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A Rare Case of Cesarean Scar Site Dermoid Tumour In North India

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A B S T R A C T

Dermoid tumour in the uterine cavity is very rare. It is also known as dermoid cyst. We present a rare case of symptomatic dermoid tumour in a young 30-year-old female of reproductive age group. A palpable lesion was noted on both clinical and radiological examinations. It was confirmed as the diagnosis of a dermoid tumour on magnetic resonance imaging of the uterus and biopsy post-operative. The treatment considered was surgical excision keeping in mind the young age of woman. According to the literature review this is the first reported case of a dermoid tumour at a cesarean site in North India.

Keywords: Benign tumour, Caesarean site, Dermoid cyst, rare case, uterine mass.

INTRODUCTION

These tumours are developmental abnormalities arising from lines of embryonic closure due to entrapment of ectodermal elements, resulting in formation of benign cutaneous cysts. [1] These are encased with stratified squamous epithelium and constitute two or more germ cell layers. [2] Desmoid tumours grow slowly, [3] and the most sites of these tumours are head and neck, accounting for roughly 84% cases. [4] Here we report an uncommon cesarean scar site uterine dermoid tumour.

CASE DESCRIPTION

A 30-year-old female patient presented to the obstetrics and gynecology outpatient department with chief complaints of abdominal discomfort and gradually increasing mass over the past one year. Her menstrual history was menarche at the age of 12-years with regular cycles of 4 days of moderate bleeding. Her obstetrical history was Para 2 Living 2 with no abortion. She had one girl child of 3-years old and a boy child of 1.5-years old, both delivered by cesarean section at a tertiary care centre. The cause of previous c-sections was cephalopelvic disproportion. She had no history of hypertension, diabetes mellitus, thyroid, sexually transmitted diseases, and post-operative complications. There was no other surgical history and no significant family history.

Clinically on bimanual palpation of the uterus, it was irregularly enlarged in size. On per speculum no significant finding was noted on cervix. There was no unusual discharge. Physically the patient had a moderate build with stable vitals.

On ultrasound of pelvis a hypoechoic mass with foci of calcification measuring approximately 11*5.8 cm was seen in subcutaneous tissue in the anterior abdominal wall suggesting scar site dermoid tumour. The mass was not

communicating with the cervical canal. The ovaries were normal in size, outline and echotexture. No free fluid was seen in the pelvis.

To confirm the diagnosis magnetic resonance imaging of the pelvis was done which revealed, lobular well defined encapsulated lesion within the rectus sheath involving anterior wall musculature measuring approximately 11.7 × 5.1 × 4.7 cm. It showed lobular T2 hyperintensity at the periphery and a central poorly marginated T2 hypointense core. It was an intermediate signal on T1W1. Enlarged draining lymph nodes were also seen in the right inguinal region, measuring approximately 21*17 mm. No infiltrations into surrounding soft tissues or any deeper extension noted. No lipoid component, hemorrhagic component or liquefaction necrosis was seen. Ovaries were normal with no fluid in the pelvis. A provisional diagnosis of benign desmoid tumour was suggested, to be confirmed by biopsy.

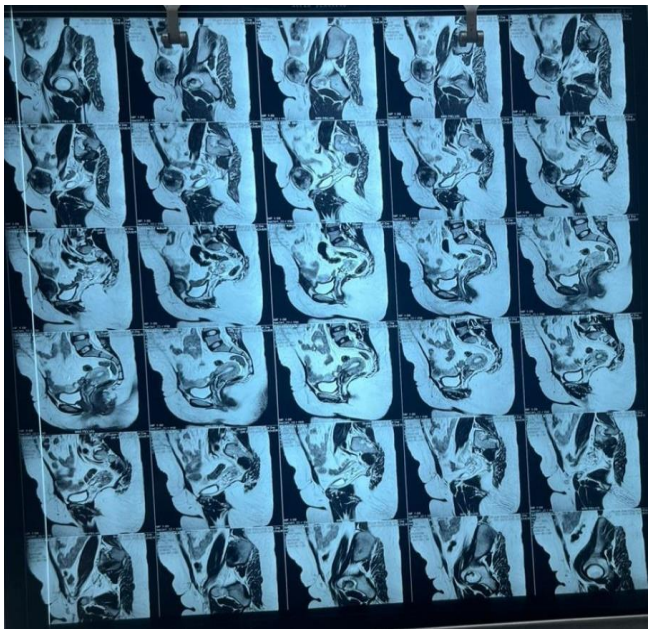

Figure 1: MRI

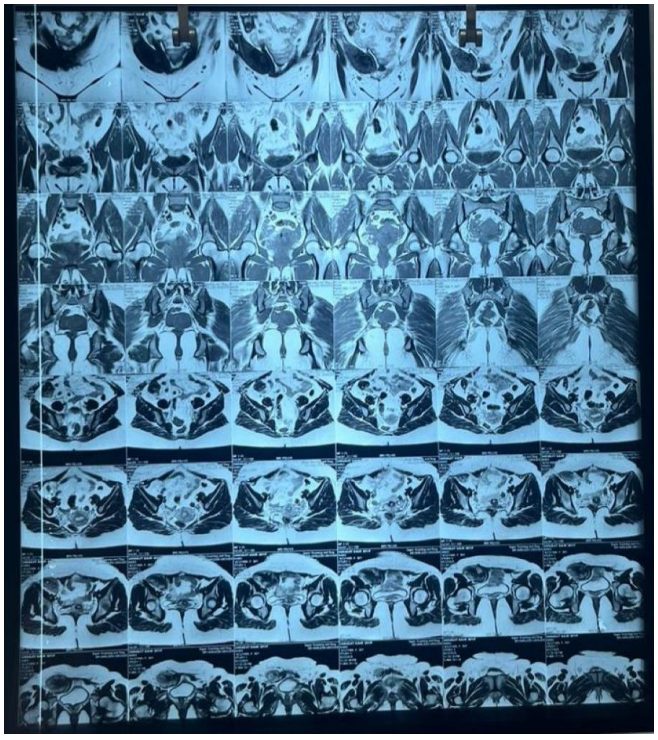

Figure 2: MRI PELVIS

Keeping in mind two ceserean deliveries a possibility of desmoid tumour at scar site was made. After discussing in detail about the available treatment options with the patient and her attendants, laparotomy and surgical excision of the mass was decided under general anesthesia. Informed written consent was taken by the patient.

During laparotomy, a 11.5 cm nodular mass was identified at the previous scar site and was excised under aseptic conditions. The operation was uneventful with no complications. The mass was sent for histopathological examination.

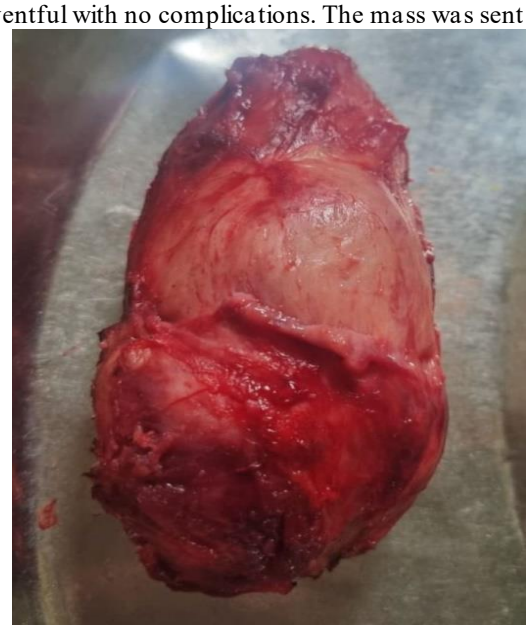

Figure 3: Dermoid tumour

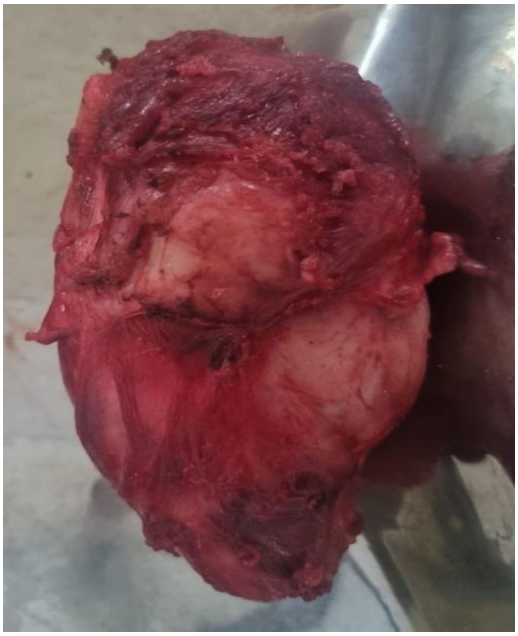

Figure 4: Tumour resected

The histopathological examination of the sections processed revealed benign spindle cells arranged in compact fasciculating bundles. They had elongated nuclei with vesicular chromatin. These bundles had scanty stroma inbetween. The cells had a collagenous quality. Non necrosis was evident. The findings were compatible with desmoid type fibromatosis and negative for malignancy.

At 2 months follow-up of the patient, she was asymptomatic with no discomfort and normal menstrual cycles. She was advised for a follow-up ultrasound 3 months post-operative to monitor her condition.

DISCUSSION

Uterine desmoid tumours are extremely rare, while ovarian desmoid tumours are the most common. [5] The case report by J hanai et al., on uterine teratoma was the first case of dermoid tumour in the uterus. [6] These tumours are composed of skin, lipid, teeth, hairs, cartilage, brain tissues, and even muscle or thyroid tissue. [7]

The clinical presentation of desmoid tumour is variable. It can present with pain, irregular bleeding, abnormal discharge, increase in size of uterus, although some cases can be asymptomatic. [8] In our case the patient had pelvic pain and increase in size of uterus which couldn't lead to the diagnosis. Thus, radiological imaging and biopsy is to be done for confirmation of diagnosis. A report by A. Papadia et al. [8] noted that the typical radiological features seen in ovarian dermoid tumours like cyst fluid, hair, sebum, "dots" and "dashes" signs are unlikely to be seen in uterine dermoid tumours. The blood tests that can be done for desmoid tumour include complete blood profile, liver and kidney function tests, tumour marker tests which are alpha-fetoprotein, beta-human chorionic gonadotropin, and lactate dehydrogenase levels. [9]

The various treatment choices for desmoid cysts include hysterectomy, surgical excision via laparotomy preserving the fertility of females. In our case report the patient had undergone surgical excision of the desmoid tumour and the sample was sent for histopathological testing.

Approximately 0.5% of cases of desmoid tumour have reported malignant transformation. [10] Thus, indicating a rare incident of malignancy. Some unexpected complications include sepsis, chronic hemolytic anemia, cyst rupture, and during pregnancy it can increase risk of uterine rupture. [11]

Dermoid cysts in the uterus are very rare with unknown incidence. According to our knowledge it is the first case in north India of cesarean scar site dermoid tumour.

CONCLUSION

Asymptomatic or mildly symptomatic cases of uterine mass or discomfort should be evaluated thoroughly keeping in mind the probability of uterine dermoid tumour which is very rare. Timely surgical intervention can preserve the fertility of reproductive age group females.

Conflicts of interest: none

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