

Recurrent Abdominal Wall Desmoid Tumor in a Middle Age Male Patient: A Case Report

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ABSTRACT

Abdominal wall desmoid tumour is a rare benign tumour of myofibroblastic origin, especially in a middle age male patient, having infiltrating margin and high incidence of recurrence. Redical resection with mesh repair of defect is only mode of treatment for it.

Keywords: Desmoid tumour; Myofibroblast; Redical resection

INTRODUCTION

Desmoid tumor classified as deep fibromatoses; a type of benign myofibroblastic neoplasm originating from the muscle aponeurosis [1]. Desmoid tumor constitute about 0.03% of soft tissue tumors and about 3% of all neoplasm with strong tendency to recur and local invasion [2]. Despite of their aggressive local infiltration desmoid tumor lack a metastatic potential [3]. It usually occurs in female of child bearing age and pregnancy stimulating their growth [4]. In a male of middle age group desmoid tumor is a rare tumor. anterior abdominal wall is most common site of occurrence with an incidence of 50% of total desmoid tumors.

We report a case of middle age male patient with recurrent abdominal wall desmoid tumor who underwent primary wide local excision who had no relevant family history.

CASE REPORT

A 58 year male patient presented to surgery OPD with a painless mass in epigastric region with history of previous surgery 3 year back for smaller lump at same site. About 2 years of remission after first surgery. Lump appears at incision site and progress to 7.5 × 5 cm² size in last 1 year.

On examination a single epigastric abdominal wall mass of size 7.5 × 5 cm² with a linear horizontal scar. Lump was non tender and fixed to anterior abdominal wall firm in consistency and smooth surface.

USG demonstrated an ill-defined irregular hypoechoic solid soft tissue lesion of 7.5 × 5 cm² infiltrating adjacent subcutaneous fat and anterior abdominal wall muscle; likely desmoid tumor.

According to medical history; physical examination; nature of recurrence and USG the patient was diagnosed a recurrent desmoid tumor of abdominal wall with 7.7 × 4.5 cm. radical resection of the affected abdominal wall with 5 cm free circumferential margin was done; after resection abdominal wall defect was primarily repaired with composite two layered mesh. Grossly tumor had a firm irregular surface. The tumor was sent for histopathological examination. On cut section tumor was glistening white with trabeculated surface. Histopathology was consistent with the diagnosis of desmoid tumor.

Post-operative period remain uneventful and patient was discharged on 7th post-operative day with healthy stitch line.



Figure 1: Post-operative image of specimen.

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Figure 2: Defect repair by composite mesh.

DISCUSSION

Desmoid tumor a form of benign fibrous neoplasm originating from musculoaponeurotic structure with an infiltrating margin [5]. DT mostly seen in female [6] and occasionally with surgical trauma [7]. Estrogen may act as accelerating factor which cause higher prevalence in young female who experience pregnancy and rare in males [6].

They can be divided into subgroups shoulder girdle; trunk; lower extremities; extra abdominal; intra-abdominal (abd wall; mesenteric or retroperitoneal); multiple; multiple familial and as a part of Gardner's syndrome. The histological findings in these lesions are identical [8-11].

Abdominal desmoid tumor usually presents as a firm mass with ill-defined margins; no distinct capsule [12]. On cut surface they are gritty; glistening; white and trabeculated. Histologically DT consist of elongated fibroblasts and myofibroblasts [13-16].

The recurrence rate of DT may show upto 20% to 77%; depend on location; extent and tumor size; the chosen therapy; completeness of initial resection and low rate recurrence seen with abdominal wall tumor which is 20% to 30% and usually seen within 6 months after excision. Metastatic disease has not been reported with DT [17].

On USG DT appears as well defined variable echogenicity with irregular infiltrating lateral margin [8,18].

The CT of DT depends on their composition they may appear homogenous or heterogenous and hypo; is or hyper intense with attenuation of muscles [8-18].

Wide local excision with about >3 cm tumor free margin WITH reconstruction of the defect is the treatment of choice. Gross negative margin has to be performed with full thickness resection of the tumor containing abdominal wall. Incomplete tumor removal; positive resection margin may lead to local recurrence [8,10].

CONCLUSION

Despite of rare entity especially in men combination of clinical factors such as history of previous surgery; the age; sex; site of mass within abdominal wall and imaging features make desmoid tumor easy to diagnose. Complete surgical resection with gross tumor free large margins is remaining most common treatment to reduce recurrence for desmoid tumor. Prosthetic mesh reconstruction for abdominal wall defect shows excellent functional result.

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