Unusual presentations of thyroid disease in general practice

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SUMMARY. We report nine cases of unusual presentations of thyroid disease seen in our practice during a period of about two years. We discuss the implications and management of these cases in general practice.

Introduction

THYROID disorders are the commonest endocrine disorders and are usually simple to treat. Correct therapy can transform the patient to normal. As general practitioners, we may see 0·4 to 1·2 per 1,000 patients with thyrotoxicosis per year and 2·4 to 4 per 1,000 patients with myxoedema per year, with a 10:1 predominance in women (Hodgkin, 1973).

There has also been a vast improvement in diagnostic accuracy since the days of basal metabolic rate and protein-bound iodine. We can now measure serum thyroxine and triiodothyronine, and assess thyroid binding proteins with the thyroid hormone uptake test (T3 Uptake). These tests and the arithmetically calculated free thyroxine index give us a better interpretation of thyroid status in pregnancy, and in patients on oral contraceptives and other drug therapy. The previous problem of iodine contamination has been removed.

Method

We report nine unusual cases of thyroid disease seen in our practice of 11,000 NHS patients, by two of the partners, between July 1975 and May 1977. We have direct access to biochemical facilities to measure: thyroxine (T4), T3 resin uptake, and the free thyroxine index—which is useful as changes in the binding proteins will then cancel out (Lye and Kamal, 1977). In addition we can request thyroid stimulating hormone (TSH) levels, applicable in hypothyroidism (Hall *et al.*, 1971), and T3 (triiodothyronine), useful in borderline thyrotoxicosis and T3 toxicosis. All our cases have had biochemical confirmation of the diagnosis.

1. *Primary infertility and anxiety*

Mrs V. M., aged 29 years, had been unable to conceive during eight years of marriage. She was anxious but had not lost weight. Thyrotoxicosis was diagnosed in 1975. She was given a nine-month course of carbimazole. She conceived after this and recently had a baby girl. She remains euthyroid and off all treatment.

2. *Acute psychotic confusional state*

Mrs M. H., aged 48 years, presented as an acute psychotic with hallucinations. A domiciliary visit by a psychiatrist was arranged and treatment started. She was later seen by us and thyrotoxicosis diagnosed. She was treated initially with carbimazole and later with radioactive iodine. This led to a complete recovery.

3. *Myopathy*

Mr H. R., aged 42 years, presented with weakness and wasting of the proximal muscles of the lower limbs. Muscle enzyme (creatine phosphokinase) levels were raised. Lid lag and ventricular ectopic beats made us suspect a thyroid disorder. He was found to have myxoedema, with high TSH, low thyroxine levels and FTI, and is an example of a recently described syndrome of myopathy and myxoedema (Mohr and Reid 1977). At the time of writing he had had thyroxine for three months and was much improved.

4. *Prolonged physiological jaundice*

Baby J. B. presented at the age of six weeks in our baby clinic, with jaundice and excessive sleeping. Her serum

thyroxine was extremely low, with a high thyroid hormone uptake. She was diagnosed as athyreotic. Replacement of thyroxine led to rapid resolution of the jaundice and her development was normal at six months.

5. Malignant cachexia

Mr J. B., aged 67 years, had recently lost 13 kg (2 st) in weight and was initially diagnosed as malignant cachexia, having had a renal carcinoma removed three years previously. He was seen later and diagnosed clinically as thyrotoxic on the basis of a retrosternal goitre, atrial fibrillation, and weight loss. The diagnosis was confirmed biochemically. Treatment with carbimazole and later radioiodine resulted in a complete recovery, maintained for a period of two years. There has been no sign of recurrence of his renal carcinoma.

6. Paroxysmal atrial tachycardia

Mrs J. B., aged 40 years, had had this disorder for many years and had received various treatments for anxiety. There was no weight loss and no signs of Graves' disease. Thyrotoxicosis was diagnosed. She was controlled on carbimazole and referred for thyroidectomy. Nine months later she remains well and off all therapy.

7. Severe endogenous depression

Mrs R. M., aged 61 years, had had a three-year history of depression and had seen two consultant psychiatrists. Treatment had produced little improvement, until she presented with coldness in the legs and a dry skin. This led to her being diagnosed as hypothyroid. The addition of thyroxine to her treatment led to a marked improvement in her depression.

8. Complete heart block

Mrs M. T., aged 73 years, presented with heart failure and mental retardation. She was found to be in complete heart block with a ventricular rate of 40 beats per minute. She was diagnosed as hypothyroid. Cautious replacement of thyroxine with advice from a consultant physician restored her to a normal sinus rhythm and mental state.

9. Tiredness, lethargy, and cramp

Mrs H. L., aged 33 years, presented with these symptoms. She had had a thyroidectomy at the age of 15 for thyrotoxicosis, and had been lost to follow-up when she moved. Examination revealed a positive Chvostek's sign, and biochemical tests revealed both hypothyroidism and hypoparathyroidism. She remains well on thyroxine and vitamin D and her thyroid function and serum calcium levels are now normal.

Discussion

We have described a variety of presentations, all having a disorder of the thyroid as their basis. Many of these patients had received medical attention previously, both from consultants and general practitioners. Diagnosis and treatment led to worthwhile improvement in their health and lives. As general practitioners we feel that the diagnosis and treatment of such patients can be carried out with the facilities now available in general practice, with appropriate referral for radioactive iodine or thyroid surgery if indicated.

In conclusion, providing that we think of thyroid disorders when seeing some of our more puzzling patients, then a diagnosis of lasting benefit may be made. With correct treatment, often available from the general practitioner, the patient will be restored to normal.

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