

Case Report

A giant retroperitoneal schwannoma in pregnancy: a rare case report and review of literature

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ABSTRACT

Retroperitoneal schwannomas are though more common among females, are very much rare tumors arising from sheath of nerves. Also, extremely rare during pregnancy. Very few articles till date are there regarding retroperitoneal schwannomas that's too in pregnant female. Usually these are symptomatic unless causing some compression to other intra-abdominal structures like vessels or bowel and usually malignant. As its retroperitoneal very difficult to diagnose it. So, with proper investigations and radiological imaging, first have to find out the differential diagnosis prior to planning for surgery.

Keywords: Giant, Retroperitoneal, Schwannoma, Neurogenic, Pregnancy

INTRODUCTION

Schwannomas are rare benign tumors derived from the neurilemma or nerve sheath. Most commonly in females between 20-50 years of life.¹ In soft tissues of head, neck, mediastinum, retroperitoneum and extremities, it is commonly seen. Among all types of retroperitoneal mass, retro-peritoneal schwannoma accounts for 0.3-3.2%.² It remains asymptomatic till it reaches a size capable of causing compression of intra-abdominal or intra pelvic organs. It's very hard to diagnose it preoperatively and usually diagnosis confirmed by histopathological examination.

Retroperitoneal tumours, which develop in the retroperitoneum without originating from the major retroperitoneal organs, are quite rare. Depending on radio-morphologic features retro-peritoneal tumours can be defined as cystic or solid masses. They can be benign or malignant tumours. Primary tumours are mostly malignant approximately (70-80) %, but metastatic lesions may also occur in this region. The most common malignant retroperitoneal tumors are sarcomas. Also,

lymphomas, epithelial malignancies, and metastases of different germ cell tumours may present in the retroperitoneum. The most common benign lesions in the retroperitoneum are lipomas, fibromas, and benign neurogenic tumours. During pregnancy, both benign and malignant retroperitoneal tumours are extremely rare.

CASE REPORT

30 years female, with complaining of pain lower abdomen, pain during menstruation and during coitus since, 2 years. No known co-morbidities. History of LSCS 3 years back and history of tubectomy 1 years back. History of painful menstrual cycle present. On general examination pallor present. Per abdomen examination tenderness over supra pubic region, firm ill-defined non-mobile mass in hypogastrium with dullness over entire pelvic region. Per rectal examination tenderness present fixed mass, right lateral wall, per vaginal examination tenderness present apparently fixed mass found over right fornix, UPT positive, β HCG positive, WBC 5.4/cumm, Hb 6.7 gm/dl, platelet count 163.3. USG abdomen and pelvis single live intrauterine

fetus of 7 weeks, 5 days heterogenous, hypodense SOL - right adnexa. CECT abdomen revealed - well defined hetero-echogenic mass with peripheral calcifications, internal necrotic areas, insinuating into sacral neural foramen, MRI revealed - peripheral nerve sheath tumour (Figure 1). Patient planned for surgery. Preoperatively correction of Hb done with 4 units of PRBC transfusion.

Suction and evacuation done by gynaecologists followed by excision of retroperitoneal mass. Findings - solid mass of (15X15X10) cm (Figure 2), retroperitoneal, presacral area with lower border L2-S5, abutting Internal right iliac artery, left rectum. Drain removed on POD7 and discharged on 10th POD. HPE report - cellular schwannoma.

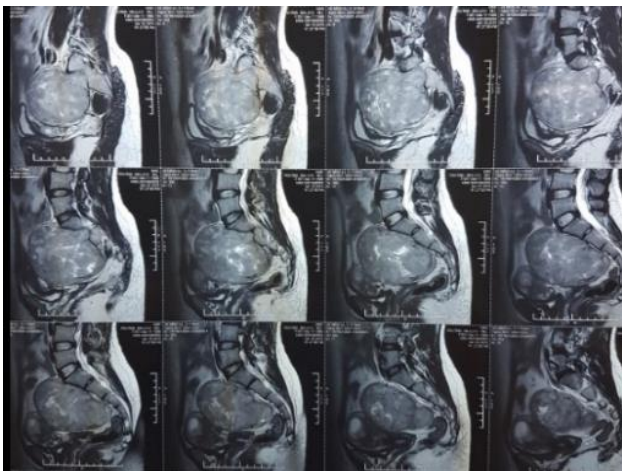


Figure 1: Section of MRI pelvis.



Figure 2: The huge mass excised in toto.

DISCUSSION

Schwannomas are solitary, slow growing, tumors.³ Pelvic schwannoma accounts for less than 1% of all benign schwannoma.⁴ These are nerve sheath tumors, most often benign in nature. These tumors rarely occur in the retroperitoneum, found in 0.5-5% of case.⁵ Despite the use of

various imaging modalities accurate pre-operative diagnosis of the tumor is very difficult because of varied and non-specific presenting signs. Schwannomas have been suspected as gynecologic masses, but there have been very few reports of benign retro-peritoneal schwannomas in pregnancy. Primary retroperitoneal tumours occur in less than 0.2% of all malignancies. Once the retroperitoneal masses have been removed, only a few cases are benign by histology. The most frequent tumours that is around 1/3rd of retroperitoneal tumors are the soft tissue sarcomas. Other common retroperitoneal malignancies may be primary lymphoproliferative tumours and malignant histiocytomas. Benign retroperitoneal tumours are extremely rare. Mostly, retroperitoneal tumours are asymptomatic until they have reached a substantial size. For this reason, they are often diagnosed by a routine ultrasound as an incidental finding during an investigation for nonspecific complaints. CECT and MRI are important in both the diagnosis and differential diagnosis of retroperitoneal mass.

Since the differential diagnosis between malignant and benign masses in retroperitoneum may not be resolved by imaging, it is safer for patients with a suspicion of malignancy to be treated by surgery.⁵ Complete tumour resection is recommended since the extent of the operation will determine the prognosis in malignant lesions.

CONCLUSION

Retro-peritoneal schwannomas are rare that's too rarer in pregnancy and preoperative diagnosis is challenging but surgery is curative. These tumors may simulate as broad ligament fibroid or ovarian tumor in female. High clinical suspicion should be done as limited role of radiological imaging. Proper preoperative evaluation, with multimodal treatment improves the outcome.

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