Case Report

Mesenteric Schwanoma

M ASLAM .G M ARAIN .J R GARDAZI

Department of General Surgery, Allama Iqbal Medical College/Jinnah hospital, Lahore Correspondence to Dr. Muhammad Aslam, Senior Registrar

Mesenteric schwanoma is a rare condition .We report this entity found in a patient admitted in surgical unit-I Jinnah hospital Lahore. He presented with Mass and continuous dull pain in lower abdomen .On exploratory laparotomy the abdomen was found to be having two masses in the mesentery of small gut one about $18\times10\times5$ cm and other $8\times5\times3$ cm in size and diagnosis of mesenteric schwanoma was made on histological examination.

Key word: Mesenteric schwanoma

Schwanoma is a benign neurogenic tumour arising from the sheath of peripheral nerves (schwan cells) usually in the soft tissues of the head and neck, extremities, mediastinum, gastrointestinal tract and retroperitoneum. However it occurs very rarely in mesentery where it is very difficult to diagnose. They may reach a large size with out causing clinical symptoms. Differential diagnosis includes other mesenteric or omental cysts, enteric duplication cyst, enteric cyst, mesothelial cyst, extrapancreatic pseudocyst, cystic mesothelioma, cystic spindle cell tumour, and cystic teratoma.

Grossly these tumours have a white to grey colour and firm texture and are typically solitary, circumscribed and encapsulated lesions located accentrically on proximal nerves or spinal nerve roots. Microscopically schwanomas are distinguished by the presence of areas of high and low cellularity called Antoni A and B tissue respectively. In the Antoni A tissue there may be foci of palisaded nuclei called verocay bodies².

Histological examination shows proliferation of spindle cell. These cells are positive for s-100 protein but negative for alpha-smooth muscle actin and c-kit. Blood vessels in schwanoma often have hyaline thickening around which there may be pseudopalisading of the tumour nuclei. Surgical intervention is aimed at total excision with preservation of neurological function.

Case Report

A 65 years old male patient was admitted on 14-03-2002 in surgical unit-I with complaint of mass in lower abdomen he noted four months back and complaint of dull pain around the umbilicus and in lower abdomen. Pain was continuous, mild to moderate in intensity, reduced by taking analgesics. There was no history of vomiting, constipation and urinary complaints. Personal and family history was unremarkable. General physical examination was unremarkable. On abdominal examination firm intraabdominal mass was palpable below the umbilicus which was slightly mobile at right angle to the attachment of the mesentery of small intestine. It was non-tender, 15×10 cm in size. Lower limit of the mass was palpable. Shifting dullness and fluid thrill was negative. Laboratory

investigations revealed normal blood complete examination, urine complete examination, and renal function tests. Ultrasound of the abdomen and pelvis revealed that there was a complex mass showing both solid and cystic areas in lower abdomen and pelvis measuring approximately 8×10cm. A similar mass was seen just superior to the pelvic mass.



Fig.1



Fig.2

Exploratory laparotomy was performed. Peroperative findings were two firm masses in the mesentery of small intestine. There was no any involvement of gut. These two masses were resected with healthy tissue margins. Blood

supply of the gut was preserved and defect in the mesentery was approximated with catgut suture No.1. Nelaton drain was placed in pelvic cavity and midline laparotomy closed. Specimens were send histopathology. Histopathology report revealed two fibroid like yellowish masses on gross examination the large measuring 18×10×5cm and smaller measuring 8×5×3cm. Microscopic examination revealed a benign neoplastic mass composed of low and high cellularity areas. The high cellularity area contain spindle shaped cells. The low cellularity areas show mild cystic change and cholesterol clefts. No evidence of malignancy seen, showing picture of schwanoma of mesentery.

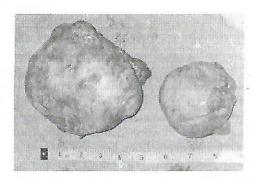


Fig.3

Discussion

Benign solitary schwanoma is a rare finding in the abdomen. The stomach and small intestine are the most common abdominal sites of occurrence. Benign schwanoma also occurs in the omentum, lesser sac, and mesentery. They may reach a large size with out causing clinical symptoms as shown in the presented case. Because of overlap in imaging features of the pseudocystic masses, histological examination is necessary to establish a definite diagnosis. The major role of medical imaging is to demonstrate the mixed (cystic and solid) nature of abdominal mass and its mesenteric or omental origion³. In conclusion a neurogenic tumour should be considered in the differential diagnosis in case of (partially) cystic abdominal masses even the absence neurofibromatosis.

References

- Sakai F, Sone S, Yanagisawa S, Ishii Z,Schwanoma of the lesser omentum. Europ J Radiol 1988;8: 113-114.
- Kumar, Cotran, Robbins, Basic Pathology 6th Ed. 1997 pp743.
- 3. Stoupis C, Ros R, Abbit P, Burton S, Gauger J. Bubbles in the Belly: Imaging of cystic mesenteric or omental masses Radiographics1994;74:729-737.