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Research Paper

Medical Science

KEYWORDS :

Endometrioma of Anterior Abdominal Wall Feigning Cytologically as Desmoid Tumor

Dr. Sharada M. S — Professor & HOD, Department of Pathology, Shridevi Institute of Medical Sciences and Research Hospital, Near Sira Gate, Tumkur, Karnataka, India.-572106

Dr.Priyadarshini.D — Assistant professor, Department of Pathology, Shridevi Institute of Medical Sciences and Research Hospital, Near Sira Gate, Tumkur -572106, India

ABSTRACT

We report a case of a 27 year-old female who presented with intermittent dull aching abdominal pain and lower abdominal wall mass about 5x4cms in the subcutaneous plane.

Clinical diagnosis was desmoid tumor and FNAC showed only spindle cells which also led to the diagnosis of desmoid fibromatosis. The mass was excised with 1cm free margin and sent for histopathological examination which revealed endometriosis of the abdominal wall.

On FNAC endometriosis was masqueraded by desmoid fibromatosis.

INTRODUCTION

Endometriosis was first described by Rokitansky in 1860 and is defined as the presence and proliferation of functional endometrial tissue outside the uterine cavity, the commonest site being within the pelvis. Endometriosis can pose a diagnostic dilemma owing to its relative rarity and vagueness of symptoms.

CASE REPORT

In this paper we present a 27-year-old female presented with a one year history of intermittent abdominal pain in her suprapubic region. There was no progressively with time. For the past year she has been complaining of a vague swelling in her abdomen that was increasing in size.

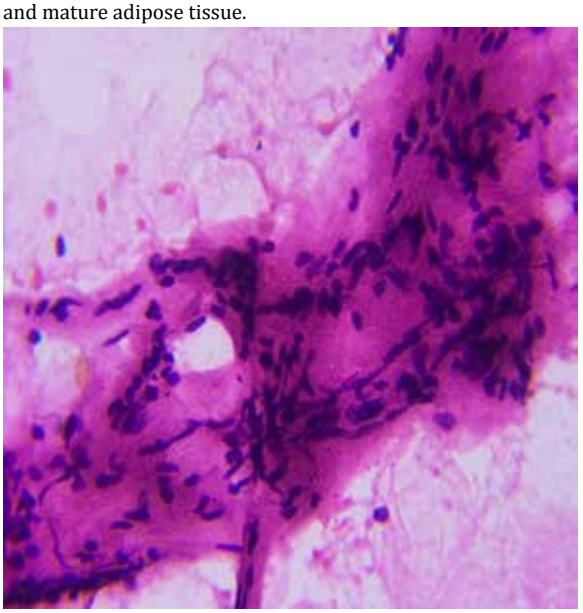
On physical examination clinicians thought of desmoid tumor.

On physical examination findings revealed an ill-defined mass in the suprapubic region, 1 cm left of the midline measuring, 1.5 cm by 1.5 cm which was extremely tender and firm. The mass was confined to the subcutaneous tissue and superior to the rectus muscle

The mass was completely excised along with surrounding tissues and an abdominoplasty was performed. The cut specimen demonstrated a fatty mass with collections of clotted blood. Histology revealed endometrial glandular tissue with clear excision margins.

Figure 1: Gross specimen shows fibro fatty tissue altogether measuring 4X4X2cms with 1cm free margin is seen.

Figure 2 : Fine needle aspiration shows spindle shaped cells and mature adipose tissue.



On FNAC the diagnosis given as Desmoid fibromatosis because of only spindle cells on repeated aspiration

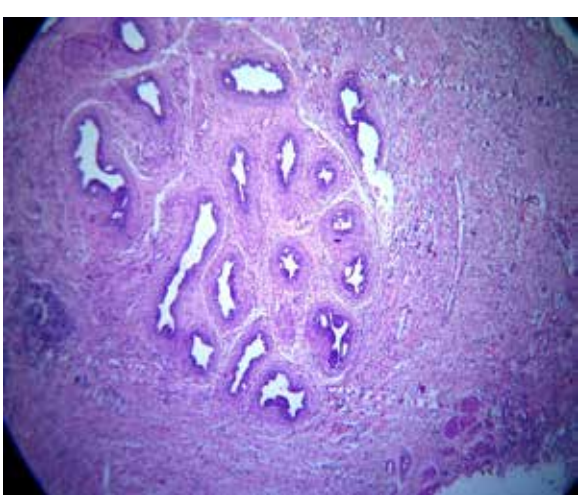


Figure 3: H&E stain shows endometrial glands and stroma within dense fibrosis

The Final diagnosis on histopathology is given as Endometriosis

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of the lower abdominal wall.

DISCUSSION

Endometriosis is defined as the presence of functional endometriotic tissue outside the uterine cavity. Endometriosis most commonly affects the pelvic organs, with the ovary being affected in 30% - 40% of cases and followed by the uterine peritoneum, the fallopian tubes, the bladder, the rectum, the vulva, and the pelvic ligaments in decreasing order of frequency,

Extra pelvic endometriosis has been documented in the bladder, kidney, bowel, lymph nodes, lungs, umbilicus, hernia sacs, and abdominal wall. Abdominal wall endometriosis usually involves incision sites from hysterectomy, laparoscopic port sites and Cesarean section, which accounts for 0.03% to 0.4% of endometriosis

Abdominal wall endometriosis is very uncommon and is usually associated in the scar after previous pelvic surgery but in our case the lump was in the lower abdomen in the subcutaneous plane and there is no history of previous surgery.

A presurgical fine-needle aspiration cytology can help to avoid mistakes in the approach of the abdominal wall tumors, the differentiation between endometriosis and desmoid tumor can help to find the indicated treatment options. presurgical differentiation between endometriosis and fibromatosis is important.

Although the typical complaints of patients with pelvic endometriosis include dysmenorrhoea, menstrual irregularities, dyspareunia and infertility, patients with extra pelvic

Endometriosis may present with unusual symptoms and occasionally, a diagnostic dilemma

Diagnostic modalities such as radiological studies, ultrasound and computed tomography scan have not been specifically helpful in the diagnosis

The correct pre- and intraoperative diagnosis of this rare disease is the most important factor for the respective treatment and prognosis of the destructive desmoid fibromatosis.

The lesions in the differential diagnosis of mass associated with abdominal scar have well-defined cytological features. Desmoid tumor and fibrosis show less cellularity with benign

appearing mesenchymal cells. Suture granuloma shows nonspecific inflammation with or without granulomatous elements and foreign material. Fat necrosis shows foamy macrophages, inflammatory and multinucleate giant cells, fragments of adipose tissue and no epithelial cells. Nodular fasciitis shows myxoid background and pleomorphic cells. Smears from primary or metastatic malignancies show hypercellularity with frankly neoplastic cells.[

Two theories concerning the pathogenesis have been proposed: (1) the most favored metastatic theory states the transport of endometrial cells to adjacent locations via surgical manipulations, hematogenous or lymphatic dissemination and (2) primitive pluripotential mesenchymal cells undergo specialized differentiation and metaplasia into endometrial tissue (metaplastic theory).

Differentiation in diagnosis and treatment between endometriosis and desmoid-type tumors considering the results of a literature review is important.

Extra pelvic endometriosis in the lung, skin, and extremities not associated with surgical violation of the uterus is believed to be the result of hematogenous or lymphatic spread of endometrial tissue

The excised skin specimen showed foci of endometrial glands surrounded by endometrial stroma, embedded in fibrous scar tissue in the sub cutis, The presence of endometrial tissue can induce metaplasia of the surrounding fascial tissue to form an endometrioma. This may cause rare occurrence of abdominal wall endometrioma without any surgical intervention

FNAC has been reported to be accurate in diagnosis but in a recent report by Dwivedi et al, this was not diagnostic in any of the four patients who underwent this procedure. Nonetheless it may be helpful in eliminating malignancy from the diagnosis.

There are few cases of primary cutaneous endometriosis without prior abdominal surgery

such as vulva, perineum, groin, umbilicus, and extremities.

CONCLUSION

In female patients presenting a tumor of the lower abdominal wall especially after ceasarean section, an endometriotic tumor as well as an aggressive desmoid tumor should be considered. Symptoms in correlation with the monthly period can facilitate the presurgical differentiation between endometriosis and fibromatosis. In the clinical practice, the desmoid fibromatosis and endometriosis also should be considered for lower abdominal wall mass.

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