

Mesenteric fibromatosis presenting as a giant intra abdominal tumor - a case report

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Abstract

Mesenteric fibromatosis a predominantly histological diagnosis has been linked to the mesentery because of its anatomic location. Giant abdominal masses from the mesentery are uncommon. A case of mesenteric fibromatosis presenting as giant intra abdominal tumor is being reported here.

Keywords: Fibromatosis, mesentery, histology, immunohistochemistry

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Received Date: 13/02/2015 Revised Date: 24/03/2015 Accepted Date: 01/04/2015

Access this article online	
Quick Response Code:	Website: www.statperson.com
	Volume 5 Issue 2

INTRODUCTION

Fibromatosis has been a disease of curiosity from time immemorial¹. Fibromatosis has been given many names like desmoids tumor of the abdominal wall, mesenteric fibromatosis of the small bowel, aka desmoids of the mesentery, retroperitoneal fibromatosis and fibromatosis of palm and elsewhere in the body¹⁻⁴ for each. The rate of growth of fibromatosis and histologically benign character also have compounded miss (understanding) fibromatosis. Rohan Shetty *et al*⁷ have described aggressively behaving fibromatosis of the mesentery. Tumor like presentations are not uncommon with mesenteric fibromatosis. GIST⁴ and pedunculated / parasitic fibroid are often the contenders of diagnosis preoperatively. Massive tumor presentations are uncommon¹.

AIMS AND OBJECTIVES

To report giant intra abdominal lump preoperatively diagnosed as fibroid. Per operatively confirmed

mesenteric tumor and histologically and immunohistochemically confirmed mesenteric fibromatosis.

CASE DETAILS

A 29 year old lady was admitted with an abdominal mass. The mass was extending from pelvis to epigastrium. Painless to touch and manipulation was freely mobile side to side. There was no ascitis, liver and spleen were not palpable. Pelvic examination was non- contributory. There were no masses elsewhere in the body. She was nutritionally well preserved with normal haemogram (HB-12.7 gm%)

USG ABDOMEN

Large hypo echoic solid mass arising from pelvis up to epigastrium

MRI ABDOMEN

MRI Abdomen shows a solid mass size 240x240x110 mm with both hypo and hyper intense areas. Interface with uterus was not clearly discernable. The patient was explored with preoperative diagnosis of fibroid. Exploration revealed a solid mass of size 240x240x110 mm in the mesentery of distal small bowel, and the bowel wall was stretched over the mass. There were few lymphnodes over the mesentery. The tumor was removed enmass, enblock resection of mass with end to end ileocolic anastomosis. Post operative period was uneventful.

HISTOLOGICAL EXAMINATION REVEALED

1. Predominantly spindle cell nature without significant mitotic figures.

2. Hypervascularity was seen. Mass appeared distinctly separate from small bowel.

3. GIST was excluded by immunohistochemistry with negative CD34 and CD117. Beta catenin not done.



Figure 1: Gross - resected specimen

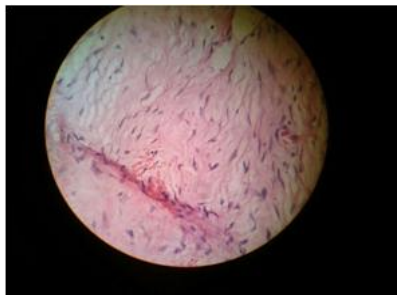


Figure 2: photo micrograph (original magnification x 40; h-e stain)

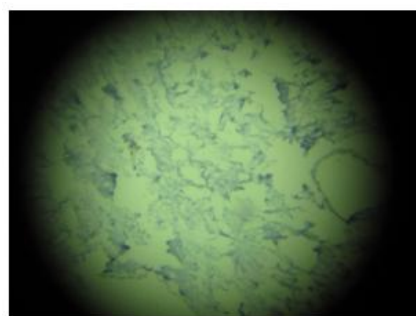


Figure 3a: IHC - cd34 - negative (40x magnification)

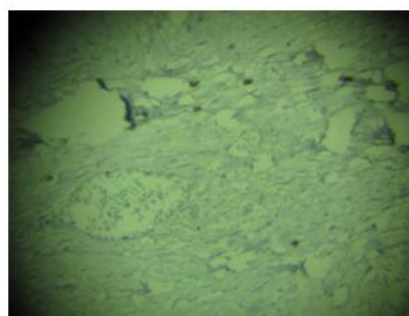


Figure 3b: IHC - cd117 - negative (40x magnification)

Table 1

	Mesenteric fibromatosis	GIST
Cell shape	Wavy, spindle	Spindle / epitheloid
Atypia	None	Variable
Growth pattern	Uniform , fascicular	Organoid and fascicle
Cellularity	Low to moderate	Moderate to high
Blood vessels	Regular, dilated, thin walled	Hyalinized
Keloid collagen	frequent	Absent
Skenoid fibres	Absent	present
Necrosis	absent	Present
CD 117	--ve	+ ve
CD 34	--ve	+ + ve
B -catenin	+ (nuclear)	--ve

DISCUSSION

Mesenteric tumors often are from either lymphnodes and duplication lymphatic cyst^{9,10} in infants. Mesenteric fibromatosis is an uncommon entity has been labelled as sclerosing mesenteritis, inflammatory pseudotumor, mesenteric desmoids and similar names². Mesenteric fibromatosis a predominantly histological diagnosis has been linked to the mesentery because of its anatomic location. These tumors are basically fibrous in a nature and have overlapping features with GIST and other neoplastic and non neoplastic lesions of the mesentery^{1,4,5,6,7} fibromatosis has been mistaken for GIST

as well as pseudotumors. In the present case, these two are excluded by immunohistochemistry and lack of charecteristics of pseudotumor signs [Table 1]. Mesenteric fibromatosis has no specific age preponderance while abdominal fibromatosis (desmoids) has both female predilection and second decade preference. Mesenteric fibromatosis have been described to be associated with familial syndromes⁴. Giant abdominal masses from the mesentery are uncommon. A case report was published from Greece⁶. The size of the mass of this patient under discussion also was 80x100x120 mm and disproportionately lacked the

symptoms. The treatment of choice of mesenteric fibromatosis is surgical^{2,4,6,7}. The behaviour of mesenteric fibromatosis cannot be predicted on histology but markers like increased mitotic index, vascular infiltration, might suggest aggressive nature. A microscopic feature called melting incineration helped further established mesenteric fibromatosis. Thick walled and modular vessels, perivascular haemorrhage go more in favour of mesenteric fibromatosis. Mesenteric fibromatosis needs to be differentiated from GIST and pseudotumors. A table suggesting the differences as shown in table no. 1.

CONCLUSION

A case of mesenteric fibromatosis presenting as giant intra abdominal tumor is being reported.

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Source of Support: None Declared
Conflict of Interest: None Declared