characteristic appearance of a myxoid liposarcoma.[2]

Hypercalcaemia is associated with malignancy, either by humoral effect or by bony or renal disease.[3,4] Certain soft tissue tumours have been associated with hypoglycaemia[2] and with hypercalcaemia by the mechanisms stated above. We can find no association of liposarcoma with hypercalcaemia without pronounced renal dysfunction.

The myxoid variant of liposarcoma is the commonest type of liposarcoma (40–50% of all liposarcoma), with the retroperitoneal region being the second commonest site (after the lower limbs).[2,5] Retroperitoneal liposarcomata usually presents either as abdominal swellings, leg oedema, ureteric obstruction or general malaise. We feel that the calcium concentrations, taken with the mild degree of renal impairment, and the response to treatment, favour a primary malignant disease. This is, we believe, the first report of this association.

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References

1 Potts JT Jr. Diseases of the parathyroid gland and other hyper- and hypocalcaemic disorders. *Harrison's principles of internal medicine*. New York: McGraw-Hill, 1987: 1875–82.
2 Enzinger FM, Weiss SW. *Soft tissue tumours*. St Louis: Mosby Company, 1983:
3 Ralston SH. The pathogenesis of humoral hypercalcaemia of malignancy. *Lancet* 1987; ii:1443–6.
4 Mundy GR. Hypercalcaemia of malignancy revisited. *J Clin Invest* 1988;**82**:1–6.
5 Reitan JB, Kaalhus O, Brennhord IO, Sager EM, Stenwig AE, Talle K. Prognostic factors in liposarcoma. *Cancer* 1985;**55**:2482–90.

Peliosis thymomis: association with tuberculosis

The differentiation between vascular lesions and primary tumours in the mediastinum is of considerable clinical importance.[1] We describe a primary mediastinal tumour (a thymoma) which contained vascular lesions.

A 73 year old retired agricultural worker presented to an orthopaedic department with pain in his neck. Subsequent investigation suggested that he had multiple myeloma affecting the body of the axis and the skull. He died 10 days after being admitted to hospital. Postmortem examination showed death to have been due to severe bilateral bronchopneumonia; active pulmonary tuberculosis was also evident. Multiple myeloma was confirmed as the correct diagnosis.

An incidental finding was an 80 × 60 × 50 mm tumour with a partially calcified capsule in the anterior mediastinum. On sectioning the tumour showed extensive vascularity and macroscopically it was initially considered to be a teratoma. Histological studies, however, showed it to be an epithelial thymoma containing numerous discrete vascular areas characterised by multiple small cystic blood-filled spaces (figure) lined by endothelial cells.

There is a recognised association between thymoma and myeloma,[2,3] as in the case described above. It is also recognised that thin walled, sometimes dilated, blood vessels are observed in some types of thymoma.[4] In the example described vascular spaces were particularly striking and were reminiscent of the multiple small cystic blood-filled spaces seen in the liver in peliosis hepatis. Peliosis thymomis is perhaps an appropriate term to describe a similar condition in a thymoma.

There is a known association between peliosis hepatis and tuberculosis,[5] and it is interesting to note evidence of tuberculosis in our patient. Splenic peliosis has also been described in association with tuberculosis.[6] Review of 14 other examples of thymoma, obtained from various Glasgow and Leeds hospitals, showed no evidence of peliotic lesions. Tuberculosis was not a feature of any of the 14 patients involved.

We propose the term peliosis thymomis to describe multiple, cystic, blood-filled spaces in a thymoma, and we further suggest that such a condition may be associated with tuberculosis, as in peliosis hepatis.

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References

1 Sabiston DC Jr. Diseases of the pleura, mediastinum and diaphragm. In: Wintrobe MM, Thorn GW, Adams RD, Braunwald E, Isselbacher KJ, Petersdorf RG, eds. *Harrison's principles of internal medicine*. 7th ed. London: McGraw-Hill, 1974:1330.
2 Gilbert EF, Harley JB, Anido V, Mengoli HF, Hughes JT. Thymoma, plasma cell myeloma, red cell aplasia and malabsorption syndrome. *Am J Med* 1968;**44**:820–9.
3 Lindstrom FC, Williams RC Jr, Brunning RD. Thymoma associated with multiple myeloma. *Arch Intern Med* 1968;**122**:526–31.
4 Muller-Hermelink HK, Marino M, Palestro G. Pathology of thymic epithelial tumours. In: Muller-Hermelink HK, ed. *The human thymus*. Berlin: Springer-Verlag 1986:230.
5 Yanoff M, Rawson AJ. Peliosis hepatis. An anatomic study with demonstration of two varieties. *Archives of Pathology* 1964;**77**: 159–65.
6 Parsons M, Slater D, Platts M, Fox M. Splenic peliosis associated with rupture in a renal transplant patient. *Postgrad Med J* 1980; **56**:796–7.

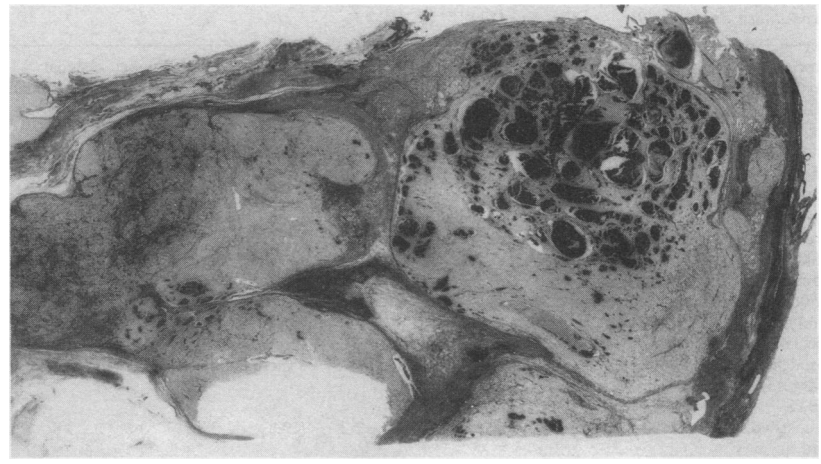

Figure *Section of thymoma. Note multiple cystic blood-filled spaces. (Reticutin.)*