

PARTIAL THYROIDECTOMY UNDER LOCAL ANÆSTHESIA, WITH SPECIAL REFERENCE TO EXOPHTHALMIC GOITRE.¹

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ALL that I shall speak about in this paper is the result of my own experience. The conclusions are such as I have been driven to. I shall not dogmatise if I can help it, because there is much room for legitimate difference of opinion on every aspect of the subject. When I began this work, partial thyroidectomy for exophthalmic goitre was regarded as being at least fairly dangerous, and the operation was not a frequent one. The number of cases which have now been operated upon enables one to speak with more knowledge, but we are still far from finality.

By way of introduction, I might say that I was led into this work in the following way. Through interest in the disease, and reading the medical literature, I had been removing the thyroid glands from milch goats, and feeding the patients on the milk. Thus I had quite a number of patients under me in the out-patient department of the hospital. One day there came a patient who was exceedingly ill, who had no living relations, and who begged for any treatment which would relieve her. After a little time I decided to operate, and placed the whole position before her. She wished for operation. I asked my senior surgeon (Mr. Murray Morton) for a bed. After the operation other patients who had seen her in the out-patient room asked to see her in the ward. Then another asked to be operated upon. Ultimately all were operated upon. Since that time I do not think I have had to persuade a patient to undergo operation. The first-mentioned patient is now doing her work as cook.

I shall not speak of etiology. It seems to me that the chief interest will centre round such questions as, Is surgical interference justifiable? If so, at what stage of the disease is it indicated, and to what extent is interference desirable? Then comes the question of the absolute or relative safety of the patient, and what modifications of technique help to assure this. Finally, and most important of all—in what condition do we leave the patient.

I have written² that, judged from the point of view of response to operative treatment, cases fall into four classes:—

I. *The classical type.*—There are present goitre, tachycardia and palpitation, tremor, staring eyes, with or without exophthalmos. There may or may not be complete amenorrhœa, emaciation, alopecia, and other less constant symptoms. But we can detect little or no organic degeneration. The heart has not "broken down," if we may use that term to indicate either definite œdema of dependent parts or irregularity of pulse. It is arguable whether operation should be performed in this class or not. There is the possibility of complete return to health by medical treatment or rest, or with no treatment at all. Also there is the possibility that, in spite of all medical treatment, the disease may progress, to end either in death or in such organic degeneration that return to health is an impossibility. We will discuss that later.

II.—In this class I place those cases in which the disease has progressed until there has been organic degeneration; and among them there have been some complete wrecks—irregular heart, œdema, enlarged liver. The existence of this class at all (and it is a comparatively large one) is some answer to the query as to whether cases in the first class should be operated upon, and it is certainly some answer to the statement still made sometimes that all patients ultimately get well if they live long enough. It has been stated that cases in this class are too far advanced for operation, I think for two reasons: (1) that they are too ill to stand the operation; and (2) because degeneration of organs has advanced to such a stage that improvement is impossible. We will discuss that also later.

III.—In this class I place the cases in which the thyroid gland is quite small, in which it can sometimes scarcely be

detected; and yet, associated with that small gland, there may be an extreme degree of one or more of the characteristic signs. There may be absence of tremor or of exophthalmos, though either or both may be excessive. There may be smothering sensations or flushings. In spite of a rapidly beating heart the patient is usually over-fat, if one may use the term.

IV.—In this class I place the cases in which there are some thyrotoxic symptoms, associated with a goitre which is not truly exophthalmic in type. I do not mean by this cases of simple parenchymatous goitre which have been in existence for some years, and have then become exophthalmic in type. Those are among the worst of cases. But there are some cases of adenoma of the thyroid in which the position of the adenoma behind the sternum or clavicle, or the adenoma, apart from any question of position or size, seems to irritate the surrounding gland tissue and cause some tremor, some staring of the eyes, and make the heart more easily excited.

To speak of the considerations which influence one in deciding whether to operate in each class one has to take into account the position in life of the patient and the severity of the case in relation to the progress made under medical treatment. If a patient has means and leisure, and the symptoms are not progressing, and one feels that there is no danger of the heart condition passing from mere irritability into organic change, then medical treatment could safely be persisted with for an indefinite time. Against this one has found that again and again a patient has moved on from one practitioner to another, or has stayed away from her own practitioner, and ultimately comes back, with œdema of the feet. I will instance one or two cases.

I recently operated upon a patient who had seen a practitioner in one of our larger provincial towns two years ago. She took his medicine for three months, then went to a Chinese herbalist. She took the drugs of the Chinese herbalist for one year and nine months; she then saw a medical man who sent her to me. This patient's sister had died in a hospital from goitre years before. I think of another case, where a woman had been going along fairly well and seeing me at moderately long intervals. One morning she came with a heart enlarged, the apex well beyond the nipple-line, and an irregular pulse. Some nights previously she had gone to a dance; that, I presume, had been the culminating cause, though it is more probable that the trouble had been progressive before the dance.

I myself refuse to operate until I know that the patient has had three months' efficient medical treatment, unless there are present other circumstances influencing the case, and one is guided by all the circumstances. One man I kept under medical treatment for nearly 12 months, but he could never work with efficiency, always the thumping heart with the least exertion, and often without. At the end of the time I removed one lobe. Response to operative treatment in this class is very prompt, and the cure is complete if organic heart disease is not present, and if sufficient gland is removed. With local anæsthesia and expert operating the danger is nil.

In the second class one gets every stage of wreck—extreme emaciation, œdema, sometimes only in feet and legs, sometimes up the whole body, sometimes in the face if the face be low, as during sleep. Pulse irregular; apex beat anywhere between the nipple-line and the axilla. They constitute a class which most men who operate for goitre say should not be touched for two reasons: (1) because operation is too dangerous, and (2) because organic disease has so far advanced that improvement cannot follow. Out of 380 thyroid operations altogether I have performed 19 on cases in this class, and I say that operation is not too dangerous, and that very great improvement follows. One patient was lying on a bed utterly prostrated. She was œdematous; the stethoscope dented the chest wall; the apex-beat was 1 inch outside the nipple-line. She had incidentally freely moveable kidneys, a retroverted uterus, was almost blind (though not old), and whilst in hospital became deeply jaundiced. Dr. White assisted me to remove one lobe, and, later, half the other. The patient now leads a happy life, does light work, walks, and drives. Of course she cannot do hard work, and her heart can never be sound, but she was completely invalidated before.

I have reported before the case of a nun, whose face was asymmetrical with œdema every time she slept. Dr. A.

¹ A paper read before the Surgical Section of the Royal Society of Medicine in joint meeting with the Medical Section and the Section of Anæsthetics on Feb. 13th, 1912. The discussion upon it was adjourned.

² Brit. Med. Jour., May 22nd, 1909.