

decreased use of tinctures of vegetable drugs, by the physicians of to-day, may be due, in part, to the fact that some pharmacists buy commercial fluid extracts and make tinctures from them by simple dilution with varying quantities of alcohol and water, instead of using, as the Pharmacopeia directs, drugs with which to make them; and physicians have failed to achieve the results recorded by their forefathers. Modern physicians have thrown aside the old and tried, to welcome the new synthetic compounds; but in so doing, is it not possible that the old may possess merits that make them equally as worthy as the new, if not more so?

THE MCINTYRE ELEPHANTIASIS CASE.

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In this world of phenomena it is not strange that a physician and surgeon, practicing his profession for a number of years, should occasionally meet with pathologic conditions more or less rare, but it is strange that some should meet the most remarkable cases at every turn, so to speak. In this connection I am sure that it is the privilege of very few professional men, outside of very large hospitals, to deal with more extraordinary cases than have come to the notice and care of my much respected friend and colleague, C. J. McIntyre, C.M., M.D. As a partial proof of the foregoing assertions, I take great pleasure in presenting to the reader four different views of a patient whom the doctor has had for several years, together with a few brief remarks upon the history of this particular case and the disease with which the lady is afflicted.

The good-natured, intelligent and respectable woman, who so kindly allowed us to divest her of all metallic substance and garments and pose before the searching eye of the camera obscura, that by so doing we might obtain further light in medicine and be able to present to your view these pictures from life, is a native of America, and was born in Wisconsin. She is now 45 years of age and the mother of ten children, to five of whom she has given birth since the disease from which she now suffers began.

Eighteen years ago, while engaged in a laborious task, she sustained an injury of the abdomen, near the umbilicus, which was followed shortly after by chills and vomiting. The cutaneous and subcutaneous tissues of the affected part presented redness, tumefaction and infiltration. In a short time the acute symptoms disappeared, leaving a well-marked hypertrophy, which gradually increased until two years later, when the left leg began to be covered with scales and to enlarge somewhat. She was at this time in the fourth month of gestation with her sixth child. The abdominal trouble grew gradually worse, but the leg remained in about the same condition until seven years later, when she fell from a step-ladder and sustained a wound from a rusty nail on the right leg, just above the ankle, where, by reference to Figures 1 and 2, the mark of its point of entrance may still be seen. This accident occurred on July 5, and on August 15 she was attacked with chills and vomiting. The seat of the wound burned and throbbed and her suffering was great. The symptoms, as she described them, appear to have been those of tubular lymphangitis. At the end of two months from the date of the accident she had recovered from the lymphangitis and, as

she remarked to us when relating the history as above, "was ready for more trouble." She did not have long to wait, for in November of the same year she again fell, this time into a register hole, and wounded her left leg, which, as we have stated, was the one on which the scales appeared two years after the abdominal injury. For a third time she was attacked with chills and vomiting, on the second day after the fall. Her physician pronounced the case, when he saw it, one of erysipelas. The entire limb from toe to knee was involved, and she was very ill for four months. The tissues never returned to their normal proportions, not even to the size which they were when the accident occurred, but, on the contrary, continued to increase in size, the trouble extending all the while further and further up the limb.

Some time after this, but just how long the patient does not remember, the right-leg, which had been injured by the nail, began to enlarge.

We have now passed roughly over the first ten years of the history of this case, giving the story substantially as the patient related it from memory.

Dr. McIntyre began to see the case about this time and has now been the patient's physician for about eight years, during which time he has had to deal with indolent, unhealthy and ever-increasing ulcers, the secretions from which have been composed of serum and pus, and very disagreeable to the sense of smell. The epidermis has at times become fissured and cracked; papillomatous excrescences of no mean size, made up of conglomerations of many smaller ones, have appeared, while the lymphatics have exuded lymph in large quantities. When the fissures and ulcers have reached deep-seated nerves Dr. McIntyre has had to assuage the great pain which the patient would experience; and there have appeared at many places, but particularly on the inner aspect of the left leg (seen in Fig. 2), quite large and deep-seated abscesses, calling for evacuation and the institution of proper treatment to prevent septic absorption. Meeting all indications as they have arisen from time to time, and supporting the patient in a proper manner amid conditions which at times have seemed hopeless, Dr. McIntyre has cared for the patient until now, when the case has assumed an insidious and chronic form. Large areas of vessels have become affected, and such wide-spread obliteration of them has resulted as to block up permanently their flow of lymph, thereby producing an everlasting lymphedema of the affected parts. From the history of the case it would appear that there resulted from the abdominal injury many years ago an ordinary erysipelas or reticular lymphangitis, and that from the invasion of the lymphatic channels at this time the disease dates. Later on we find one leg affected with eczema, the other with a septic wound, and finally, the eczematous one, after an injury, becomes the seat of a traumatic erysipelas. At these three seats of original attack there have occurred successive attacks of diffuse lymphangitis, each recurrence causing an aggravation of the already bad condition. Thickening and induration of the skin and connective tissue have taken place, the dilatation and multiplication of the blood vessels keeping pace with the general connective tissue hypertrophy, until we have now a case of elephantiasis Arabum which, in some respects at least, is the most wonderful on record. In support of this last remark I wish to state that it has been made after a careful examination of a great many works

on the subject under discussion, among which may be mentioned those of Hebra, Neumann, Kaposi, Ziemssen's Encyclopedia (the volume on Skin Diseases), Crocker, the London *Lancet* since 1878, A. H. Buck's Refer. Hand-book Medical Science, Keen and White's American Text-book of Surgery, Hooper's Dictionary, published in New York in 1847 by Harper & Bros., Stephen Smith's Surgery, Dr. Titley in the *Lancet*, Vol. xx; M. Clot-Bey, A. J. Howe, etc. Felkin's case in the *Edinburgh Medical Journal*, 1889, page 779, is the only case I have found which very closely resembles the McIntyre one. In this instance the patient was an Eurasian woman.

In a general way I may close my remarks regarding this case by saying that the patient is a most hopeful, good-natured and happy woman, who, if it were not for

Extending downward from the umbilicus, corresponding to the linea alba, there is at present a fissure about four inches in length and two and one-half inches in depth (best seen in Fig. 3), the sides of which are in a state of ulceration and discharge a disagreeable-smelling mixture of serum, pus and lymph. During the past year the labia majora and minora and clitoris have become involved, but are not as yet enlarged to any great extent, in fact, there is no chance for any considerable enlargement, for the abdomen as it hangs, or rather protrudes, downward is as stiff and unwieldy as any elephant's belly on earth. To the sense of touch, moreover, there is nothing that I know of which feels more like the hide of an elephant than this does. There is very little

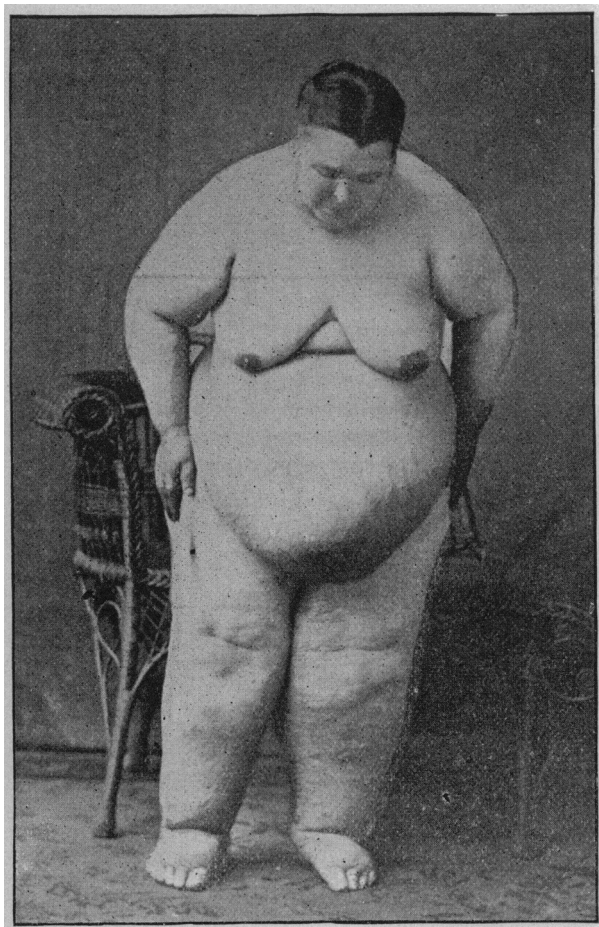


FIGURE 1.

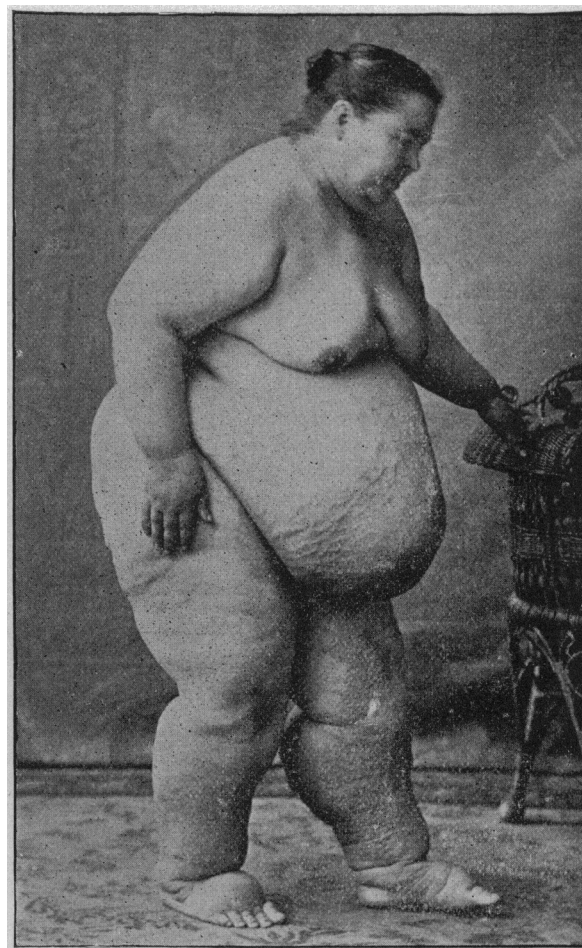


FIGURE 2.

the asthma, with which she has suffered much at times for the last six years, would not complain at all, notwithstanding the fact, that in addition to her terrible state, she has no husband to care for her and is in the most destitute circumstances, with several children still requiring the care that none but a mother can bestow.

By reference to Figs. 2 and 3 a very interesting demonstration of a commencing lymphangiectasis may be seen on the lower part of the abdomen near the line of the groin. This condition is to the lymphatic vessels what dilatations and varicosities are to their congeners, the veins, and should the condition here seen, by confluence and aggregation, form distinct tumors, we will have what is called lymphangioma.

feeling in this thick, rough, wrinkly, unctuous and void-of-hair skin. In the edema produced by other diseases and other causes there is pitting on pressure, but no part of this growth pits, even when great pressure is applied. The blood recedes to quite an extent from the point of pressure to return very slowly, indeed, but that is all.

While elephantiasis Arabum, the synonyms of which are pachydermia, Dal fil, Barbadoes leg, Elephantenfuss, mal de Cayenne, etc., may be considered a pandemic disease, we must consider it when appearing in this climate and from the causes which appear to have been responsible for it in this case, a very sporadic malady. Authors of the present day speak of elephantiasis Græcorum as lepra, and elephantiasis

Arabum as simply elephantiasis or pachydermia, it being now certain that the two are distinct. I think that when we have a case like the one under discussion and springing up in this part of the world from causes similar to those which appear to have been at the bottom of this case, the simple term lymphedema would be the best to employ, reserving the terms elephantiasis Græcorum for the lepra type, and elephantiasis Arabum for those cases found in hot climates near the tropics, particularly in Egypt, on the coast of the Mediterranean, the west coast of Africa, the Antilles (Barbadoes), Brazil, Malabar and parts of India, in all of which sections of the world it is most often met with and where, almost always, the cause of it is the entrance into the blood and lymphatics

Coast of Africa, the home of the *filaria sanguinis hominis*, every native into whose lymphatics the *filaria* gains entrance is not affected with elephantiasis. In some it produces chyluria, and in some it does not appear to affect the health at all. This fact, therefore, goes to prove that there is not in this parasitic worm, *per se*, any special poison the presence of which is necessary in order that either chyluria or elephantiasis may exist. For, unless the parasites block, by their presence, the lymph channels, there will not be chyluria; and unless they develop in sufficient numbers to produce stagnation in the lymph vessels, there will not be, from them at least, an elephantiasis. It

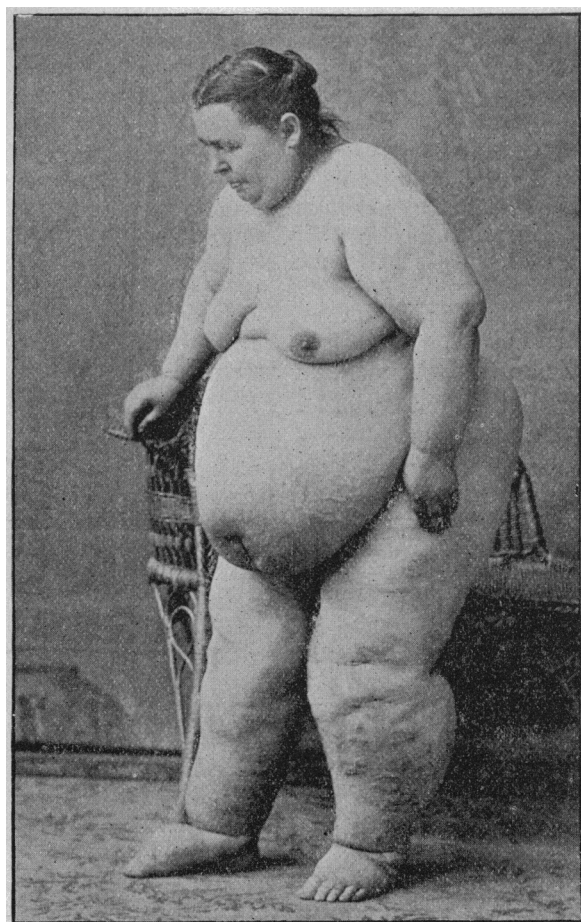


FIGURE 3.

of the embryo of a nematode worm, the name of which is *filaria sanguinis hominis*, from its discovery in the human blood. For much of our knowledge in regard to this we are indebted to Wucherer, Salisbury, Lewis, Bancroft, Manson, *et al.*

With us in this country the disease probably always appears after chronic or frequently repeated acute inflammations of the blood and lymph vessels or anything which hinders the flow and favors the escape of the lymph in the lymphatics; and whether it be produced by an inflammation of the blood vessels or of the lymphatics themselves, or from external pressure, it matters not, we will have lymphedema, and following it there will be cell-proliferation and consequent increase in the surrounding tissues.

In tropical countries, but particularly on the Guinea

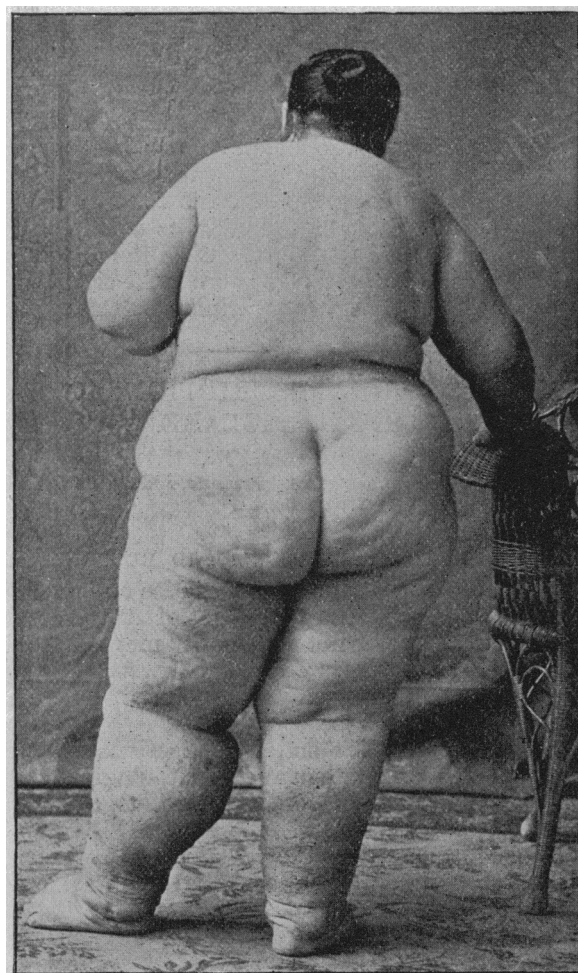


FIGURE 4.

is, therefore, apparent that it is not necessary that we should have in this country, in order to produce genuine cases of chyluria or elephantiasis, the worm which Manson has so well studied for us, and we do not believe that the *filaria sanguinis hominis* had any part in the cause of the McIntyre case which we have just reported.

Manson says that this parasite resembles a delicate thread of catgut, animated and wriggling; and W. Essex Wynter tells us that the female has a diameter of about 1-100 of an inch and a length of 3 to 3½ inches. As yet no perfect specimen of the male has been found. The mouth is circular, without papillæ; there is a narrowing at the neck, and the tail is bluntly pointed. The parent worm is necessarily only found during operations involving the affected tissues, or in

autopsies. On the other hand, the embryos occur in immense numbers and are readily found in blood obtained by pricking the skin. They appear as active organisms, each being contained within a delicate sheath which projects slightly at one or the other end of the worm. Its length is about 1-90 of an inch and its diameter 1-3200.

Dr. Manson obtained ova consisting of oval bodies 1-500 by 1-750 of an inch. These are too wide to traverse the channels of the lymphatics and consequently become impacted and thus give rise to the conditions of elephantiasis and chyluria.

The mosquito plays a part in the spread of this disease in hot climates. Dr. Stephen Mackenzie's experiments showed that the embryos only occur in the cutaneous vessels while the patient is asleep, whether by night or day. As to what becomes of them during the period of activity of the patient nothing certain is known. During sleep, however, while the filaria embryos circulate in the blood of the sleeper the mosquito fills himself with the infected fluid and flies to some stagnant pool of water, his natural haunt, upon the surface of which he drops to die. The embryos of the filaria contained within the blood are thus set free and become ready to enter the circulation of the next thirsty mortal who drinks the water.

THE METHODIC DESCRIPTION OF A SURGICAL DISEASE.

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(Concluded from page 83.)

FORMS, VARIETIES, COMPLICATIONS AND RECURRENCES.

The description of the forms, varieties and complications of the disease comprises that of all the points and features which are not commonly met with and the description of which would embarrass or obscure the description of the most common or frequent appearance of the disease.

Those forms, varieties and complications must be stated as due to peculiar causes; to pathologic peculiarities, to peculiar symptoms, course, termination, duration, diagnosis, prognosis, complications, relapses, sequelæ or consequences. Complications may be local or regional or general. The local and regional complications may be due to malformation, to softening, induration, neurosis, injury, congestion, inflammation, gangrene, ulcer, fistula, tumor; they may affect the skin, connective tissue, adipose tissue, tendons, muscles, fascia, periosteum, bones, medulla, arteries, veins, capillaries, lymphatic vessels, lymphatic glands, nerves, an organ special to the region. The general complications may affect the organs of circulation, respiration, etc. For each form, variety or complication state the frequency and importance.

METHODIC DESCRIPTION OF THE LOCAL SYMPTOMS

FURNISHED BY THE SIGHT, TOUCH, HEARING.

The methodic description of the local symptoms furnished by the sight, touch and hearing are much facilitated by arranging them methodically according to each disease or group of diseases. Hence the following separate methodic descriptions:

The classification here adopted and advocated is based on the clinical manifestation which is visible and at once recognizable by the student, and which leads to the pathologic and etiologic characters which

themselves lead to the diagnosis, prognosis and treatment.

These diseases are: Malformations, injuries, neuroses, softenings, indurations, congestions, inflammations, gangrenes, ulcers, fistulæ, tumors.

They may affect the skin, connective tissue, adipose tissue, tendons, muscles, fasciæ, periosteum, bones, medulla, joints, arteries, veins, capillaries, lymphatic vessels, lymphatic glands, nerves, an organ special to the region, in all or only one of its component parts.

This plan corresponds to descriptive anatomy, a fair knowledge of which is previously necessary to study profitably general anatomy, which studies the tissues and organs of the same nature regardless of their situation and relative position. The same, in the study of surgical diseases, a descriptive and clinical knowledge is necessary before undertaking the study of the diseases from the point of view of causes or nature, irrespective of the clinical forms they may assume and the location they may affect, such as diatheses, gout, struma, tubercles, syphilis, etc. It would seem that the study of the general diseases should precede the study of their local manifestations, but experience teaches that that study is much more profitable after some clinical knowledge has been acquired.

We must here beg for indulging in repetitions which can not very well be avoided in a new subject where clearness and precision must have precedence over style and grace.

METHODIC DESCRIPTION OF FUNCTIONAL SYMPTOMS.

The methodic description of functional symptoms comprises the following features:

1. The alterations in the physical, *i. e.*, mechanical phenomena of the functions; they usually consist in alterations of movements, *i. e.*, contractions of the muscular fibers of the part or of the organ. We must state the alterations in the capacity or extent of the movements (including reflex, if any), in their duration, in their rhythm or order of succession, in their frequency or rapidity, in their intensity; the alterations in the sounds presented by auscultation, if any, stating the cause, intensity, rhythm.

2. The alterations of the chemical and vital phenomena, comprising the description of the alterations taking place in the contents of the organs; alterations of character, of losses, by gains; the alterations in the presence or action of the peculiar agent which is usually present in the organ (such as pepsin).

3. The alterations of the secretions of the organ, which should be described after a separate guide explained below.

4. The alterations in the composition of the blood in the afferent vessels; also of the efferent vessels; these must be described after a separate method, as explained below.

5. Alterations of the nerve actions and of the nerve centers which preside over the functions.

METHODIC DESCRIPTION OF THE PATHOLOGIC ALTERATIONS OF A NORMAL FLUID.

These present to state: 1. The alterations of the physical characters, *i. e.*, quantity, color, smell, taste, consistency and specific gravity. For each state frequency and importance. 2. The alterations of the chemical characters and of the composition, *i. e.*, of the reaction, of the qualitative analysis, of the inorganics (water, gas, salts), of the organics (albuminoids, carbonaceous, of the characteristic or peculiar substances usually present in the secretion,