aurism*. Remembering this in connection with the fact that very small doses produce

the effects of the remedy, more especially in the form of the bromide, some care should be exercised in its administration. Among the therapeutic effects of gold may be noted the fact that it is tonic, more especially to the nervous system, and this accounts for the fact that it is an aphrodisiac of no mean power. It was highly esteemed many years ago as an anti-syphilitic, and recent experience confirms this view, more especially in the later forms of the disease.

The cutaneous troubles in which I have had occasion to employ the gold preparations to any extent are limited. In acne and eczema of a subacute or chronic character I have found arsenuro an invaluable adjuvant. On the other hand, in chronic eczema and in the later manifestations of syphilis, mercauro has proved itself almost a specific so much so that its administration was always attended by marked improvement, which ceased as soon as it was discontinued. This was what attracted my attention to the gold preparations, and in investigating their therapeutical properties I have been impressed by the fact that the most active as well as most efficient salt of gold is the bromide. It not only acts powerfully when administered alone, but seems to increase the therapeutic effects of arsenic and of mercury, and for that reason much smaller doses of these agents may be given, better results obtained, and, at the same time security from toxic effects will be secured. These are the qualities which recommend the preparations mentioned above, which are true chemical combinations and not empirical mixtures.

It may not be inappropriate to mention a few cases from practice illustrative of the good effects of gold preparations in diseases of the skin and in syphilis.

CASE I.—Miss F. B., a dark blonde of seventeen years, has been suffering from a marked pustular acne for two years. She is very nervous in disposition. Vlemingx's lotion ordered applied at night, and resorcin ointment every morning. In addition, the pustules were emptied thoroughly every day. Some little improvement showed itself, but it was not stable. A "nervous" attack would cause the eruption to mani-

fest itself in a marked relapse. After two months of this treatment, with variations of the external measures, she was placed on ten drops of arsenauero three times a day. In one week the eruption had disappeared, and now, after a lapse of two months, no lesions have appeared.

CASE II.—Miss B. R., a blonde of eighteen years, states that she has been suffering from a papular acne with comedones, since she was thirteen years of age. Free incisions of the papules, together with a sulphur ointment locally, failed to procure any decided effects until arsenauero was used. Her face is now perfectly smooth and clear and downy.

CASE III.—Miss M. P., was suddenly attacked by ansintense pruritus, accompanied by a mild form of ichthyosis. The ordinary anti-pruritic solutions did not allay the itching. The peculiar form of pruritus together with the ichthyotic condition (not congenital) pointed to a central origin of nervous nature. Added to the anti-pruritic solution was arsenauero, administered in ten-drop doses before each meal. Improvement set in almost immediately, and at the end of three weeks the patient was cured. This occurred despite the fact that the trouble had lasted about a month before I treated her, and despite all the local treatment which she had been given.

CASE IV.—C. R., a man of about sixty years, has suffered from general pruritus for several years. At the time he applied for treatment he was emaciated and haggard from loss of sleep due to the obstinate itching from which he suffered. He could only rest after complete exhaustion, and even then sleep was not only not enjoyed, but lasted for the briefest periods only. He presented many of the symptoms of neurasthenia. An antipruritic lotion, to be applied three times daily, and arsenauero, in fifteen-drop doses before meals, have markedly ameliorated his condition. He bids fair to make a complete recovery in a short time.

CASE V.—Miss M. Z., a girl of twenty-four years, has been troubled with a rosacea involving almost the entire face for a period of four years. She is of a markedly neurotic

temperament, and her skin will become congested visibly if she gets excited in her conversation. The best reducing agents used externally have had but little influence upon the cutaneous affection. Her stomach was not in order, the trouble being apparently, so-called nervous dyspepsia. Bearing in mind the close relationship between rosacea and gastric disorders, she was offered five-drop doses of arsenauero before meals in addition to local applications. Marked amelioration of the gastric and dermal symptoms appeared, and now she is practically cured.

CASE VI.—Miss H. L., a strong, stout girl of seventeen years, has suffered a long time from urticaria. A close examination of her case shows that she is intensely susceptible to nervous perturbations. She complained of slight gastric crises at times, which disappear spontaneously, but were always accompanied by a marked urticarial eruption involving the entire integument, including the scalp. While an antipruritic relieved the condition temporarily, internal measures failed to procure relief until fifteen-drop doses of arsenauero were given and diminish gradually to ten drops three times a day, until the condition was relieved. This relief has now lasted for four months with no indications that the disease will recur.

CASE VII.—Mrs. B. H., an old lady of fifty-seven years, had been troubled with a marked case of eczema for a number of years. Her chest, back, arms and thighs, as well as abdomen and breasts, have been the seat of a most intensely itching papular eczema for years. Her forearms and legs were affected with the squamous form of the same disease, the folds of the elbows and popliteal spaces presenting marked fissures. Constipation which existed was relieved by the acid aperient mixture, and an antipruritic lotion followed by a menthol ointment partially relieved the patient. After a time the condition remained in *statu quo*. As no improvement would appear, she was placed on ten-drop doses of mercauro three times a day, and the dose increased until she took twenty drops at a dose. Improvement was noticeable to such a degree that in one month no traces of the eczema appeared.

She was continued on the remedy for two weeks longer, and has continued well ever since, a period of about four months.

CASE VIII.—Mr. C. H., an old gentleman of eighty-two years, was troubled with marked eczema of a squamous nature localized upon the backs of his hands. Being placed upon the same treatment as Case VII. much more rapid results were observed. He has had numerous relapses, however, due to the fact that he will handle mortar and similar irritating substances, including frequent washing of the hands. A strict adherence to injunctions, however is always followed by a rapid return to the normal. Of course water externally is always prohibited in these cases of eczema.

CASE IX.—Mr. A. F., a young man of thirty-two years, applied for treatment for undefined pains in the head and swellings of the forefinger and thumb of the right hand, on the left ramus of the jaw, and over the right clavicle. He had contracted syphilis some five years before. He was given mercurio in fifteen-drop doses, to be increased five drops every week until vertigo declared itself, when the remedy was to be discontinued for a time. Marked effects for the better declared themselves long before the thirty-drop doses were taken. These latter had to be discontinued after a week on account of the vertigo which declared itself. The swellings, however, had gone down, the backache and headache had disappeared, and the patient slept quietly and was refreshed, something he had not known for a year previously. He resumed the treatment after a rest of two weeks and feels strong and buoyant instead of weak and melancholic.

CASE X.—Mr. O. W., a married man of forty-three years, contracted syphilis about two years and a half ago. The condition remained unrecognized for about six months. He then applied to me for treatment. His symptoms disappeared rapidly under active mercurial treatment followed by the mixed. I lost sight of him for about a year, when he applied for the relief of a bursa of the left knee which had been cut open by a surgeon. It returned, and he was advised an elastic knee-cap and placed upon mercurio in twenty-drop doses three times a day. The

bursa gradually reduced, and the patient, deeming the elastic bandage sufficient, discarded the medicine. The effusion began increasing and he quickly resumed the mercurio, and I had the satisfaction of observing the effusion entirely disappear. The patient indulged in increased doses which brought on vertigo. This symptom disappeared, however, upon resuming the original quantity. So far as any other syphilitic symptoms are concerned, they are not evident, and the patient feels both cheerful and contented.

These cases have been roughly outlined so as not to weary the reader. They are what might be called sample cases from a large number of similar ones which have terminated favorably under the influence of the gold preparations mentioned. One feature which has been particularly noticed in connection with mercurio is its marked aphrodisiac properties. While only male patients have mentioned this, no doubt the female ones experienced similar sensations or exhilaration. This latter has been alluded to by a number of patients of both sexes. There is no doubt in my mind that the bromide of gold is the most efficient salt of the metal, and it appears to exercise a two-fold effect therapeutically—viz., it increases the action of the arsenic and mercury with which it is combined, and at the same time it seems to prevent the manifestation of toxic symptoms. It is itself very efficient, if we are to believe competent authority, which states positively that bromide of gold is thirty times as efficient as the other bromides.

So far as the preparations mentioned are concerned, they are efficient and rapid in action and the manifest effects of the gold are evident. An exact dosage by means of measuring the drops is attained and ease of administration is secured, no disturbance of the stomach resulting from their ingestion. The vertigo which is experienced disappears as soon as the dose is diminished. I have had no occasion to observe aurism up to the present. In fact, I have seen none but the good effects of these gold preparations. One point, however, must be borne in mind. The indications presented must be as such as demand gold. Some of the older writers main-

tain that gold was the remedy for syphilis, whereas it is only in the later and deeper manifestations that its good effects are shown. Furthermore, gold and its preparations will not have good effects in all skin diseases, but will prove a most valuable adjuvant in such as have a distinct neurotic base as an aetiological or complicating factor.

It is the hope of the writer that the few clinical notes jotted down above may serve as a stimulus to further inquiry into the therapeutical worth and more extended application of gold and its salts, as it is a matter of interest and possibly of the greatest importance, more especially in the treatment of many chronic affections of viscera and organs.

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### MISCELLANEOUS.

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#### HOSPITAL ABUSES.

Too much encouragement cannot be given to the hospitals, and their increased efficiency is a matter of satisfaction to all practitioners. The present is, however, a time of transition, and there are a number of grave abuses in this period of this adjustment which will disappear later on we hope. Originally the hospital was a charitable institution, designed for the homeless poor. The advantages of hospital treatment have become so marked of late years, however, that many prefer going to the hospital to being treated at home. They do not go to the hospital because it is a charitable institution for economical reasons, but because of the improved conditions to be gained there. In this way the general practitioner loses a very considerable amount of practice. It is to be hoped that in time there will be little but hospital practice, and that the sick of a community will be cared for entirely in such institutions, where each physician will treat his own cases either independent of the institution or in connection with it. The public hospitals should not be under the general surveillance of a few fortunate physicians, who, while they do not receive any direct remuneration from the hospital itself, still use their connection with it to further their own advantages.

Properly speaking, the hospital should not be set aside for a clique of select professional men to fatten upon, but be the joint possession of all members of the profession.—*Dominion Med. Monthly.*

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#### RULES FOR PROGNOSTICATING THE SEX OF AN EXPECTED CHILD.

Dr. D. E. Keffe, in *New England Medical Monthly*, gives the following:

1. When both father and mother are matured—that is over twenty years—if the vigor of the husband is relatively greater than the wife's, expect a female child.

2. When with all other conditions the same as in 1, only that the mother is more vigorous than the father, expect a boy.

3. When the parents are relatively of equal vigor, expect an equal division of the children as to sex, for nature seeks the conservation of the sexes. If, however, with the vigor the same, the complexion of the mother is dark and the father is light, you may rather expect a boy. If, on the other hand, the father is dark and the mother of light complexion, rather lean towards a girl.

4. When one of the parents, though apparently as vigorous as the other, is comparatively either immature or senile, consider the one nearest the age of stalwart maturity as the more vigorous. For example: A wife sixteen to eighteen, or forty-two or over, with a husband twenty-five to forty, prognosticates a daughter. On the other hand, with a husband sixteen to twenty, or forty-eight or over, and a wife twenty to thirty-five, expect a male child.

Very many exceptions to these rules will occur; so many, indeed, as sometimes to make them appear of doubtful application. Nevertheless, a patient and extended trial will prove their utility.

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#### THE CHEMICAL COMPOSITION OF MAN.

From a chemical point of view, man is composed of thirteen elements, of which five are gases and eight are solids. If we consider the chemical composition of a man of the average weight of 154 pounds

we will find he is composed in large part of oxygen, which is in a state of extreme compression. In fact, a man weighing 154 pounds contains 97 pounds of oxygen, the volume of which, at ordinary temperature, would exceed 980 cubic feet. The hydrogen is much less in quantity, there being less than 15 pounds, but which in a free state, would occupy a volume of 2800 cubic feet. The three other gases are nitrogen, nearly 4 pounds; chlorine, about 26 ounces, and fluorine,  $3\frac{1}{2}$  ounces. Of the solids, carbon stands at the head of the metalloids, there being 48 pounds. Next comes phosphorus, 26 ounces, and sulphur  $3\frac{1}{2}$  ounces. The most abundant metal is calcium, more than 3 pounds; next potassium,  $2\frac{1}{2}$  ounces; sodium  $2\frac{1}{4}$  ounces; and lastly iron,  $1\frac{1}{2}$  ounces. It is needless to say that the various combinations made by those thirteen elements are almost innumerable.

#### TRACTION OF THE TONGUE IN APPARENT DROWNING.

A report was recently published in *La Tribune Medicale*, which appears to illustrate the value of traction of the tongue in the restoration of the apparently drowned. A boy fell into one of the docks at Havre, and was not recovered till he had been immersed fully five minutes. He was quite unconscious when brought to land, but a custom-house officer at once proceeded to perform artificial respiration by Laborde's method (rhythmical traction on the tongue,) while other attendants rubbed him vigorously and blew air into his mouth. In half an hour signs of life reappeared in the form of respiration and a few moans. He was quite two hours longer before completely recovered. Our contemporary considers that the result was mainly due to the traction on the tongue and with Dr. Gilchrist, of Nice, who has called our attention to the report, suggests that it should be made widely known throughout the lay press that traction on the tongue, repeated regularly fifteen times a minute, is a highly efficacious treatment in many cases of apparent death from asphyxia.—*Brit. Med. Jour.*

#### METROPOLITAN SCHOOLS OF MEDICINE.

It is generally acknowledged that the London hospitals possess the largest clinical material in the world, but the wide area over which the hospitals are distributed forms an obstacle to the proper utilisation of this material. The new scheme of the Metropolitan Schools of Medicine which started on May 1st will doubtless prove to be of great value to medical men coming from abroad and wishing to obtain a general idea of modern theory and practice. Cards of admission may be obtained from the Secretary of the Metropolitan Schools of Medicine, West Wing, Examination Hall, Victoria Embankment, between the hours of 1.30 and 3, except on Saturdays. A general time-table of the arrangement of the various hospitals and schools will be furnished with the cards. The fee for three months is seven guineas and for six months ten guineas. The holders of these cards are entitled to attend the practice of nine general hospitals. A man would probably derive more benefit by attending one or two hospitals regularly, rather than spending a "butterfly existence" amongst nine. The promoters of the scheme have adopted the wise precaution of allowing the ticket holder to choose his own mode of existence; and have consequently provided ample material for the exercise of his selective capacity. Medical men wishing to be signed up for hospital attendance before presenting themselves for examination should not purchase one of these tickets; this scheme has no connection with any examining body. Up to the present time fourteen tickets have been sold; the three months series appear to be the most popular. Many inquiries are being made by medical men in the Colonies and in America, who are anxious to make the best use of their time when they visit this country, and who would prefer not to travel as far as Vienna in order to obtain the necessary medical instruction. The scheme is believed to meet a real want, and it is expected that when the winter session comes round the number of tickets will have increased.—*Brit. Med. Jour.*



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