Thyroiditis

Chronic lymphocytic (autoimmune) thyroiditis

This common condition is usually associated with raised titres of thyroid antibodies. Not infrequently there is a family history of other autoimmune disease. It commonly presents as a *multinodular goitre* with established or subclinical thyroid failure, although it may present as a discrete swelling. Features of chronic lymphocytic (focal) thyroiditis are commonly present on histological examination in association with other thyroid disease — notably toxic goitre. Primary myxoedema without detectable thyroid enlargement represents the end stage of the pathological process.

Clinical features

As might be expected from the varied histological picture (above), the onset, the thyroid status and the type of goitre vary profoundly from case to case. The onset may be insidious and asymptomatic, or so sudden and painful that it resembles the acute form of granulomatous thyroiditis. Mild hyperthyroidism may be present initially, but hypothyroidism is inevitable and may develop rapidly or extremely slowly. The goitre is usually lobulated, and may be diffuse or localised to one lobe. It may be large or small, and soft, rubbery or firm in consistency — depending upon the cellularity and the degree of fibrosis. The disease is commonest in women at the menopause, but may occur at any age. *Papillary carcinoma and malignant lymphoma* are occasionally associated with autoimmune thyroiditis.

Diagnosis

- Biochemical tests of thyroid function vary with the thyroid status and are of diagnostic value only if hypothyroidism is present.
- Significantly, raised titres of one or more thyroid antibodies are present in over 85 per cent of cases.
- Differential diagnosis from nodular goitre, carcinoma and malignant lymphoma of the thyroid is not always easy.
- FNAC is the most appropriate investigation although abundant lymphocytes may make the cytological distinction between autoimmune thyroiditis and lymphoma difficult. When there is doubt about neoplastic disease, which may coexist with thyroiditis, operation is necessary.

Treatment

- Full replacement dosage of thyroxine should be given for hypothyroidism and if the goitre is large or symptomatic, because some (under TSH stimulation) may subside with hormone therapy.
- More minor manifestations of the condition such as a small goitre with raised antibody titres, do not need thyroxine replacement if thyroid function is biochemically normal; however, long-term surveillance is necessary because of the risk of late thyroid failure.
- Occasionally the goitre increases in spite of hormone treatment and in these circumstances there may be a favourable response to steroid therapy.

- Thyroidectomy may be necessary if the goitre is large and causes discomfort.
- The clinician must, however, be cautious when a lymphocytic goitre increases in size and becomes unresponsive to thyroxine as this may be due to the development of malignant lymphoma.

Granulomatous thyroiditis (subacute thyroiditis —de Quervain's thyroiditis)

This is due to a virus infection for e.g. due to a mumps virus. In a typical subacute presentation there is pain in the neck, fever, malaise and a firm, irregular enlargement of one or both thyroid lobes. There is a raised erythrocyte sedimentation rate and absent thyroid antibodies, the serum T4 is high, normal or slightly raised, and the I123 uptake of the gland is low. The condition is self-limiting and in a few months the goitre has subsided; subsequent hypothyroidism is rare.

In 10 per cent of cases the onset is acute, the goitre very painful and tender, and there may be symptoms of hyperthyroidism. Thirty-five per cent of cases are asymptomatic but for the presence of the goitre.

If diagnosis is in doubt, it may be confirmed by FNAC, radioactive iodine uptake and by a rapid symptomatic response to prednisone. The specific treatment for the acute case with severe pain is to give prednisone 10—20 mg daily for 7 days and the dose is then gradually reduced over the next month.

Riedel's thyroiditis

This is very rare, accounting for 0.5per cent of goitres. Thyroid tissue is replaced by cellular fibrous tissue which infiltrates through the capsule into adjacent muscles, paratracheal connective tissue and the carotid sheaths. It may occur in association with retroperitoneal and mediastinal fibrosis and is most probably a collagen disease. The goitre may be unilateral or bilateral and is very hard and fixed. The differential diagnosis from anaplastic carcinoma can only be made with certainty by biopsy, when a wedge of the isthmus should also be removed to free the trachea. If unilateral, the other lobe is usually involved later and subsequent hypothyroidism is common.