Giant Calcified Retroperitoneal Teratoma

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Abstract

Retroperitoneal teratoma involving adrenal gland is a rare entity in adults comprising only 4% of all primary teratomas. These tumors are mainly seen in infants and children. Diagnosis is made by X-ray and CT abdomen showing the presence of large tumor with cystic and calcified walls. Here, we present an interesting image of a 16-year-old girl who presented with large (12 × 10 cm) calcified cyst occupying left side of abdomen which was treated successfully by surgical excision.

Keywords Retroperitoneal · Calcified · Teratoma · Adrenal

Giant Calcified Retroperitoneal Teratoma

A 16-year-old girl presented with complaints of left hypochondrial lump for a 10-year duration. The lump was painless and progressively increasing in size over the last 1 year. Abdominal examination revealed a large smooth, well-defined lump just below the left costal margin, which was moving with respiration. An X-ray abdomen revealed an oval shaped calcified lesion on the left side of the abdomen (Fig. 1). On further evaluation with CT abdomen, it showed a 12 × 10-cm, well-defined, linear calcified cyst with homogenous fat density content arising from the retroperitoneum (Fig. 2). A diagnosis of congenital retroperitoneal cyst was made, which was surgically excised. The tumor was approached through L-shaped abdominal incision (the modified Makuuchi inci-

sion) and then left-sided medial visceral rotation (the Mattox maneuver). Intraoperatively, the tumor was densely adhered to the posterior abdominal wall muscle and the splenic flexure of the colon, which was meticulously dissected. Moreover, there was an inadvertent ligation of the accessory renal artery to the lower polar of left kidney without any sequelae. Cut section of the resected tumor showed thick walled cyst containing yellowish white cheesy material (Fig. 3). The final

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Fig. 1 X-ray abdomen showing egg-shelled calcified lesion

Fig. 2 CT abdomen showing linear calcified cystic lesion in left retroperitoneum

histopathological report showed a mature cystic teratoma of adrenal gland, which is an extremely rare entity in adults. At 1 year of follow-up, patient is doing well and asymptomatic.

Retroperitoneal teratoma involving the adrenal gland is a rare disease, accounting for only 4% of all primary teratomas [1]. It is mainly seen in infants and children; however, occurrence in adults is rare. They are more frequently encountered at the left side and are cystic with calcified walls [2]. Diagnosis is based on high index of clinical suspicion and radiographic investigation with x-ray and CT abdomen, showing the presence of characteristic calcified elements. Prognosis is excellent after complete surgical excision with an overall 5-year survival rate of nearly 100% [3]. Adrenal teratoma should be regarded in differential diagnosis of any young adults presenting with calcified retroperitoneal cyst of a long duration.

Fig. 3 Cut section view of the resected tumor

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

References

1. Gatcombe HG, Assikis V, Kooby D, Johnstone PA (2004) Primary retroperitoneal teratomas: review of the literature. *J Surg Oncol* 86(2):107–113
2. Kuo EJ, Sisk AE, Yang Z, Huang J, Yeh MW, Livhits MJ (2017) Adrenal teratoma: a case series and review of the literature. *Endocr Pathol* 28(2):152–158
3. Bhatti A, Al-Hindi H, Azzam A, Amin T, Abu-Zaid A (2013) Mature (benign) cystic retroperitoneal teratoma involving the left adrenal gland in a 22-year-old male: a case report and literature review. *Case Rep Oncol Med* 2013:610280