The Association of Clinical Pathologists: 84th General Meeting

The 84th general meeting of the Association of Clinical Pathologists was held at the Adam Smith Building, the University of Glasgow, on 9 and 10 April 1970. As well as simultaneous sessions, when free communications were presented, most of which are abstracted below, there were three symposia. The first symposium on 'Rheumatoid disease' was chaired by Dr L. E. Glyn. At the second symposium on 'The porphyrias', the chairman was Professor A. Goldberg. The final symposium was chaired by Professor N. R. Grist and the subject was 'The scope of hospital virology'. A special guest lecture on 'Cat virus leukaemia and its possible relevance to man' was given by Professor William F. H. Jarrett, when Professor D. F. Cappell was in the chair.

Autoimmune thyroiditis associated with malignant lymphoma of thyroid

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Of 122 malignant tumours of thyroid submitted from the surgical units of the Western Infirmary (1960 to 1969 inclusive) six appeared to be lymphomata. Because of the difficulty in distinguishing malignant lymphoma of thyroid from the active forms of Hashimoto's disease and from small-cell carcinoma of thyroid, all the cases were reviewed by Professor I. Doniach who agreed with the diagnosis.

The patients were aged between 60 and 72 years; four were female. All patients had had rapid thyroid enlargement for a few months and in three there was also a history of goitre for many years. Three died within 18 months of diagnosis; one is well after two years. In five cases, portions of thyroid uninvolved by tumour were available for study and all showed diffuse lymphocytic and plasma cell infiltration and the epithelial changes characteristic of Hashimoto's disease. Serological examination performed in four cases showed thyroid microsomal antibody in all four and antithyroglobulin in three, but the thyroglobulin precipitin test (positive in 50% of cases of uncomplicated Hashimoto's disease) was negative in the lymphoma cases.

In a case of hypothyroidism referred from another hospital and followed for nine years, strongly positive thyroid antibody tests were seen to become weaker during the development of a thyroid lymphoma.

It is concluded that thyroid lymphoma is frequently accompanied by histological and serological evidence of autoimmune thyroiditis and that the antibody titres may tend to fall with the development of lymphoma.

Electron microscopic findings in Q fever

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A case of Q fever endocarditis and hepatitis is described. An initial liver biopsy showed no abnormality beyond occasional histiocytic infiltrates but a later biopsy showed early cirrhosis. Electron microscopy of the second biopsy showed widespread damage to the sinusoidal endothelial cells. The hepatocyte microvilli were fused or distended into blebs. No organisms could be found. The appearances were consistent with the hypothesis that the primary lesion in Q fever hepatitis is in the sinusoidal endothelium.

At necropsy rickettsiae were found by electron microscopy of the diseased mitral valve. It is suggested that where the facility exists this method should be used for searching for Coxiella burnetii, since it is applicable to fixed material and is free from the vagaries of fluorescent antibody techniques.

Some further observations on microgliomatosis

J. HUME ADAMS (Institute of Neurological Sciences, Glasgow)

A brief review of 12 cases of microgliomatosis encountered by the author was presented. Seven were male, five were female, and the age range was from 7 to 74 years. The term microgliomatosis was used because of the similarity of the tumour cells to microglia and because the cytoplasm of a large proportion of the tumour cells could be selectively impregnated with silver carbonate using the Naumenko and Feigin technique. The histological features were very similar in each case but in other respects the cases could be subdivided into four groups.

Group 1 (five cases) where there was a single tumour mass in the brain; the tumours were usually ill-defined rather than granular lesions that caused only little or no expansion of the affected brain. Group 2 (three cases) where the tumour in the brain was clearly of multicentric origin. Group 3 (one case) where tumour could not be identified with the naked eye but subsequent histological examination showed the typical features of diffuse microgliomatosis. Group 4 (three cases) where, in addition to the cerebral tumour, there were lymphomatous deposits in other organs of the body. One case had been previously diagnosed as lymphosarcoma and the other two as reticulum cell sarcoma. In two of these three cases some of the tumour cells in the systemic deposits gave the same reaction with silver carbonate as the tumour cells in the brain.

Red cell shape in hypothyroidism

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Irregularly contracted red blood cells are present in small numbers in the blood films of about two-thirds of patients with untreated hypothyroidism, and this has been found to be of diagnostic value. There appears to be no correlation between any of the clinical features of the hypothyroid state and the red cell change but preliminary results indicate that hypothyroid patients lacking these misshapen red cells may have a release of serum lipids and that this may be detectable in those in whom these cells are present. These abnormal red cells slowly disappear with treatment of the subthyroid state.