

A Rare Case of Obturator Fossa Mass – Pelvic Castleman's Disease

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A B S T R A C T

Introduction: Castleman's disease is a benign disorder described as Giant cell mediastinal hyperplasia by castleman and towne in 1954 of unknown ethiology. Castleman disease has been found in neck, chest, abdomen and pelvis but it is extremely rare in the pelvic retroperitoneum and till date only 16 cases of pelvic retroperitoneal Castleman disease has been documented.

Case report: We present a case of asymptomatic lateral pelvic tumor in a 23-year-old woman who on CT presented as a left-sided extra peritoneal pelvic tumor. Patient was prepared and Abdomen was approached through Hand assisted laparoscopic approach, a vascular tumor of 6x4x5cm size was seen in left obturator fossa, adherent to left obturator nerve and abutting iliac vessels without infiltrating surrounding tissues. A laparotomy and excision of tumor was performed without any complication and a pathological diagnosis of Castleman's disease was obtained.

Conclusion: Although several cases of unicentric Castleman's disease in the abdominal cavity treated laparoscopically have been reported, to the best of our knowledge, no cases of true obturator fossa lesion has been reported yet. In summary we have presented an unusual lateral pelvic tumor in obturator fossa which on histology turned out to be a Castleman's disease.

Keywords: Obturator Fossa Mass, Pelvic Castleman's Disease

INTRODUCTION

Castleman's disease is a benign disorder described as Giant cell mediastinal hyperplasia by castleman and towne in 1954 of unknown ethiology.¹ Castleman disease has been found in neck, chest, abdomen and pelvis but it is extremely rare in the pelvic retroperitoneum and till date only 16 cases of pelvic retroperitoneal Castleman disease has been documented.² Mostly Pelvic Castleman's disease is diagnosed post-operatively as a histo-pathological surprise. Here we report a rare case of Castleman's disease presented as tumour in Left Obturator fossa.

CASE REPORT

A 23 year old female attended outpatient department with complaints of abdominal pain associated with nausea and vomiting of one year duration. Pain was more in flanks and also present in left lower limb, pain increases on squatting with no lower limb weakness. Patient was otherwise good in health. No specific finding was noted on examination of the patient.

Contrast CT of abdomen was taken to get more data regarding the lesion, it showed a well defined smooth bordered fairly

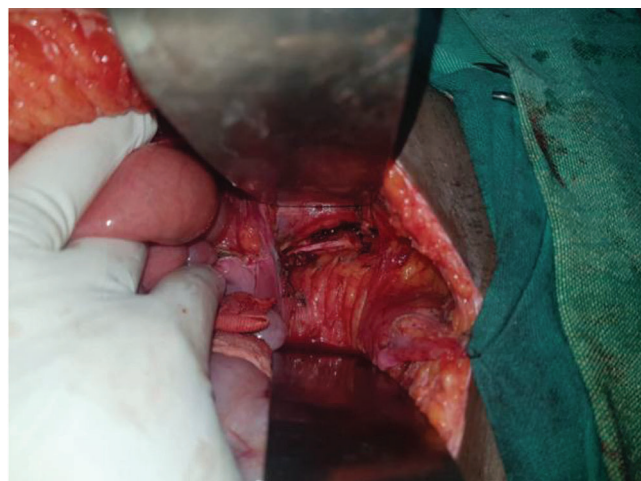


Figure-1: Intra-operative finding of mass in the Left obturator fossa

homogenous soft tissue density of size 4.8x3x4.6 cm towards left side of body of uterus, probably paraganglioma.(Fig 1) The symptoms gradually progressed, and a MRI pelvis was taken which showed homogenous enhancing mass lesion along left lateral pelvic wall in the obturator fossa with no

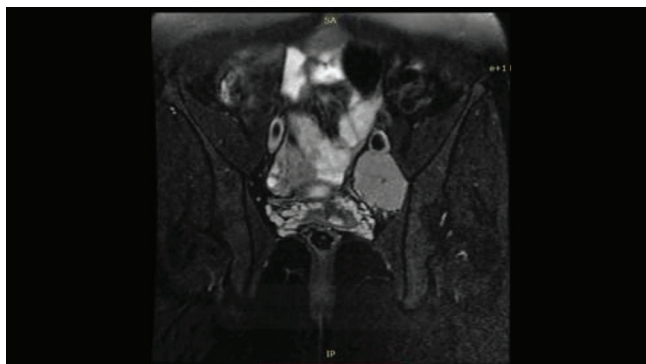


Figure-2: MRI showing lesion in left obturator fossa

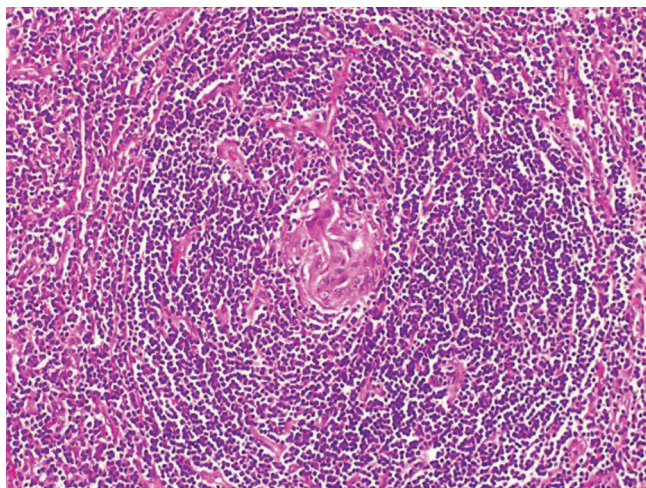


Figure-3: Photomicrograph picture of the tumor revealed hyaline vascular variant of Castleman disease

evidence of invasion of adjacent viscera, muscles or bones—probably Paraganglioma [fig 2] or Castleman disease.

Patient was prepared and Abdomen was approached through Hand assisted laparoscopic approach, a vascular tumor of 6x4x5cm size was seen in left obturator fossa, adherent to left obturator nerve and abutting iliac vessels without infiltrating surrounding tissues. It was excised in total and abdomen closed with left flank drain after obtaining hemostasis. Postoperative period was uneventful. Histopathological examination of the tumor revealed hyaline vascular variant of Castleman disease.[fig 3]

DISCUSSION

Castleman's disease is a rare benign neoplasm of the lymph nodes initially described in mediastinum and now includes extra mediastinal lymph node hyperplasia. Clinical manifestations are usually heterogeneous from mild symptoms to severe systemic symptoms. Castleman's disease includes unicentric form which is the more common and usually found in both males and females aged 20 to 30 years, presenting asymptotically or with compressive symptoms related to the mass.³ Unicentric castleman's disease affects a single group of lymph nodes in chest or abdomen and it is cured by surgical resection. Multicentric castleman's disease usually affects adults of 50 to 60 years and is likely to present with systemic symptoms. They are also found in immunosuppressed patients with HIV and Herpes Virus 8 and tend

to behave aggressively like a lymphoma.⁴

Histopathologically the three common variants are hyaline vascular variant, plasma cell variant and mixed cell variant. Hyaline Vascular Variant is the most common, accounts for 90% of the cases is usually unicentric. Plasma Cell Variant is usually multicentric. Benign Retroperitoneal tumors of the pelvis are extremely rare and the differential diagnosis includes neural tumors, lymphoma and granulomatous disease and only 20% constitute benign tumors.⁵

MRI is useful for detecting the extent of the disease but less sensitive for calcification. FDG-PET/CT of Castleman disease demonstrates only moderate radio tracer uptake with reported SUV max between 4.7 and 5.8 while lymphomas usually express higher SUV.^{6,7} The imaging modalities fail to definitely point out the possibility of Castleman's disease unless we keep a high suspicion.

Appropriate management with a complete surgical resection has been considered as a standard therapy. A wide excision margin is preferred due to the lesions infiltrative patterns and occurrence and as observed in the present case there is hyper vascularity to the lesion which may be associated with bleeding when excised.⁸ A thorough pre-operative discussion about radiological examination could be useful for assisting the preparation for surgical resection.

CONCLUSION

Although several cases of unicentric Castleman's disease in the abdominal cavity treated laparoscopically have been reported, to the best of our knowledge, no cases of true obturator fossa lesion has been reported yet. In summary we have presented an unusual lateral pelvic tumor in obturator fossa which on histology turned out to be a Castleman's disease.

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