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Degenerative Uterine Fibroid in A Pregnant Patient

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ABSTRACT

Uterine leiomyomas are the frequently found benign solid tumours of the female genital system, which usually develops 20-50% of all women between the ages of 30 and 50. Here we present the case of a 40 years old lady gravida 8 para 7+0 at 24 weeks of gestation with anterior wall uterine fibroid with complain of spotting and leaking per vagina. She expelled dead fetus 800 gm, the placenta was removed under general anaesthesia in pieces. It seems to be submucous degenerated fibroid. Histological finding confirmed the diagnosis. After few months she was admitted for hysterectomy due to menorrhagia and passage of clots. Ultimate treatment of fibroid is surgery.

Key words: Pregnancy, fibroid, surgery.

INTRODUCTION

Uterine leiomyomas or fibroids are most frequently found benign solid tumour with a prevalence of 20 to 30% in patient older than 30 years or 20 – 50% of all women. Leiomyomas are estrogen dependent tumours presenting growth during gestation in up to 50% of cases[1]. Most patients with fibroids are asymptomatic but they may present with pain, menorrhagia, infertility and miscarriage or mass abdomen. Ultrasonographic appearance is usually characterized by a homogenoeous and heterogeneous hypoechoic uterine mass, but the appearance can be variable with degenerative changes. This case shows how challenging can be the diagnosis with the degenerative fibroid.

CASE REPORT

A 40-year-old patient gravida 8 para 7+0, anti HCV +ve and known case of insulin controlled diabetic for last two and half years. Her first antenatal visit was at 17+ weeks of gestation and at that time ultrasound showed 10.6x8.6cm anterior wall uterine fibroid along with pregnancy. At 24 weeks of gestation she presented with spotting per vagina and she was admitted and plan was conservative management.

Examination

Fundal height was 26-28 weeks with longitudinal lie, cephalic presentation, cervix full length. Vaginal examination showed spotting but no leaking.

The next day patient complained of leaking per vaginum which was confirmed. After discussing with the patient termination of pregnancy was planned. Induction was done with tablet cytotec per vaginum after making sure that fibroid will not hinder the expulsion. She expelled 800gm fetus and the placenta with it, there was some (degenerative fibroid?) membrane like feeling protruding through Os. She was shifted in operation theatre and under general anaesthsia it was removed in pieces and it seemed to be submucous avascular and friable degenerated fibroid (not diagnosed previously). After removal of fibroid up to the base, the uterine cavity was curetted (Figs. 1, 2). Antibiotics were prescribed for 7 days and called after one week for follow up which was satisfactory.

Histopathology

Liomyoma with areas of hyalinization and haemrrhgic infarction.

After few months she was admitted for hysterectomy due to menorrhagia and passage of clots. Intra-operatively 10 week size of uterus and cut section shows intramural 3x2.5cm fibroid in

lower uterine segment and features of adenomyosis.

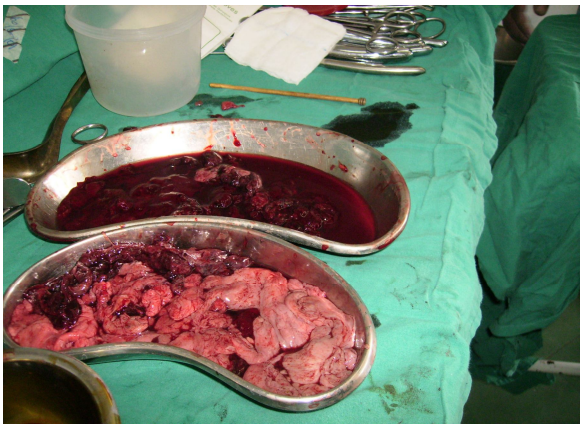

Fig. 1. Showing degenerative fibroid after evacuation.

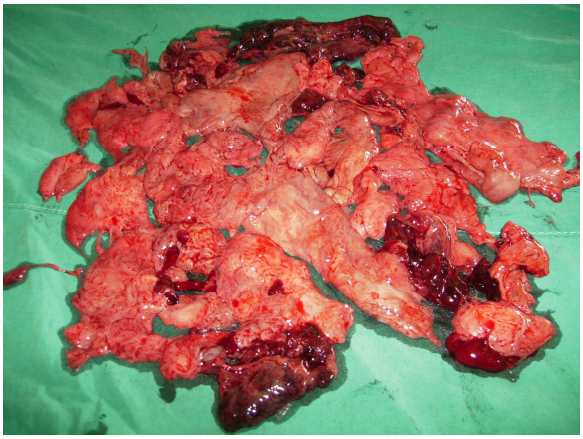

Fig. 2.

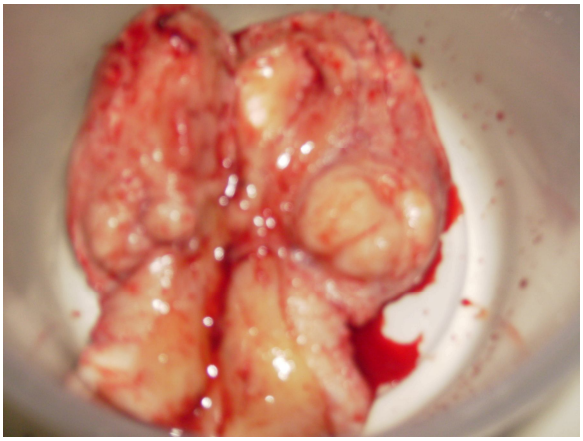

Fig. 3. Cut-section.

Cervix

Chronic non-specific cervicitis with squamous metaplasia.

Endometrium

Mild secretary phase.

Myometrium

Adenomyosis and fibroid.

DISCUSSION

Leiomyomas or fibroids are predominantly composed of smooth muscle surrounded by a pseudocapsule.[2,3] Most uterine fibroids are asymptomatic for that reason, true estimates of prevalence are unknown, but it probably ranges between 20% to 50%

These are characterized by their location: submucousal, intramural or sub serosal, which may be pedunculated and simulate adenexal masses[3,4]. Leiomyomas may often enlarge during pregnancy or oral contraceptive use, beside regression at the climacteric and puerperal periods[2]. Enlargement during pregnancy presents a multifactorial etiology and may be related to myometrial hypertrophy, higher vascularization and changes in the local steroid receptors. As fibroid enlarges, an imbalance between oxygen demand and supply causing areas of degeneration[2]. Among the degeneration observed during pregnancy, the benign ones which are most frequently found hyaline, myxoid, cystic or red degeneration[4]. Malignant sarcomatous degeneration is observed in only 0.5% of fibroids and whether it is primary or secondary to degeneration is still controversial[1].

Uterine fibroids are characterized by a homogeneous or heterogeneous hypoechoic uterine mass, but with cystic degeneration, a fibroid has a variable sonographic appearance. It can mimic an ovarian cyst,[7] endometrioma,[8] abscess,[9] and endometrial hyperplasia[10]. Yarwood and Arroyo[7] reported a 10-cm cystic uterine fibroid that mimicked an ovarian cyst.

Pelvic ultrasound initially done for pregnancy is also the method of choice for assessing leiomymaes[5] besides evaluating the gestation in first trimester. Ultrasonography may demonstrate the

presence of fibroids as well as their progression. During pregnancy estrogen levels increases and uterine stretching interfes with the blood supply to fibroids, which causes infarction, cystic degeneration or both. On USG leiomyomas present as hypoechoic circumscribed homogeneous masses localized in the submucosal/ intramural or subserosal region of uterus[1]. The diagnosis of degenerating fibroid is difficult because of the heterogencity in their presentation. In this case ultrasound shows the anterior uterine wall fibroid 14x10.5x13.1 cm in lower segment displacing fetus in the fundal region. Actually it was submucous fibroid with degeneration and that is why after the expulsion of the fetus, it came out along with the delivery of the placenta and membranes.

In cases where leiomyomas present an atypical appearance, MRI can better characterize the relationship between the mass and other pelvic structures besides providing a better definition of liquid and haemorrhagic components of the lesion[6]. Clinical and USG correlation together with knowledge of the variable sonographic appearance of degenerating fibroids can lead to correct diagnosis of uterine fibroid and thus help in timely appropriate management.

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