specially affected. It already explains the extreme clubbing of the fingers; and if we, following Erasmus Wilson, regard ichthyosis as "a defect of development and normal growth of the skin," it explains also why in the present case the skin took such a prominent part in the abnormalities produced. How far such a hypothesis fits in with the requirements of the other recorded cases I am, in the absence of information thereon, quite unable to express any opinion.

NOTES OF TWO CASES OF ACROMEGALY.

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THE following are two typical cases of this interesting disease:

CASE I.—Miss M., aged 47, is of Irish birth, but has lived for ten years in New York, from whence she returned to England in the summer of 1894. She says that as a young woman she was slight and active, and had rather small hands and feet. For the last five or six years she has noticed enlargement of the hands, feet, and face, though she is not clear as to which enlarged first. It is five years since she last menstruated. During that time she has grown nervous, irritable, and languid, and thinks her memory is failing. Her vision has become very defective. For a year or two she has perspired very freely, and has been intolerant of heat, though she stands cold fairly. She has had no loss of hair, hardly any pains in the limbs, and but slight headache. She says that an American doctor whom she consulted a year ago told her she had myxedema, but that another doctor said she had not. She had taken thyroid tablets for some time without benefit. There is no history of any similar disease occurring in any member of her family.

Fig. 1.—Case I.

When I first saw her, in August, 1894, the patient presented the characteristic countenance of acromegaly. The nose was long and thickened, the lower jaw large and prognathous, the lower lip swollen and everted, and the skin of the face generally coarse, thickened, and wrinkled. The

eyebrows were of average quantity, and the hair of the head was not markedly altered. (In the photograph (Fig. 1) the hair has been touched up by the photographer who printed from my negative.) The hands were much enlarged, apparently both in the hard and soft parts, the fingers being uniformly enlarged, without bulbous extremities, and with flat square nails. The wrist, relatively to the metacarpus, was small. The feet were also increased in size. Owing to the nervous and almost hysterical state of the patient, a proper examination of the chest and abdomen was not feasible, but no kyphosis was obvious when she stood up in her clothes. The tongue was extremely large. The thyroid appeared of normal size, and there was no unusual dullness behind the manubrium sterni. The voice was somewhat "croaky" in character.

The patient complained of considerable shortness of breath on exertion, but the pulse was of fair quality, and there was no sign of arterial degeneration. The apex beat of the heart was just outside the nipple, but otherwise the organ presented no abnormal sign. The lungs were normal. There were varicose veins in the left leg. The patient slept fairly, was troubled only with slight headaches and slight occasional "rheumatic" pains in the limbs. The digestive system appeared normal, as was the urine. Vision was markedly impaired, and she could only read large print with strong convex glasses. Perimetric examination showed bitemporal hemianopia (Fig. 2). The pupils were normal, and there was

Fig. 2.—Visual fields of Case I.

no ocular or other paresis. The optic discs were rather small, pale, and irregular in outline, but the fundi were otherwise normal. The patient was treated with arsenic and tabloids of pituitary gland, but she grew gradually weaker and more languid in body and more fretful in mind. In February of this year she succumbed to an attack of bronchitis. No *post-mortem* examination was allowed.

CASE II.—Mrs. B., aged 34, came to the hospital in October, 1894, for general lassitude and excessive thirst. She first noticed enlargement of the hands about five years ago. At that time she had an illness called influenza, in which she had rigors, fever, and frontal headache, being ill a fortnight. This illness left her weak for some time, and a few months later she began to have severe headaches in the forehead and at the root of the nose, perhaps as often as twice a week. The hands continued to increase in size, and two years ago the feet did so also, so that instead of "fours" in boots she had to wear "sevens." The face and head began to grow large about the same time, and she says that two years ago her sight suddenly became dim, and she only saw one half of an object she was looking at. She thinks she increased in height as she certainly did in weight, rising from nine to thirteen stones. During the last eight months, however, she has been very thirsty and hungry, has passed a great quantity of urine, and has lost three stones in weight. Her strength has been much diminished during this time.

Whereas two years ago she began to sweat profusely, for the last eight months she has hardly sweated at all. The headaches have remained unaltered during the last five years. She has three children, aged 12, 10, and 8, and she has not menstruated since the birth of the last. The menstrual function has been always scanty; from the age of 14 to that of 22, when she married, she suffered from symptoms of anæmia, and menstruation was very infrequent, while since marriage it has only occurred once or twice.

Fig. 3.—Case II.

Fig. 4.—Case II.

Just before the second confinement she was ill for three weeks with severe pain and swelling of the joints and much sweating. She has had no miscarriages and there is no history of syphilis. She had small-pox at 14 and scarlet fever at 20 years of age. She has not been alcoholic and has had no mental worry, though during the last few years she has become fretful and desponding.

As regards the family history, the patient's father had right hemiplegia at the age of 40, the mother is said to be "not strong," and the patient is the eldest of nine children, all the others being healthy.

On admission the patient presented the characteristic face of acromegaly, with elongated lower jaw, and nose and somewhat thickened lips, but the change was less marked than in the first case, the soft parts especially being less thick. (Figs. 3 and 4). (Fig. 5 represents Mrs. B. about the time she

Fig. 5.—Case II.

married.) The tongue is enlarged, as are the hands, and, to a less extent the feet. The fingers have square ends with flat ribbed nails, and the phalangeal joints are slightly swollen. She thinks the enlargement has slightly decreased since the excessive flow of urine began. There is no increase in the size of the bones of the arms and legs. There is a slight cervico-dorsal kyphosis and the lower ribs appear to push the belly forwards. The clavicles are of natural dimensions, but the second rib cartilages are very large. The thyroid gland is distinctly enlarged and is symmetrical, soft, and non-pulsatile. There is slight dulness at the manubrium sterni.

The hair on the head is abundant, coarse, and dry, but is not increased in other parts of the body. The skin is generally dry, and is slightly thickened on the enlarged extremities. There is slight exophthalmos, more marked on the left. There is no paresis of the external ocular muscles, but the left pupil is slightly larger than the right. The left pupil hardly contracts when light falls on the nasal half of the left retina. The optic discs are pale and small, and their appearance suggests commencing atrophy. Vision: with left eye— $\frac{1}{4}$; with the right eye she cannot read the largest type at any distance.

Perimetric examination shows bitemporal heminopia, with some contraction of the nasal field in each eye, and a central scotoma in the right eye. (Fig. 6.) Between the central and

Fig. 6.—Visual fields of Case II.

the temporal scotoma in the right eye is a zone in which light is dimly perceived.

General sensation and the other special senses appear normal. There are occasional moderate "rheumatic" pains in the limbs, and also feelings of numbness, and sometimes burning sensations.

The patient is intelligent, fairly cheerful, has no conspicuous defect of memory, but it is obvious that slight effort exhausts both body and mind. She is not especially emotional. The thoracic, abdominal, and pelvic viscera present nothing abnormal to physical examination. The patient passes from 100 to 200 ounces of urine daily, containing about 6 per cent. of sugar, and of specific gravity 1035 to 1045. There is no albumen and no peptone. Microscopical examination of the blood shows no abnormal conditions.

Progress of the Case.—The patient remained in hospital for five weeks, during most of which time she took arsenic in small doses. After the first week she was put on diabetic diet, with a result that the quantity of urine was not diminished, although the sugar was reduced to 2 per cent. Afterwards, under the use of codeia, the sugar went down to 1 per cent., without any reduction of the amount of urine passed per diem.

The temperature tended to be subnormal, varying from 97° F. to 98.6° F. The patient had several very severe attacks of diffused headache, sometimes accompanied with vomiting. These were usually relieved by antipyrin or, less efficiently, by croton oil. During the last three weeks of her stay in hospital, the patient took pituitary tabloids, and since her discharge has continuously taken these tabloids and arsenic. Since she left the hospital she has taken ordinary diet.

On the whole there has been very little change in her condition for good or bad. What change is observable is a slight loss of flesh, attributable to the glycosuria, which makes the enlargement of the face and hands less conspicuous. (During the stay in hospital her weight increased from 9 st. 7 lbs. to 9 st. 10 lbs.) The patient is certainly not otherwise worse, perhaps she is a little more cheerful, but I cannot trace any markedly beneficial effect to either the arsenic or the pituitary tabloids.

REMARKS.

Without entering into a discussion of the pathology of acromegaly, for which our present physiological knowledge hardly suffices, attention may be called to three points illustrated by the two cases, namely, the early arrest of menstruation, the distinct signs of enlargement of the pituitary gland, and the absence of therapeutic effect of the pituitary tabloids.

Amenorrhœa is one of the most constant and earliest symptoms of the disease in women, often preceding the hypertrophy of the extremities, but it may occasionally come on later, as in a case recently published by Dr. George Murray, where the increase occurred two years before the cessation of menstruation. The experience of spaying both in women and in animals, however, shows clearly that suspension of ovarian function is not in itself a sufficient cause of acromegaly. It is also certain that neither mere increase in size of the pituitary gland, as when it is the seat of a tumour, produces the symptoms (except headache and hemianopia), nor does its destruction by growth or inflammation.

Simple hypertrophy of the gland is undoubtedly the condi-

tion found most frequently *post mortem*, and the hypothesis that the disease is due to exaggeration or perturbation of the normal function of the pituitary body has some degree of plausibility.

In some cases, on the other hand, no such enlargement has been found, as in one reported by Pel,¹ where the pituitary gland was said to be "completely normal, the thymus only slightly hyperplastic, and the thyroid moderately atrophic." In this case there was a large glioma of the left hemisphere.

It is possible, however, that there might be exaltation of the gland's function without increase in its size. But until we have some evidence as to what the normal function of the gland is, this hypothesis must remain doubtful. The fact that in myxœdema there is usually some hypertrophy of the pituitary body is distinctly opposed to it.

With regard to treatment, I venture to think that we have no reliable clinical evidence in favour of the administration of pituitary gland, while if the above hypothesis be true it is likely to be actually harmful.

NOTES ON ORCHITIC EXTRACT.

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It may be of interest to some who have not yet used orchitic extract, to hear of a few cases which appear to point out the value of this remedy under certain circumstances. Dr. Brown-Séquard cited several cases in which the subcutaneous injection of orchitic extract in old men enabled them to devote themselves to business with a much increased vigour, and to endure, without fatigue, physical exercise far in excess of what they were capable of prior to taking the extract.

CASE I.—On June 1st, 1894, I was called hurriedly to a gentleman, aged 65. I had been attending him for many months, but he was reported to be much worse. He was a man prematurely aged, worn down with care and trouble. He had a slight murmur at the base of the heart, was very anæmic, exceedingly thin, and now so weak that the simple act of struggling on to his elbow in bed to talk caused such breathlessness, that it was two or three minutes before he could utter a word. Every form of tonic and nourishment, peptonised and otherwise, had been used for this case for months without effect. The patient appeared like a battery that would not work; the component parts of each cell were in fairly good order, but the vital fluid had been used up and the cell was dry. Dr. Brown-Séquard's cases came to my mind, and I at once decided to give orchitic extract. The result was marvellous. In two days the patient declared himself much better, his appetite was much greater, while he was stronger in every way, and the breathing had greatly improved; he went steadily on with the orchitic extract tabloids, taking four every day, until on the tenth day he was able to walk downstairs without aid, and on the fourteenth walked upstairs without much difficulty. He now improved quickly, was able to return to his office, and go about fairly well, feeble no doubt, but in the words of his friends he was "a veritable resurrection." Some weeks later he took a very long walk, fainted by the wayside from fatigue, and was brought home in a cab; all efforts to revive him failed, and in a few days he quietly passed away. I have no doubt that this patient would have been alive now had he listened to advice and not used up his strength.

Since then I have given orchitic extract in a large number of cases with excellent results; and as it would go beyond the scope of this note to give details of every case, I will simply give a general outline of two or three, with remarks.

CASE II.—A widow lady, aged 60, whose husband had been dead six months, had lost weight, suffered from dyspepsia, great weakness, and appeared feeble and failing. Many remedies and nourishments were tried without much effect. Orchitic extract was given, and in a few days she said that the "pills" were evidently doing her good. She took them from June 28th to November 16th, 1894, by which time she had brightened up, walked up stairs instead of being carried, and had put on 8 lbs in weight, which may be considered exceptional, as she was an exceedingly spare, slight woman.

CASE III.—An unmarried lady, aged 45, very thin, suffering from many fancies, took orchitic extract with the best results from July 18th, 1894, up to March, 1895. She is much more cheerful, has got rid of her fancies, while she is nearly double the weight she was before. The case had been under my care for five or six years, and nothing did her good until she took the tabloids, so I think I am justified in giving the credit to them.

CASES IV AND V.—Two sisters, approaching the climacteric period, one a widow and the other married to an elderly man, who both suffered from palpitation, flatulence, and extreme nervousness, derived great benefit from the tabloids. The nervousness and depression passed away. They took the tabloids steadily from November 29th, 1894, to January, 1895.

CASE VI.—In this case of impotence in the male the tablets were of no value whatever as regards the impotence, but the patient having ceased taking them for a while called again for a supply, as he found

¹ Berl. klin. Woch., 1891, No. 3.