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EDITORIAL

A difference of opinion still exists as to the best method of treatment for the majority of patients with hyperthyroidism, a difference that is to some extent reflected in the views of the three authorities writing on this subject in this issue. A much wider divergence is to be found, however, in many other discussions of the same subject. At the Royal Society of Medicine in 1958, for instance, Black[1] stressed the current tendency at the Mayo Clinic to employ surgery in preference to the anti-thyroid drugs and to operate without preparation with these agents on all patients without ' unusually severe disease '. Other speakers urged that there was still a case for the medical treatment of many patients.

It is evident that local factors must decide, to a great extent, which method is adopted. The availability of first-class facilities for surgery, or of radioiodine, must greatly influence the decision. At the Mayo Clinic, for example, the surgical facilities are second to none, while the fact that a large number of the patients live far away must weigh heavily against medical treatment. That this, however, can also be very successful is shown by the results of a study of 101 patients by Astwood and his group in Boston.[3] During a four-year period after the cessation of medical treatment, 55% remained well. More than half of the relapses took place within three months from the end of the period of treatment, which, for the patients to be included in the study, had to be given for at least six months. What is surprising about these results is the fact that none of the factors usually considered to affect the outcome was significant, in particular the coexistence of youth, a small goitre and mild hyperthyroidism (a combination often thought to favour a high remission rate).

There is no doubt that, if medical treatment is adopted, the patient needs to be seen frequently by the same observer, in much the same way as would be used at a diabetic clinic. Many observations should be made at each visit to make sure that the disease is being properly controlled; among these, careful assessment of the tendon reflexes is very helpful. The slow relaxation of the muscles of plantar flexion is so characteristic of the ankle jerk of hypothyroidism, and so different from that in hyperthyroidism, that it furnishes an indication of overtreatment. In the clinic it is simpler to test the biceps jerk, when the abnormal relaxation of the muscle can often be appreciated by the hand not wielding the hammer.

Coming up on the heels of the two leaders, after a very late start in the race, is radioiodine as a method of treatment. It is highly significant that Macgregor[2] should have found that 60% of 1,034 cases of hyperthyroidism were suitable for this form of therapy. Once the doubts about the risks are resolved, radioiodine may take its place as the treatment of choice for a very large number of patients as the facilities become more widely available.

REFERENCES

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3. SOLOMON, D. H., BECK, J. C., VANDERLAAN, W. P., and ASTWOOD, E. B. (1953), *J. Amer. med. Ass.*, **152**, 201.