gout. Skin diseases may be influenced and modified by gouty habit of body, and this has been referred to in discussing the therapeutics of Class 2. The herpetic diathesis I do not understand, unless it be "rheumatic." The alteration of the general nutrition consequent upon malarial poisoning I think in some cases plays a direct part in inducing skin mischief, and especially attacks of pemphigus and bucnemia tropica, or elephant leg. The appropriate remedies in such cases would be quinine and arsenic and iron of course; and all the diseases named are relieved by these remedies. The connexion of malarial poisoning with skin disease is a matter deserving attention. It is a question how far Delhi boil and its allies are connected with malaria. I own, of course, malarial poisoning may hereby act as a debilitating agent, and give a patient afflicted with a cutaneous disease less chance of recovery than a person free from the effects of its operation upon him; and I see many cases in those returned from abroad in proof of this. The skin affection may be due in consequence of a part of the malarial mischief. But at present our information on this point is anything but satisfactory, yet I feel sure time and further observation will show that there is the closest connexion between the two. The "keloid diathesis" may or may not exist. In some cases the tendency to the development of keloid tumours in all parts of the body is marvellous; and the same may be said of "fibroma," but this may be due to a peculiar disposition on the part of the fibro-cellular textures of the skin, deranged—over-stimulated in some cases—by climatic influences acting upon it, and disposed thereby to undergo change—a disposition independent of the general state of the blood. The evidences, however, at present in our possession are insufficient in proof of the existence of a "keloid" or a "fibromatous" diathesis. It must be shown that these, if diatheses, are hereditary before I can accept them as diatheses.

Neurotic diseases are daily assuming an increasing importance, and properly so. They are connected with definite conditions of general ill-health, and deserve a notice here. Pemphigus, herpes, in some cases general pruritus, and very likely true prurigo, are illustrations. The principles of treatment involve the removal of over-work and fatigue of the body and mind, attention to the tendency to general deterioration of the tissues of the body, which is frequently present, and general wasting of the body; the securing of due rest, change of scene and air, as well as the institution of a special system of neuro-tonicism. It is in these cases that arsenic is frequently beneficial. The sympathetic nervous system is probably particularly involved in such diseases as pityriasis rubra, where hyperæmia seems to be due to a loss of tonicity in the vessels, itself consequent upon disorder of the sympathetic system, the more clearly evidenced by the coincidence of hyperæmic conditions of important internal organs largely controlled by the sympathetic and also the general character of the cutaneous hyperæmia. In these cases "general debility" is particularly marked, patients do not seem to be able to "pick up" strength, and specially to assimilate, and it is only by the most careful tonic regimen, and by care being taken that the powers of the body are husbanded, that recovery can be brought about.

Lastly, I think that we shall in course of time come to recognise that the lymphatic system is much concerned in skin diseases. No doubt it is itself disordered as a consequence of the operation upon the whole body of certain potent influences of ex-malarial poison, but it has yet to be determined how far in certain cases it may be primarily at fault, as in scleroderma. Thus I think that in all cases where the fibro-cellular structures of the skin are specially involved—fibroma, keloid, elephantiasis, &c.—we should seek to determine how far the sympathetic system is concerned primarily or secondarily in the disease. Quinine is a potent agent for good in all cases in which the lymphatics are actively involved in diseases of the skin, whether primarily or secondarily.

A few words are necessary about the local treatment of skin diseases immediately dependent upon, or part of, a general derangement of the system. The remedies should be used with similar intention as in the case of local applications spoken of as regards Class II. After all, they are quite subsidiary; and I will only say that, when used to remove exuberant growth or to heal ulcerations, the best time to begin their employment is when internal medicines

are just beginning to make an impression on the disease. If the general condition upon which depends the development of an eruption or an ulcer be left uninfluenced by internal treatment, the use of irritants or caustics will often tend to spread or to favour the outbreak of fresh mischief, as might be anticipated. The exuberant granulations of a strumous sore or the unhealthy ulceration in syphilis are especially aided in their disappearance or their healing by the mercurial plaster or other application used in conjunction with the internal remedy at the time that the latter has begun to improve the general condition. However, this is self-evident. But I do think that local applications are sometimes the cause of harm, simply because they are too much trusted to for the cure, and are not subordinated, as regards their use, in due time to general remedies. The use of soothing applications in neurotic diseases to allay local irritation due to general causes is necessitated by the discomfort of the patient and the harm likely to be done by reflex action &c.

SUMMARY.

From the foregoing observations I hope it will be evident that the treatment of diseases of the skin consists in something more than the prescription of arsenic. I have asked one after another, "Why do you give arsenic?" and the invariable answer has been, "Well, one does give it, you know!" or, "Well, what else shall we give?" I have attempted to prove that it is impossible to formulate a particular treatment for a particular disease—i.e., to say this or that man has this or that disease, and therefore he must have such and such treatment. He requires a combination of medicamentation suited not only to the disease itself, but also to his individual peculiarities and concomitant circumstances; and it needs all the knowledge and tact of the physician to make this combination happily. In regard to local measures, I am certain that they frequently do harm, from the injudicious employment of stimulants and astringents where simple soothing means are called for. But, thanks to our advancing knowledge of therapeutics, better principles begin to prevail.

Harley-street.

LARGE OVARIAN CYST; TAPPING; CYST INFLAMMATION; OVARIOTOMY; RECOVERY.

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THE following case of ovariectomy is probably worthy of record as illustrating the advisability of performing the operation when the ovarian disease is attended with certain formidable complications, and which until lately were generally considered to contraindicate its performance.

Mrs. F—, aged sixty-three years; a widow lady; never pregnant. First noticed an enlargement of the abdomen three years ago, which was pronounced by her medical attendant to be caused by an ovarian tumour. She had for several months abandoned all hope of recovery, as she was informed by several medical men whom she had consulted that her age was against any attempt to remove the tumour.

She came under my care on the 25th October, 1871. I found the abdomen symmetrically but enormously distended, and the ribs on each side everted. Fluctuation was well marked. Tympanitic sound elicited only quite posteriorly on each side. Respiration laboured. Copious bronchial secretion, with incessant cough. Pulse 115, feeble and intermittent. Bowels constipated. Appetite impaired.

I suggested immediate tapping, and on November 28th I removed fifty pints of highly albuminous fluid. Twenty-eight hours after the tapping the chest symptoms became much aggravated; the lividity of countenance, hurried respiration, and increased bronchial secretion being so marked as to make her recovery seem almost impossible. Under suitable treatment, however, they gradually abated, and in three weeks the patient was able to leave her room.

A careful examination of the tumour was now made. It appeared to comprise one large cyst, with some solid matter

in the left iliac region, which was believed to be adherent to the parietes of the abdomen.

The patient improved in health and strength; but the cyst rapidly filled—so much so that I advised her to be again tapped, to which she consented; and on January 27th, 1872, twenty-four pints of a dark-coloured albuminous fluid was removed, being evidently mixed with blood. She recovered from the immediate effects of the tapping tolerably well, and could take moderate exercise.

Three weeks after the last tapping she complained of being very unwell. The bronchial symptoms were much worse; her strength and appetite failed her; she had frequent attacks of vomiting, and had several distinct rigors. There was a dull pain in the lower part of the abdomen, the latter being generally very tender to the touch. Pulse 128, feeble and irregular. Temperature 102°. These symptoms, in spite of all treatment, became rapidly worse, and she could scarcely bear to be moved in bed.

On February 25th she appeared not likely to live many hours. Pulse 128; temperature 104°. Vomiting every twenty minutes; constant thirst; delirium, and tossing about the bed. She seemed insensible to abdominal pressure. Her friends had been with her all night, expecting her death hourly. At this visit I was anxiously appealed to by her friends for my opinion, and I informed them that there was only one chance for her, and that perhaps a very faint one—namely, the removal of the tumour. Some of her friends very strongly opposed any operative interference. I endeavoured to fix the attention of the patient in order to explain to her the critical condition she was in, and also what remedy I proposed, but did not thoroughly succeed; and I left the room fully expecting not to see her alive again. I ordered her, however, five-minim doses of hydrocyanic acid with eight of tincture of opium every two hours. The patient's sister followed me out of the room to take counsel with me as to the future treatment, and, after some discussion, I requested her to consult with the patient if she saw a favourable opportunity, as well as with her relatives, and let me know the result of their deliberations, as the patient was not in a condition to think or act entirely for herself. In the afternoon I was informed that, in a somewhat lucid interval, the patient wished to have the operation performed as soon as practicable, and that the majority of her friends had agreed with her. I then fixed an early hour the next day for it to take place.

26th.—The medicine and stimulants ordered yesterday appeared to have somewhat relieved the delirium, but the other symptoms continued much the same. She was anxious for the operation, which I proceeded to perform assisted by Mr. Whitcombe and my sons. My colleague, Professor Norris, ably administered the chloroform. An incision of three inches only was made, and the cyst exposed. The patient was turned on her left side when the cyst was tapped, but on traction being made it gave way, and the contents, with about two pounds of fibrinous exudation, escaped. By careful pressure of the abdomen Mr. Whitcombe succeeded in preventing any contents of the cyst escaping into the abdominal cavity. There was a firm adhesion in the left iliac region, a portion of which required the use of the actual cautery. The cyst was then withdrawn; it arose from the left ovary. The pedicle was nearly six inches in length; it was kept outside the abdomen by means of a clamp. Two sutures transfixing the peritoneum and three superficial ones were only required to close the wound. Lint dipped in a solution of carbolic acid constituted the after-dressings. The clamp was removed on the fourth day. On account of the chest symptoms chloroform was administered with some difficulty and danger. Reaction was soon established, and the patient became at once quite rational. The sickness ceased from the moment of the completion of the operation, which occupied twenty minutes.

The pulse continued quick and occasionally irregular until the third day, when it was 98; the temperature 99°. On this day, after a fit of coughing, prolapse of the pedicle occurred to the size of a hen's egg, and was accompanied with a severe pain in the right inguinal region. By means of a daily application of a strong solution of carbolic acid combined with pressure to the extruded portion of the pedicle it rapidly diminished in size, and eventually no traces of it were manifest. Nourishment and stimulants, which were commenced within an hour after the operation, were administered regularly and freely by the mouth

throughout the convalescence. Beef-tea, opium, and brandy injections were occasionally given during the first three days, and at the end of the week the patient was allowed two mutton-chops daily, which were very much relished. The bronchial symptoms were very troublesome and threatening for three weeks, and were only relieved by gallic acid and large doses of opium. The patient made a good recovery, and a month after the operation she drove sixteen miles in a cab in search of apartments in a more salubrious atmosphere. She has become much stouter, is in perfect health, and only fears that the inclement weather may reproduce the bronchial symptoms.

Birmingham.

THE RELATIVE FREQUENCY OF DISEASE BETWEEN THE RIGHT AND LEFT SIDES OF THE HEART;

DEGENERATION OF THE HEART, ITS CAUSES AND MEANS OF AVOIDANCE.

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(Continued from p. 254.)

Heart of newly hatched trout—How affected by the negation of oxygen and an increase of carbonic acid—Influence of carbonic acid upon the contractile fibre of the heart—Effects on the human heart of pre breathed air—Defective ventilation a frequent cause of sudden death in heart disease—Importance of pure air in cardiac degeneration.

THE object of my last communication was to show that the relative frequency of disease between the two sides of the heart depended, as a rule, upon age; that the left side of the heart was the one to suffer before the age of forty, the right side of the heart after that age. It was also shown that diseases of the left side of the heart are generally the result of inflammatory action; diseases of the right side of the heart, of tissue-degeneration, or of mere mechanical influences, as of backward pressure of blood upon the right cavities of the heart from obstruction to its flow through the branches of the pulmonary artery.

It was further stated that, according to the ordinary law of life, tissue-degeneration, or natural decay, usually begins at the age of forty; that, with its advent, the left side of the heart becomes less prone to inflammatory disease, and approaches more and more closely in its tendencies to the diseases of the right side of the heart; and that the degenerative tendency of the latter is, after this age, greatly influenced by the three great vital functions—the action of the brain and nervous system, respiration, and circulation.

It was thus shown that, to maintain the heart's structures in as healthy and sound a condition as they could possibly be maintained under the law of natural decay, these vital functions must neither be overworked nor fall short of their necessary duty—that, in fact, regular, natural action is their law of life.

I showed the effect of impure air in promoting the degenerative tendency in the structures of the heart, and especially in those of the right side of the heart, after the age of forty. I was thus led to a passing consideration of the baneful influence produced upon the heart by badly-ventilated houses, schools, manufactories, pits, theatres, underground railways, and all places of a similar character.

To this point I return, to show the influence of an increasing quantity of carbonic acid in the air respired upon the contractility of the muscular fibres of the heart.

I take for my example the newly-hatched trout. During the winters of 1869–70 and 1870–71, I hatched some thousands of this fish, many of which I daily submitted to microscopic examination. The result of my investigations, in reference to the action of the heart and to the influence upon it of a decreasing quantity of oxygen and an increasing quantity of carbonic acid in the water in which the fish was confined, shows,—

That, on placing the fish in a glass trough containing a