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Pseudolipoma of Glisson's capsule simulating metastatic tumour

We found Karhunen's recent description[1] of three examples of pseudolipoma arising in the capsule of the liver particularly interesting, because we have very recently seen such a lesion. Initially we suspected that this might be a secondary deposit from a malignant meningioma.

Case report

A man aged 46 years received multiple injuries in a road traffic accident, including fractures of several major long bones and most of his ribs, so that he had severe flail chest. He died three weeks later.

The necropsy findings included the anticipated evidence of recent trauma and its effects. In addition, three unanticipated lesions were found. These included a mass in the right middle cranial fossa which measured about 5 cm in diameter, and which was firmly adherent to the meninges. There was erosion of the bone adjacent to the mass, so that there was destruction of part of the lateral wing of the sphenoid and of the lateral wall of the sella turcica, together with penetration of the roof of the right orbit. The anterior part of the superior aspect of the right lobe of the liver bore a firm rounded grey nodule measuring 0·7 cm in diameter, which seemed to be within the capsule (Fig. 1). The third lesion was a stellate area of firm yellow tissue measuring about 2 cm in diameter within the hepatic parenchyma near the inferior margin of its right lobe.

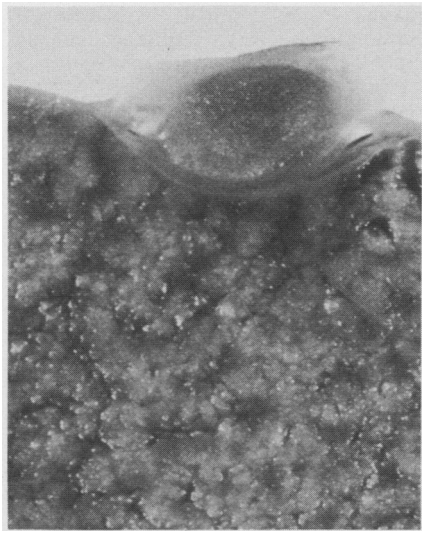

Fig. 1 *Cut surface of nodule in hepatic capsule. At this level, it measures 0·4 cm in diameter.*

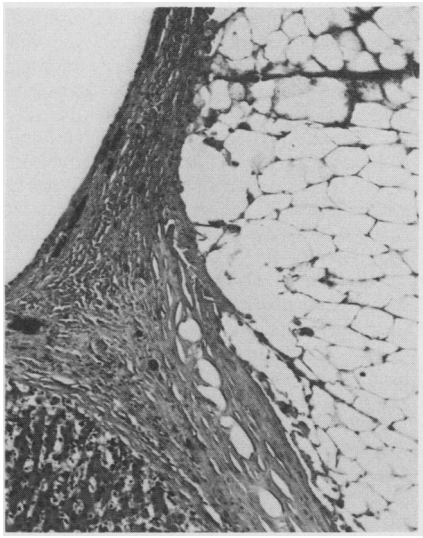

Fig. 2 *Edge of nodule with adjacent liver and capsule. (Haematoxylin and eosin.) Original magnification × 15.*

Histological examination of several representative sections of the intracranial mass showed that it was, in fact, a fibroblastic meningioma with some cellular areas, but without any evidence of malignant character. The nodule in the hepatic capsule was formed of necrotic adult type fat surrounded by a collar of dense fibrous tissue within which there were flecks of calcification, and it seemed to resemble closely previous descriptions of pseudolipoma (Fig. 2). The lesion in the liver parenchyma was a recent infarct.

Some months ago we saw a malignant meningioma that had given rise to a secondary deposit in the visceral pleura. This metastatic lesion, together with an unrelated carcinoma of the large intestine, were clinically unsuspected necropsy findings (Binning CPS, Reid H, Benbow EW, unpublished observations). It formed a well demarcated and firm nodule protruding from the surface of the organ, very much like the hepatic nodule in this more recent case. Our suspicion that the hepatic capsular lesion was a secondary deposit from a meningeal tumour was thus coloured by our previous experience: this finding illustrates very clearly the principal importance of pseudolipoma of Glisson's capsule, which is that it may masquerade as secondary tumour.[1,2] In one of the previously recorded cases[3] there was a carcinoma of the prostate, which might have led to a comparable error. Another case was associated with a benign pleural mesothelioma,[2] and two cases have been associated with large intestinal adenomata.[2,4]

The pathogenesis of this lesion remains obscure, and no one seems to have improved upon Rolleston's suggestion, made in 1891, that it is the result of the impaction of a severed epiploic appendix in the space between the liver and the diaphragm.[5] It seems unlikely that pseudolipoma of the hepatic capsule could progress, as Karhunen suggests, to that even more unusual lesion, the solitary necrotic nodule of the liver: this lesion, although close to the hepatic capsule, is clearly within the parenchyma,[6] and its internal organisation seems quite different.[6,7]

One of the most curious aspects of the published findings on pseudolipoma of Glisson's capsule is that of those 15 cases, including ours, in which the sex was recorded,[1–5,8,9] only one occurred in a

woman.[3] It is tempting to suspect that such a sex discrepancy must represent a clue to the pathogenesis of the lesion, but if it is such a clue, it is one that we are quite unable to solve.

Finally, the lesion seems quite clearly to be within the capsule, rather than the parenchyma, of the liver, and so the term "pseudolipoma of Glisson's capsule"[3 8] (or, for haters of eponyms, pseudolipoma of the hepatic capsule) is preferable to the more commonly used "hepatic pseudolipoma."[1 4 9]

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Anti-HTLV-III positive laboratory reagents

In common with many other laboratories we are updating our "in house" guidelines for the safe delivery and processing of specimens from patients with autoimmune deficiency syndrome (AIDS) based on our existing category 3 pathogen policy and national publications.[1–3] It has become apparent, however, that with the advent of additional sensitive methods for the detection of HTLV-III antibody, some commercial human based quality control reagents already handled and used within the laboratory, particularly as controls in haematological and biochemical investigations, may, themselves contain HTLV-III antibody. This problem was recently highlighted by Jones *et al*[4] regarding the use of reagents in the haematology and blood transfusion laboratory for the diagnosis of bleeding disorders. We recently became aware of a similar problem with a commercial quality control serum used in the biochemistry department.

In June we were notified by the manufacturer that our current stock of Total IgE quality control serum was being temporarily withdrawn because HTLV-III antibody had been detected in some of the serum raw material used to prepare this product. Furthermore, to avoid this problem with subsequent batches routine checks on serum raw materials were to be introduced by the manufacturers. We examined the IgE control material ourselves using an enzyme linked immunosorbent assay (ELISA) technique and confirmed the presence of HTLV-III antibody in the "medium" and "high" but not in the "low" Total IgE control. As a result of this we have begun checking other human based quality control material. We do not know how widespread the problem is but we would hope that all manufacturers of human based quality control material will introduce similar measures to those adopted by our supplier, even though the risks to laboratory staff are probably minimal, providing conventional safe laboratory handling techniques are practised. The situation would be eased if there was an easy reliable screening test for the virus or its antigens, as is the case with another category 3 pathogen, hepatitis B.

Detection of this in commercial or clinical specimens enables selection or assessment of the relative infective risks to be made, which in turn contribute to the prevention or management of potential "control of infection" problems. In the meantime screening for HTLV-III antibody is the current laboratory test for identifying samples from potential cases of AIDS, but this does not necessarily equate with infectivity, and, furthermore, positive specimens may require confirmatory tests.[5] To facilitate the handling of these specimens in the laboratory some recent reports have referred to heat inactivation of lymphadenopathy associated virus (LAV)[6] and AIDS associated retroviruses.[7] The effect of heat or β propiolactone treatment on biochemical and haematological indices has previously been reported, and providing that these are still acceptable,[7–11] such treatment of quality control material offers one possible way of reducing the infectivity of human based material. Although due to a different agent, non-A, non-B (NANB) hepatitis has been transmitted to patients, however, despite using heat treated factor VIII concentrate,[12] and if doubt still exists whether heat treatment at 56°C for 30 minutes completely inactivates HTLV-III or not[8] careful selection of the human sources of laboratory controls and screening for HTLV-III antibody with subsequent rejection of affected donations is an alternative. This approach is already used commercially to select "hepatitis B antigen free" reagents widely used in laboratory investigations, and we would strongly urge all manufacturers to consider this approach with potential HTLV-III affected human material.

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