CASE REPORT

Primary squamous cell cancer of the liver- a rare complex cystic liver lesion

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Introduction

Cystic liver lesions are commonly diagnosed due to the widespread use of ultrasound scans. A large majority of these are benign. Occasionally, patients present with doubtful radiological features, which require further evaluation and intervention. This case describes an extremely rare case of cystic neoplasm of the liver.

Case presentation

A 49-year-old male underwent an ultrasound scan for right-sided abdominal pain and revealed a large cystic lesion in the right lobe of the liver. Further imaging with a triple-phase CT scan revealed a complex cyst. Initial diagnosis of biliary cystadenoma was considered. As apart of the workup, a diagnostic aspiration was done. Tumour markers and cytological evaluation were normal. Considering the radiological appearance of a complex cyst, the patient was offered the right hepatectomy. During laparotomy, multiple small peritoneal nodules were noted in the right upper abdomen. Imprint cytology from the lesions revealed malignant cells. Surgery was abandoned after taking a biopsy from the cyst and deposits. Subsequent histology revealed a moderately differentiated invasive squamous cell carcinoma (SCC) of the liver. Later, the patient was further evaluated to exclude possible primary focus, which became eventually negative.

Discussion

Primary SCC of the liver is extremely rare with less than 50 reported cases globally [1]. Skin, head and neck, respiratory tract, oesophagus, cervix, and rectum are common. Though the exact origin is unclear, a common hypothesis is inflammation of a longstanding cyst leading to squamous metaplasia and subsequent SCC [2,3]. In a few rare cases, SCC was attributed to hepatic teratomas and hepatolithiasis [4].

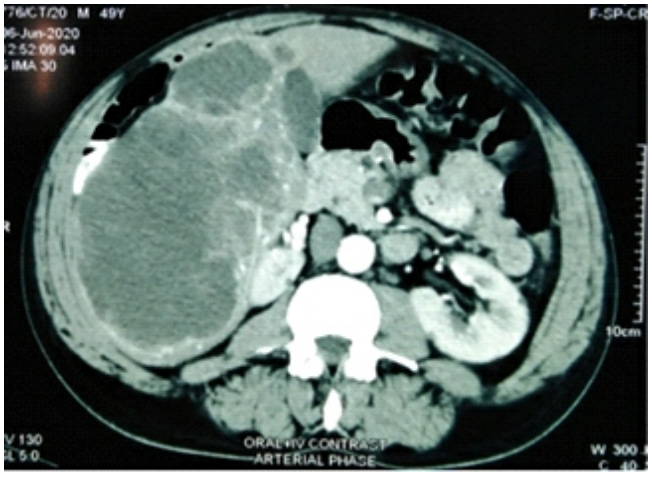

Figure 1. Contrast enhanced computed tomography showing complex liver cyst.

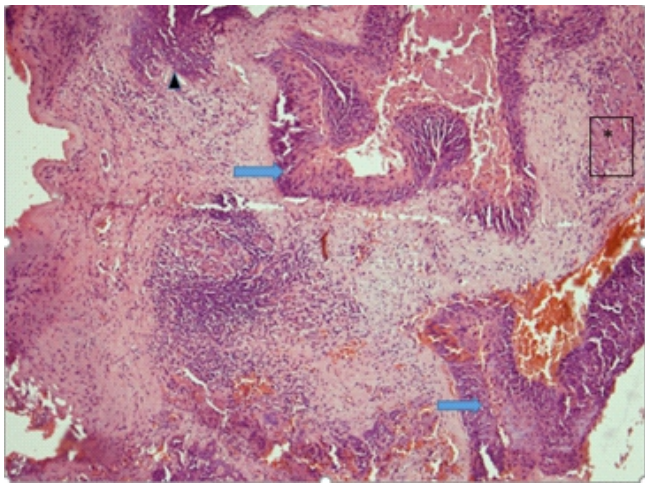

Figure 1. Liver tissue (*) with a cyst wall lined by dysplastic stratified squamous epithelium(--->). The discontinuous basement membrane in focal areas raises the possibility of invasion (^).

Localized disease to the liver is managed by radical resection. Alcohol ablation and transcatheter arterial chemoe-mbolization were other treatment options offered in literature [5]. However primary SCC of the liver has aggressive behaviour and a poor prognosis. Reported overall survival is less than one year [3, 4].

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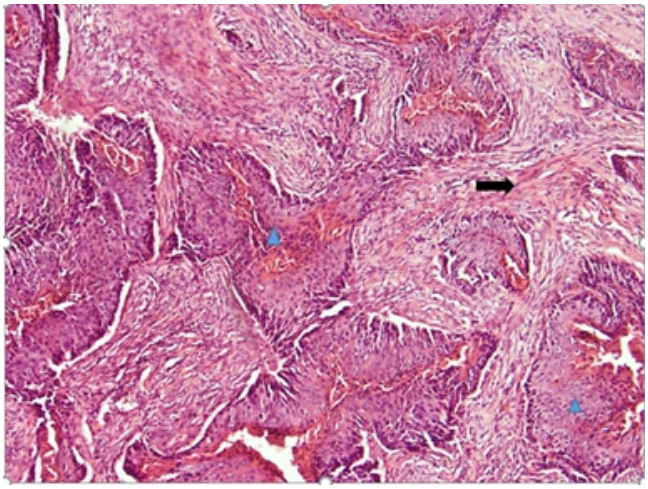

Figure 3. Figure 2: Peritoneal biopsy showing an Infiltrating tumor composed of anastomosing cords, nests, and trabeculae (^). The constituent squamoid cells bear moderately pleomorphic nuclei with coarse chromatin and eosinophilic cytoplasm. The stroma is desmoplastic (-->)

All authors disclose no conflict of interest. The study was conducted in accordance with the ethical standards of the relevant institutional or national ethics committee and the Helsinki Declaration of 1975, as revised in 2000.

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Learning Points:

- Primary squamous cell cancer of the liver is very rare.
- It can arise from a pre existing cyst.
- Generally has a poor prognosis.