example of obvious anxiety). The anxious atmosphere surrounding the child becomes the natural one for it. Anxiety is there as a matter of course, colouring all its views and enterprises. The same holds for the genesis of many childish phobias. These are often the crystallization at one point of a general sense of insecurity easily engendered in a young child facing a big and difficult world. Similarly, with obsessive and compulsive conditions, the part played by the stage of development of thinking (sympathetic magic) in determining their almost universal incidence, must be investigated in their relation to instinctive tendencies. Of hysterical conditions it may be said that again a common-sense evaluation is required. The problems of the hysterical constitution and of hysterical dissociation have not by any means been finally met by the hypotheses so far advocated.

All these problems, about which there is at present so much speculation, offer a promising field for really scientific investigation. The psychiatrist, who so often sees only the end-results, envies the paediatrician his opportunities of seeing the beginnings, of watching personalities in the making, and of guiding them towards healthy, happy achievement.

RESULTS OF TREATMENT IN EXOPHTHALMIC GOITRE.

BY

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THERE is considerable uncertainty in the minds of many medical men as to the place of surgery in the treatment of toxic goitre, by which is meant not only exophthalmic goitre, but also those closely related conditions in which there are manifestations of thyroid intoxication, such as the so-called "toxic adenoma." It may be of interest, therefore, to review the results of treatment in a series of patients, some of whom were treated by thyroidectomy, and others by various methods but without thyroidectomy.

All the patients in this series were admitted to the wards under my charge during 1920-25, and since then have been recalled from time to time; only those who have been seen this year, or of whom reliable reports have been received this year, will be considered. A period varying from five to ten years has now elapsed since their admission to hospital. They all remained under direct observation in the wards for several weeks at least, and in some instances for several months, during which time many lines of treatment and investigation were tried according to the ideas or clues we were working on at the time, but neither x-ray treatment nor radium was employed; so that, although the number is small, they have been carefully observed. They were admitted because they were the more serious cases, and they include such patients as those with heart failure in preparation for surgical treatment, and similar cases in which surgical treatment was not carried out for one reason or another. The two groups—those treated by thyroidectomy and those treated by other methods—though not strictly comparable as regards the severity of the disease, are similar to a considerable extent, since many patients in whom thyroidectomy appeared advisable refused to undergo operation, and because we are always ready to delay operation, if possible, so that other methods of treatment can be tried. As a rule, thyroidectomy was advised in the more severe cases, and in those that proved resistant to other methods of treatment.

Of the 60 patients, there is no report for 1930 in 10, and of the remaining 50, 24, with an average age of 38 years, were treated surgically, and 26, with an average age of 35 years, by means other than thyroidectomy. Of the 24 treated surgically, the results (Table I) are good (capable of full work) in 15, poor (working with difficulty) in 5, bad (leading invalid life) in 1, while 3 are dead. Of the 26 treated by non-surgical methods, the results are good in 10, poor in 4, bad in 2, while 10 are dead. The

principal difference in the results in the two groups is the much higher mortality in the non-surgical group. Even if two patients who died in hospital of conditions not apparently connected with the thyroid disease are omitted, the difference in the mortality in the two groups is striking.

TABLE I.

Treatment.	Total Number.	Average Age.	Results.			
			Good.	Poor.	Bad.	Died.
Surgical	24	38 years	15	5	1	3
Non-surgical	26	35 years	10	4	2	10
	50		25	9	3	13

The patients can be subdivided into those with primary and those with secondary Graves's disease, although this distinction cannot always be made with confidence. The essential disturbance that produces the thyroid intoxication is unknown, but is probably the same in both. In primary Graves's disease, however, there is no evidence of previous structural change in the thyroid gland; the characteristic histological changes are found throughout the whole gland, and the subjects are usually young adults. The signs of intoxication may be very severe; this group includes the typical cases of exophthalmic goitre with the eye signs, tachycardia, tremor, vasomotor, and nervous disturbances. In secondary Graves's disease the disturbance arises in a patient who has a damaged thyroid gland already, as shown by coarse or fine fibrosis, colloid goitre, local areas of degeneration, etc.; the histological changes characteristic of the disease are found distributed in a patchy manner, and the subjects are commonly more advanced in years. The signs of intoxication are usually mild, eye signs and vasomotor disturbances may be absent, but the functions of the other organs of the body may be seriously crippled, possibly because they are older. The patients with but slight evidence of thyroid intoxication, but with auricular fibrillation and heart failure, belong as a rule to this secondary group.

The classification of patients that were treated by non-surgical methods into the primary and secondary groups, reveals (Table II) that the good results are found mainly

TABLE II.—Treated by Non-Surgical Methods.

Type.	Total Number.	Average Age.	Results.			
			Good.	Poor.	Bad.	Died.
Primary	16	28 years	8	3	1	4
Secondary	10	47 years	2	1	1	6
	26		10	4	2	10

in the primary group (average age 28 years), and the mortality is greater in the secondary group (average age 47 years). Of the four fatal cases of primary Graves's disease, two patients died in hospital of conditions other than the thyroid disease, but the other two were young females, 15 and 25 years of age, who were not seriously ill when in hospital, but who did not remain under observation, and relapsed later and died at home. The six patients with secondary Graves's disease who died had an average age of 45 years; one, aged 39, had been ill off and on for twenty years and died shortly after admission with an acute severe intoxication; one, aged 53, died after discharge, but no operation was advised because of the presence of pulmonary tuberculosis; and the remaining four died after discharge in acute exacerbations of the thyroid disease, having refused operative treatment when in hospital. Of the six patients in whom the result is recorded as "poor" or "bad," two have since undergone operation and are now improving, and two others have refused operations. Of the ten patients in whom the result is recorded as "good," two, aged 65 and 36 years,

had secondary Graves's disease, were not seriously ill, and improved rapidly under treatment; the remaining eight were young females (average age 26 years) with primary Graves's disease, who either improved rapidly with treatment, or were in such domestic and financial circumstances as to allow of prolonged rest under supervision. In one of them the result could not be called "good" until as long as six years after commencing treatment, and as long as eleven years from the onset of the disease.

Those that received surgical treatment (Table III) can be classified about equally in the primary and secondary groups, with average ages of 29 and 44 years respectively.

TABLE III.—*Treated by Thyroidectomy.*

Type.	Total Number.	Average Age.	Results.			
			Good.	Poor.	Bad.	Died.
Primary	10	29 years	8	1	0	1
Secondary	14	44 years	7	4	1	2
	24		15	5	1	3

One only of the deaths occurred immediately after operation; the other two patients (aged 44 and 49 years) who died had one lobe only removed, and died later in acute relapses, three and six years following the operation. Of the six patients in whom the results are recorded as

"poor" or "bad," one has recently had a third operation, at which the thyroid gland was found to have grown to a considerable size from the remnant left at the previous operations, and is now doing well. The remaining five may require further operative treatment also, but in their case there are factors that make a decision difficult.

CONCLUSIONS.

The number of patients is too small to be of statistical value, nor are the groups strictly comparable, but the results after periods varying from five to ten years after discharge from hospital confirm the impression gained from the experience with a much larger number that have not been under observation for so long, or have not been studied so carefully. The nature of the results in the patients treated by surgery will depend, of course, on the experience and skill of the surgeons available. The following conclusions, however, seem justifiable. Of patients whose condition is severe enough to require admission to hospital, surgical treatment is indicated in the present state of knowledge in those with secondary Graves's disease. It is indicated, also, in those with primary Graves's disease who do not improve rapidly, or who continue to relapse and become chronically ill in spite of satisfactory management, or who for financial or other reasons cannot submit to adequate observation and treatment. In a number of the younger patients with primary Graves's disease recovery takes place without surgical treatment, but observation and treatment extending over years may be necessary.

THE AFTER-HISTORY OF HEALED SURGICAL TUBERCULOSIS.

BY

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THE treatment of non-pulmonary tuberculosis has passed through various phases in the last thirty years. In the earlier days treatment was mainly by operation, and tuberculosis was regarded as a local disease to be eradicated by painstaking removal. Hence, free and often elaborate excisions of joints were widely practised. In the end the unfortunate outcome as regards the local disease, no less than the frequency of disastrous functional results, caused the methods of radical excision and erosion to fall into deserved disuse.

This was hastened when it was realized that tuberculosis of a joint is not the primary condition, but is a pyaemic manifestation in a patient already infected in another spot. Obviously, if this view is correct—and there can be little doubt that it is—the most extensive local procedure will not cure the disease. In conformity with this view, treatment then swung over to conservative methods aiming to raise the resistance of the body by general treatment and handling the local condition by rest in the optimum position for a prolonged period. The results of this method are on the whole good, but they fall short of ideal, and in recent years the question of operative treatment has again been seriously raised by thoughtful surgeons.

It is clear that in the present state of our knowledge our main curative agent in tuberculosis is rest. The rest given by any form of external splint, however carefully applied, is at the best incomplete. If by operation we can induce ankylosis of a tuberculous joint, either by intra-articular or extra-articular technique, that joint will almost certainly heal. The object of the modern revival of operation is therefore not immediate eradication of disease, but ultimate cure by production of an ankylosis.

Any surgical method, however sound in theory, must in the end stand or fall by its results, and it is unfortunately very difficult to estimate with any accuracy the end-results in surgical tuberculosis. This communication has been written in no spirit of controversy, but simply with the object of contributing certain data which may be useful in any discussion of the respective merits of the conservative and operative methods. The author has had the

advantage of treating this type of case during twenty-six years in one institution by conservative methods, involving, in addition to the usual resources of general treatment, a somewhat rigid fixation by plaster or appliance. In these respects the series has the advantage of being very homogeneous, but the difficulties in arriving at an accurate idea of the results are great.

The main stumbling-block is diagnosis. How is one to be sure that a given case is really tuberculosis? In the series here discussed all that can be said is that every case has been taken, by clinical examination, by skiagram, and, where available, by examination of aspirated material, before a diagnosis of tuberculosis was accepted. While the grosser errors—for example, syphilis, actinomycosis, haemophilia, the varying dystrophies of the type of pseudo-coxalgia, and the more obvious infective joints—can be eliminated, who is to say what other conditions may still be hidden in the dump we call surgical tuberculosis?

In a previous communication¹ I endeavoured to estimate the more immediate results of conservative treatment; the object of the present inquiry is to estimate, as far as may be, the ultimate fortune of those patients who are discharged as cured.

The investigation concerns a total of 170 cases of children who have been under my care for tuberculous disease of the larger joints. These patients comprise 67 suffering from disease of the spine, 71 with disease of the hip-joint, and 32 where the lesion was in the knee-joint. All these patients were discharged between the years 1906 and 1924 with the observation "apparently cured." None of the patients examined has been discharged from the institution for a shorter period than six years, and the length of time which has elapsed since their apparent cure ranges from six to no less than twenty-four years.

Of the 170 patients, I have been able to find 129, and their present condition is exactly known. The proportion of cases traced must be regarded as satisfactory when one considers the very floating nature of the population in a large industrial city.

In classifying the results, the method adopted is as follows:

Class A includes all patients found to be in good health with no sign of activity in the old disease and no fresh focus of tuberculosis. They are all either at work or quite capable of doing active work. These number 110.

Class B comprises cases in which there is complete arrest of the disease, as in Class A, but the functional result is not good; these patients, who number 7, must be regarded as cripples.