ABDOMINAL WALL DESMOID TUMOUR OVER APPENDICECTOMY SCAR

Vijaya Kumar¹, Sarbeshwar Bhuyan², M. Gogoi³

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ABSTRACT: BACKGROUND: Desmoid tumors are slow growing deep fibromatoses with aggressive infiltration of adjacent tissue but without any metastatic potential.(1,2,3) CASE PRESENTATION: We report a female patient with desmoid tumor of the abdominal wall over appendicectomy scar who underwent primary resection. Preoperative evaluation included abdominal ultrasound, and computed tomography. The histology of this cases revealed a desmoid tumor. CONCLUSION: Complete surgical resection is the first line management of this tumor entity.

KEYWORDS: Benign, desmoids, tumour.

INTRODUCTION: Desmoid tumors are histologically benign neoplasms with a strong tendency to recur locally after resection(4) and account for 0.03% of all neoplasms and 3% of all soft tissue tumors.(5) These tumors have an intermediate biological behavior between benign fibrous lesions and fibrosarcomas. They occur usually between the ages of 25 and 40 years with a strong prevalence among women in the fertile age group. The most common site of predilection is the anterior abdominal wall.

We present the case of this rare medical entity in a 23-year-old female with history of appendicectomy and later after 2 years she developed desmoid tumor.

MATERIALS AND METHOD: It is a rare case study from Department of General Surgery, Assam Medical College, Dibrugarh.

CASE PRESENTATION: A 23-year-old female recognized a right lower abdominal wall swelling. In her history she reported an appendectomy 2 years ago and a pregnancy 9 months back. On clinical examination, a firm, non-tender lump of about 15cm x 10cm x 8cm arising from abdominal wall occupying Rt iliac fossa, hypogastric region and umbilical region.

Preoperative ultrasound showed heterogenous mass lesion arising from anterior abdominal wall taking minimal vascularity, computed tomography scan revealed a mass lesion isodense to muscle noted arising from anterior abdominal wall originating from the rectus abdominis with loss of fat plane in preperitoneal layer possibly desmoid tumor. Resection of the tumor with 3 cm wide margin and the defect was covered with a vipro-Mesh. Biopsy report came out to be desmoid tumor.

The postoperative course was uneventful and the patient was discharged at the 8th postoperative day.

DISCUSSION: Desmoid tumor, also known as aggressive fibromatosis,(5) is a rare tumor. They can be divided into five subgroups: extraabdominal, intraabdominal, multiple, multiple familial and as part of Gardner’s syndrome. Extraabdominal desmoid tumors have a wide distribution; the shoulder girdle, abdominal wall and lower extremities are most commonly involved. The histologic findings in
these lesions are identical. Abdominal wall desmoid tumors arise from musculoaponeurotic structures of the abdominal wall, especially the rectus and internal oblique muscles and their fascial coverings, and occasionally cross the midline. The commonest groups associated with these tumors are young women during or after pregnancy. The fibroblast has been shown to exhibit a proliferative response to estrogen.

Most of the abdominal wall desmoids measure 5 cm by 15 cm in diameter. Our patient presented with a painless mass measuring 15x10x8 cm. On CT appear homogeneous or heterogeneous and hypo-, iso-, or hyperintense compared with the attenuation of muscles. In our case it was mass lesion isodense to muscle. MRI findings include poor margination, low signal intensity on T1-weighted images and heterogeneity on T2-weighted images, and variable contrast enhancement. Definitive diagnosis must be established with histopathologic analysis. Wide local excision followed by reconstruction of the defect is the treatment of choice. Incomplete tumor removal or involved excision margins may lead to local recurrence. Abdominal wall desmoid tumors have a significantly lower recurrence rate. Radiation therapy is used in patients with inoperable tumors, local recurrences or incompletely excised lesions. Chemotherapy and endocrine therapy is under trial.

CONCLUSION: Desmoids tumor over appendicectomy scar is extremely rare condition. The diagnosis of desmoids tumor should be strongly considered in female patients with an abdominal mass and a history of previous abdominal surgery.

REFERENCES:
Fig. 1: Post-operative specimen of 15x10x8cm with its cut section

Fig. 2: CT suggestive of desmoid arising from rectus and internal oblique

Fig. 3: Right iliac fossa lump at appendicectomy scar

Fig. 4: Desmoid tumour specimen weighing about 450 gms

AUTHORS:
1. Vijaya Kumar
2. Sarbeshwar Bhuyan
3. M. Gogoi

PARTICULARS OF CONTRIBUTORS:
1. Senior Resident, Department of General Surgery, RIMS, Raichur.
2. Associate Professor, Department of General Surgery, AMCH, Dibrugarh.
3. Registrar, Department of General Surgery, AMCH, Dibrugarh.

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NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Vijaya Kumar,
House Number 1-4-155/134,
Jyothi Colony,
Near IB Colony,
Raichur-584102,
Karnataka.
E-mail: rathod.dr@gmail.com

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