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Case Report

Accessory Liver Containing Metastatic Tumour

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Summary. The occurrence of an accessory liver is extremely rare. A case is reported here describing an accessory liver showing interesting features, being located in the gastrosplenic ligament and containing a metastatic tumour deposit.

Key words: Accessory liver – Gastrosplenic ligament – Metastasis.

Case Report

A 74 year old caucasian female, who had a small cell anaplastic carcinoma of the bronchus with liver metastases, died from pulmonary embolism. At post-mortem examination a mobile swelling was present projecting from the anterior part of the gastrosplenic ligament, and it was thought to be an accessory spleen. The swelling measured $4 \times 2 \times 1.5$ cm, and was dark brown, soft, nodular, and contained near its upper pole a rounded greyish-white metastatic deposit 0.8 cm in diameter (Fig. 1).

Histological examination (Fig. 2) showed a normal liver architecture enclosed in a thin fibrous capsule. The metastatic deposit had a similar appearance to the original tumour. A focus of tumour cells was also seen in a portal tract and in the adjacent tissue, suggesting that the metastases had arrived via the afferent blood vessels.

Discussion

Developmental abnormalities of the liver are rare, except for the occurrence of Riedel's lobe which is rather common. The abnormalities may include accessory lobes, atrophy of the left hepatic lobe, enlargement of the processus omentalis giving rise to the Spighelian lobe, ectopic liver tissue in another organ, cystic and hamartomatous malformations.

The abnormally positioned hepatic tissue may occur as an accessory lobe which is attached to the liver by bridge of hepatic tissue or a mesentery, as an ectopic liver in which the hepatic tissue is sited within another organ, or as an accessory liver which is a separate organ neither attached to the liver nor embedded in another organ.

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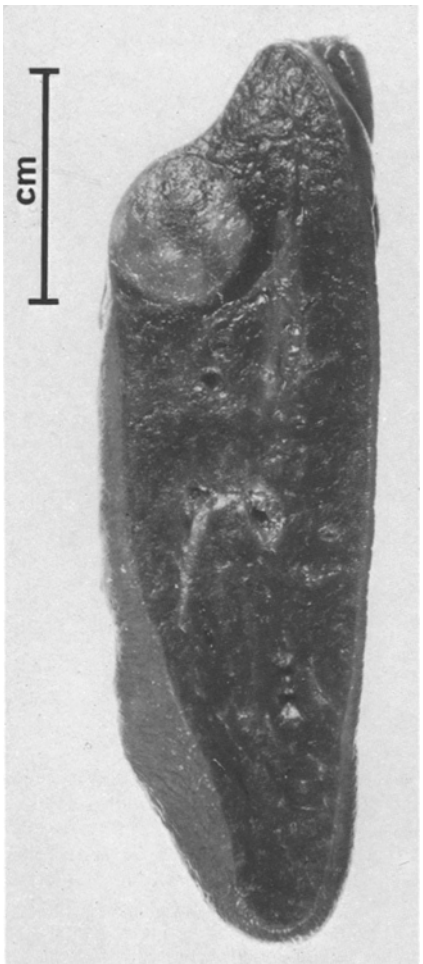

Fig. 1. Accessory liver containing a metastatic deposit

The liver arises in the fourth week of development as a diverticulum from the ventral surface of the foregut, close to the point where the latter joins the vitellointestinal duct (Davies, 1967). The liver of the pig, dog and camel is divided into distinct and separate lobes by strands of connective tissue, and occasionally the human liver may show this reversion (Sherlock, 1975), up to sixteen lobes having been reported (Moser, 1952).

These lobes have no clinical significance and are discovered during laparotomy or post-mortem examination, but occasionally they cause clinical or radiological confusion with more ominous intraperitoneal swellings (Fraser, 1952). Torsion of a hepatic accessory lobe has been reported (Cullen, 1925). The accessory lobe may show the same pathological features present in the anatomically normal liver, as in the case described above. This also was described by Davies (1946) and Collan (1978) referred to cases of hepatic cirrhosis of the liver and associated accessory lobes.

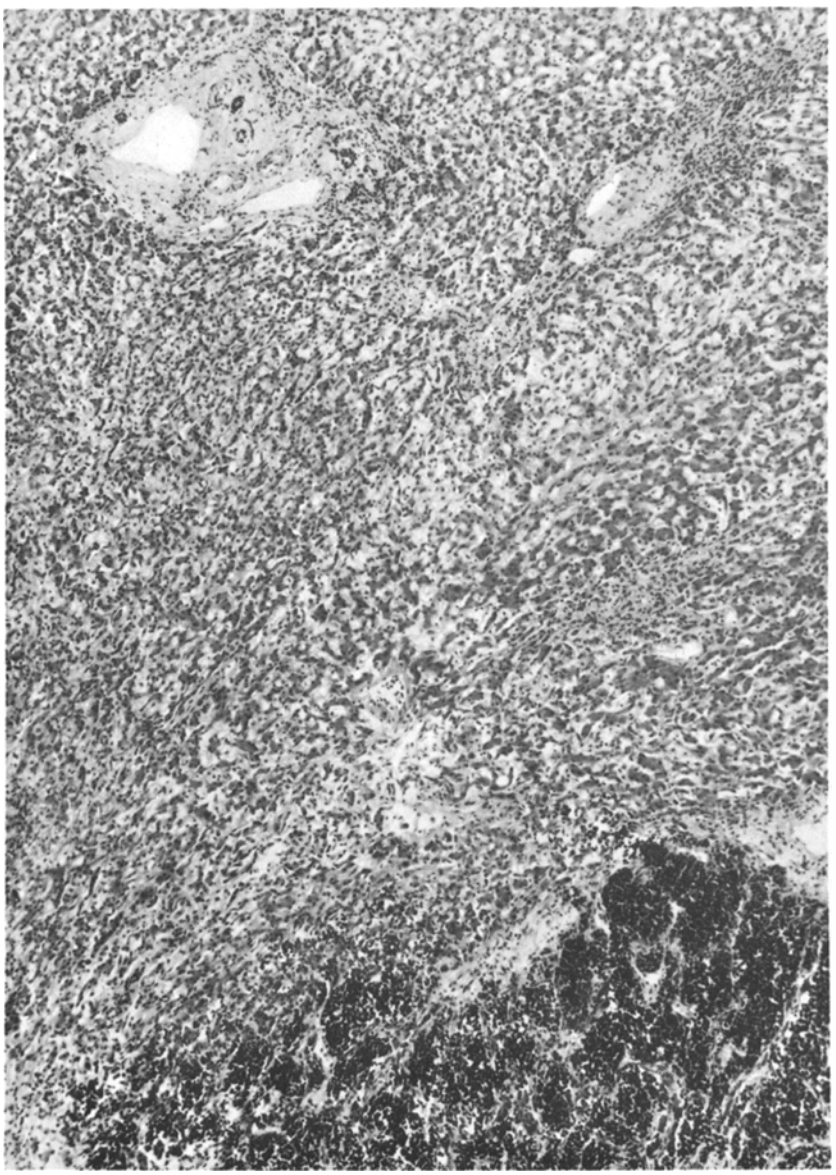

Fig. 2. Histology from the specimen shown in Fig. 1, showing liver architecture and a metastatic deposit. H.E., ×60

Accessory lobes have been reported in many sites intra-abdominally and in the right thoracic cavity (Gray and Skandalakis, 1972). The commonest sites of occurrence are the undersurface of the liver and the gastrohepatic ligament. Cullen's (1925) review of hepatic abnormalities goes as far back as 1767, and he reported an accessory hepatic lobe springing from the surface of the gall

bladder, and mentioned another in an amniotic hernia. Davies (1946) reported a hepatic nodule embedded in the neck of the pancreas of an African, and mentioned that Rolleston (1929) had reported them in the omentum. A structure resembling Riedel's lobe can also occur on the left hepatic lobe (Dick, 1951). Gardner accidentally discovered hepatic tissue in an adrenal gland and Heid (1948) described a focus of liver tissue involving the splenic capsule. He also mentioned that heterotopic liver tissue can occur as isolated nodules in Glisson's capsule, in the wall of the gall bladder and scattered over the peritoneum. They also can occur in the intestinal mesentery.

The supradiaphragmatic liver lobes occur in three typical sites, the right costophrenic variety being the most frequent; and a left supradiaphragmatic liver lobe and another case located close to the inferior vena cava have been reported (Vercelli-Reta, 1978).

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