Aggressive Fibromatosis in a postpartum woman: A Case Report

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ABSTRACT--Desmoid-type fibromatosis often emerges from the rectus abdominis muscle in postpartum females and in scars because of the abdominal procedure, they will moreover additionally rise up in any skeletal muscle. Desmoid tumors generally have a tendency to infiltrate adjacent muscle bundles, often entrapping them and causing their degeneration. They may moreover be derived from mesenchymal stem cells. Despite the fact that fixation to musculoaponeurotic systems is apparent, the overlying skin could be normal. We document a 46 yr old woman patient with a desmoid tumor of the anterior abdominal wall, beneath the umbilicus, who underwent partial excision together with abdominal repair. The affected person had a history of hysterectomy 10 years back. The preoperative assessment covered abdominal ultrasound, computed tomography, and magnetic resonance imaging. The histology confirmed a desmoid tumor.

Keywords--desmoid, tumor, postpartum

I. INTRODUCTION

Desmoid tumors are neoplasms that are fibrous in nature starting from the musculoaponeurotic structures at some phase all through the body.[1] The term desmoid, authored by Muller in 1838, is gotten from the Greek expression "desmos", in light of its tendon-like appearance. They appear as infiltrative, typically nicely differentiated, firm abundances of fibrous tissue, and they're regionally aggressive[2]. This course and the tendency for recurrence make the remedy of these fairly unusual fibrous tumors hard. They establish 3% of all smooth tissue tumors and 0.03% of all cancerous growths[3]. Ct scanning and MRI are utilized for the diagnosis, analysis and interpretation of the extent of desmoid tumors. They can help choose the degree of the tumor and its relationship to close by structures, particularly previous to surgical removal. Mri is ideal to ct scanning in defining the pattern and the volume of involvement as well as in figuring out if recurrence has taken after surgical procedure

II. CASE REPORT

A 46-year-old female came with a chief complaint of swelling with intermittent pain for 4 months in the hypogastric region extending into the left iliac region. On palpation, the swelling is firm in consistency and not freely mobile. CECT abdomen was done which showed mildly enhancing anterior abdominal wall mass probably arising from left rectus abdominis muscle which is infiltrating bladder with suspicious infiltration of the small

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bowel. The biopsy report turned out to be a desmoid tumor(fibromatosis). Later posted for wide local excision with abdominal wall repair. Intraoperative findings revealed infiltration of the bladder, small bowel, and sigmoid colon. Gross specimen was sent for histopathology which confirmed desmoid tumor.

III. DISCUSSION

Desmoid tumor is an uncommon tumor. They contrast from fibrosarcomas in the way that in spite of their forceful nearby invasion, desmoid tumors don't metastasize to different parts of the body[4-6]. They can be partitioned into the accompanying subgroups: extra abdominal, intraabdominal, multiple, multiple familial and as a feature of Gardner's syndrome. Extra abdominal desmoid tumors, by and large, have a wide dispersion; the shoulder girdle, trunk and lower extremities are most ordinarily included. The commonest groups related to these tumors are most commonly females during or after pregnancy. The fibroblast has been appeared to show a proliferative response to estrogen. Females with desmoid tumors have a relapse of their lesions after attaining menopause. There is a notable relationship in patients with a background marked by abdominal or pelvic surgical procedures. This tumor is likewise connected with trauma, estrogen treatment, Familial Adenomatous Polyposis(FAP) and Gardner syndrome[7]. The differential diagnosis for this case includes lymphomas, rhabdomyosarcoma, liposarcoma, leiomyosarcoma, neurofibroma,fibrosarcomas, intense hematomas and neuroectodermal tumor.

IV. RADIOGRAPHIC FEATURES OF DESMOID TUMORS

Ultrasound

Desmoid tumors are the commonest neoplasms of the abdominal wall and normally show up as homogeneously hypoechoic masses. They are lobulated and may show vascularity on colour Doppler scanning

СТ

most desmoid tumors are very much encompassed masses, despite the fact that sometimes they may show up aggressively with poor characterized edges .most are moderately homogeneously or focally hyperattenuating when contrasted with soft tissue on the non-contrast scan .most will exhibit enhancement following administration of contrast intravenously

MRI

MRI, just like the case with other soft tissue tumors, is progressively more sensitive to nearby tumor extension. Their appearance is represented by their dense cellularity. Common signal characteristics include:

low signal intensity on both T1 and T2

Post contrast T1 (Gadolinium): may show homogeneous, inhomogeneous, or no significant enhancement [8]

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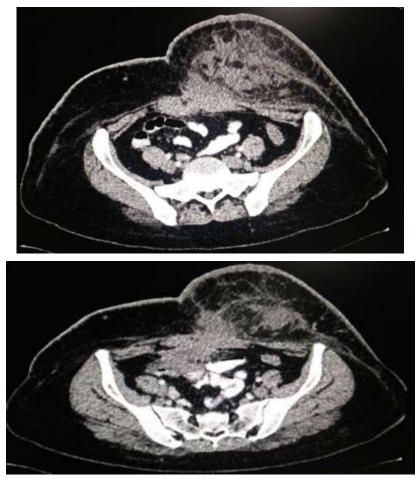


Figure 1 and2: showing axial cect abdomen showing heterodense lesion arising from rectus abdominis muscle of anterior abdominal wall.

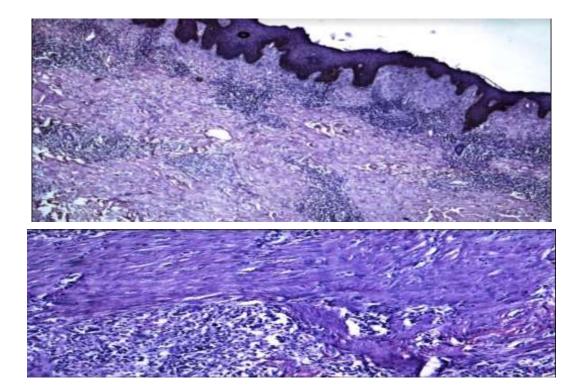


Figure 3 and 4: shows histologic findings of desmoid tumor showing fascicles of spindle shaped cells with bland uniform nuclei with moderate amount of cytoplasm



Figure 5 and 6: s howing gross specimens of desmoid tumor

V. CONCLUSION

The mix of features, for example, past history of surgical procedure, the age and sex of the patient, the area of the mass inside the anterior abdominal wall and the imaging features, make desmoid tumor a solid essential consideration of diagnosis although it is an uncommon element and particularly in females especially middle-aged women. The treatment approach stays aggressive and incorporates careful surgical resection. Abdominal wall repairs can be adequately accomplished with a prosthetic reconstruction of mesh with astounding practical outcomes.

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