

CASE REPORT

Leiomyoma of the Gall Bladder- A Case Report

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ABSTRACT

Mesenchymal neoplasms of the gall bladder are rare, and most represent sarcomas of various histological types. Here we report a case of conventional leiomyoma in the gallbladder in a healthy 22-year-old lady. The tumor was found incidentally on a routine ultrasound abdomen, and the patient was subjected to simple cholecystectomy. Postoperative course and follow-up at one month remained uneventful. Histology and Immunohistochemistry were consistent with a benign smooth muscle neoplasm similar to conventional uterine leiomyoma. Therefore, leiomyoma should be included in the differential diagnosis of spindle cell tumors of the gall bladder and must be distinguished from leiomyosarcoma and rare gastrointestinal stromal tumour-like neoplasms.

Keywords: Leiomyoma, Gastrointestinal stromal tumours, Gall Bladder.

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INTRODUCTION

Mesenchymal tumours of the gall bladder are exceedingly rare. In one study, the incidence of gall bladder sarcomas was estimated at 2% of all gall bladder cancers.¹ However, the frequency of benign mesenchymal neoplasms in the gall bladder is unknown. Previously described benign tumours include paraganglioma, neurofibroma, granular cell tumour, inflammatory fibroid polyp, gastrointestinal stromal tumour (GIST)-mesenchymal neoplasms miscellaneous other rare lesions.²

CASE REPORT

A 22-year-old healthy lady presented with an asymptomatic gallbladder lesion detected on the ultrasound abdomen. The impression made by the sonologist was? Polyps/?stone. The patient was subjected to cholecystectomy. The excised gall bladder specimen was cut, which revealed a .5cm small sessile polyp at the fundus. The specimen was sent for histopathological examination. The patient did not give any history suggestive of immunodeficiency or uterine leiomyoma. Her all baseline profile was within normal limits. Postoperative course and follow-up at one month

remained uneventful.

PATHOLOGIC FINDINGS

Gross examination of the cholecystectomy specimen revealed a single polyp in the body of the gall bladder measuring 0.6x0.5x0.3cm. The overlying mucosa was partially atrophied. Gall stones were not found. The cut section of the polyp was grey-white, with the formation of whorls, and it was encapsulated.

A microscopic examination from the polyp showed flattened overlying lining epithelium with subepithelium showing benign spindle cells in fascicles and whorled appearance (figure 1b). Individual cells exhibit spindle-shaped nuclei and a moderate amount of eosinophilic cytoplasm consistent with a smooth muscle neoplasm. No mitosis, necrosis or atypia were seen (figure 1c). So the possibility of sarcoma was ruled out. The surrounding gall

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bladder contained chronic inflammatory infiltrates. Immunohistochemically, the tumour cells were strongly positive for alpha-smooth muscle actin (α -SMA) and were negative for S-100 and CD117 (figure 2).

DISCUSSION

Leiomyomas are benign smooth muscle tumours, which commonly originate in the female genital tract (~95% of all leiomyomas) but are rare at other sites (e.g., skin, gastrointestinal tract and urinary bladder). Microscopically they consist of interlacing bundles of elongated spindle cells with brightly eosinophilic cytoplasm and cigar-shaped blunt-ended nuclei. Immunohistochemically, leiomyomas express smooth muscle differentiation markers (α -SMA, desmin and h-caldesmon) and are negative for CD34 and CD117. In contrast with leiomyosarcomas, nuclear and cellular pleomorphism, high mitotic rate, infiltrative growth and coagulation necrosis are absent. The differential diagnosis of leiomyoma in the gall bladder includes

leiomyosarcoma, extra-gastrointestinal stromal tumours, other rare malignant and benign mesenchymal tumours and pseudotumours with smooth muscle, fibroblastic and neural differentiation like schwannoma, neurofibroma. Based on appropriate histological and immunohistochemical criteria, Leiomyosarcomas and other sarcomas can be excluded.⁶⁻⁷

In summary, this case represents the leiomyoma of the gall bladder in a female without clinical signs of an immunodeficiency syndrome or any other significant illness and leiomyoma in the gall bladder should be kept in the differential diagnosis of gall bladder spindle cell neoplasms.

Takehome message

Gallbladder leiomyoma is rare but might be under-recognized and should be kept in the differential diagnosis of gallbladder polyps.

CONFLICT OF INTERESTS: There is no conflict of interest.

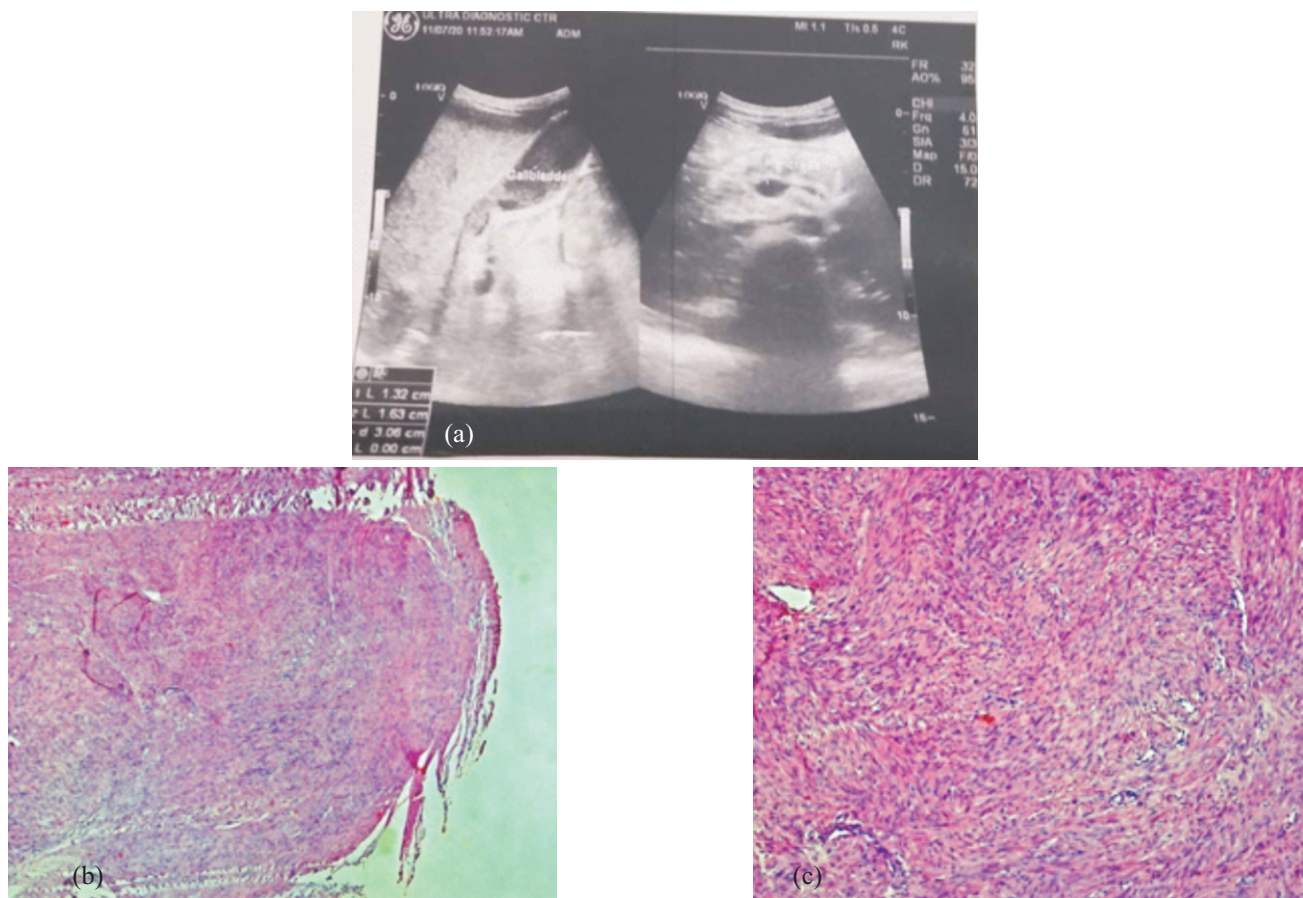


Figure 1: (a) Ultrasonographic examination of gallbladder polyp (b) Histological appearance of the leiomyoma, low power view (10x) with mucosa on top (c) High power view (40x) showing elongated nuclei and brightly eosinophilic cytoplasm.

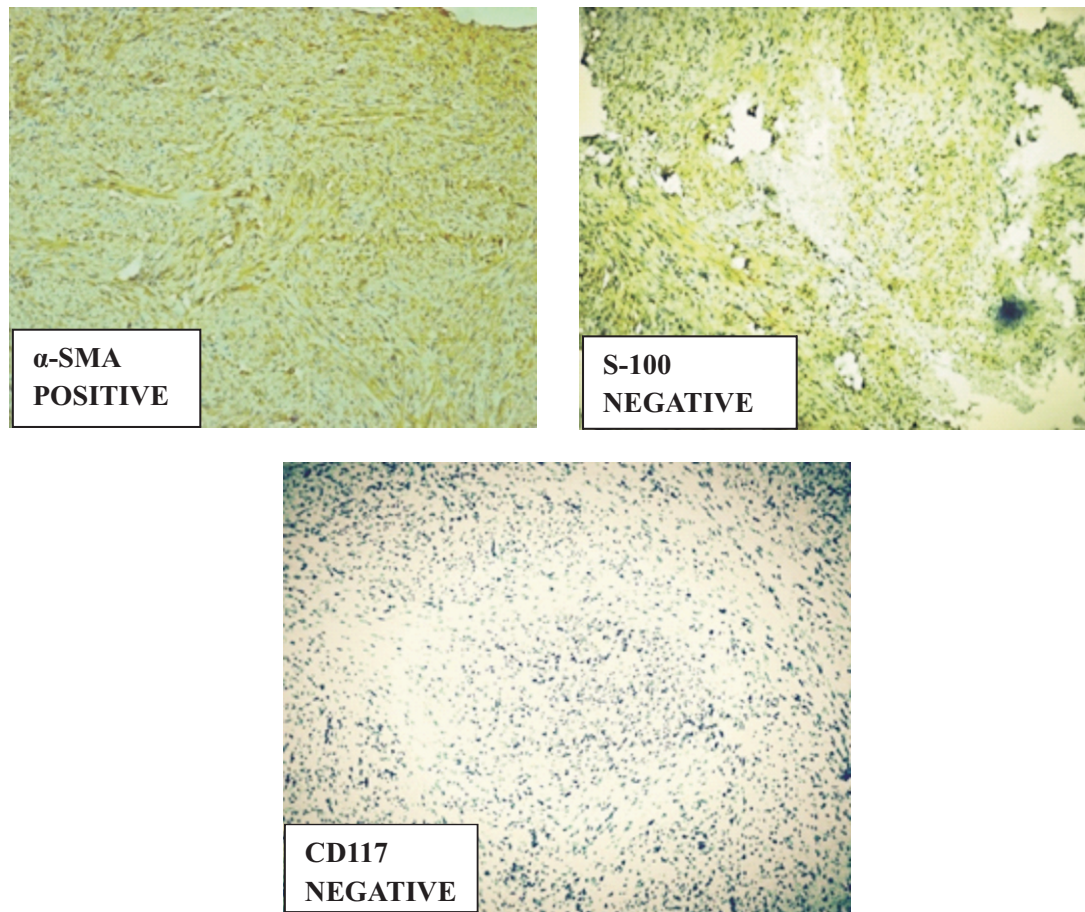


Figure 2: Diffuse α-SMA immunostaining, negative S-100 and CD117 staining.

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