

Prolapsed degenerating postpartum uterine fibroid: A case report

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Abstract

Fibroid in pregnancy is common in clinical obstetric practice. There are conflicting reports in the literature on many so-called fibroid complications in pregnancy, and there are inadequate data on the optimum management strategy. We present a case of a pregnancy with large fibroid which was uneventful till delivery but ended in immediate postpartum complication of fibroid degenerating and prolapsing into vagina dealt with myomectomy at day 30 postnatal. Initially managed conservatively with intrauterine balloon tamponade and anaemia correction and discharged home. Later on myomectomy was performed on day 40 postop due to recurrent complaint of foul smelling vaginal discharge and fibroid protruding in vagina. This case illustrates a very rare complication of pregnancy with fibroid and the difficulties that are encountered in managing such cases.

Keywords: Uterine Fibroid, Pregnancy.

Introduction

The prevalence of uterine fibroids in pregnancy varies between 1.6 and 10.7 percent, depending upon the trimester of assessment and the size threshold.¹⁻⁵ There is a plethora of publications in the medical literature and textbook chapters on the gynaecological aspects of fibroid outside of pregnancy, but the literature is scanty and conflicting on the fibroid features and management during pregnancy and labour. The most important factors in determining morbidities in pregnancy include fibroid number, size, location, and relation to placental implantation (retroplacental). Submucous fibroids have the strongest association with lower ongoing pregnancy rate (OR 0.5, 95% CI 0.3 to 0.8), mainly due to defective implantation.⁶ However, there is no evidence that subserous or intramural fibroids adversely affect pregnancy outcome.⁷ Large submucous or multiple fibroids may distort the uterine cavity leading to abnormal lie and presentation (risk of breech 13% (fibroids) vs. 8% (without fibroids)), pre-labour premature rupture of the membranes (PPROM), pre-term labour (PTL) (19% (fibroids) vs. 13% (without fibroids)) and risk of

CS (49% (fibroids) vs. 21% (without fibroids)).⁸ Cervical or low anterior fibroids may obstruct labour and render CS technically difficult. Retroplacental fibroids have been shown to be associated with a higher incidence of miscarriage, PTL, placental abruption, and postpartum haemorrhage (PPH) (8% (fibroids) vs. 3% (without fibroids)).^{8,9}

Case Report

A 31 year old woman, primigravida, married since one and a half years was booked at 12 weeks at our hospital. Her routine sonography at 11 weeks of gestational age demonstrated an incidental finding of a fibroid arising from posterior wall of uterus 4.5 x 3.8 cm at 11 weeks which increased in size till 18 weeks gestational age to 6.8 x 5.2 cm. Thereafter the size of fibroid remained static and pregnancy went uneventful. She was delivered by elective caesarean section at 37 weeks on 1 November 2016 at Agha Khan Hospital for Women Garden, Karachi because of oblique lie and recurrent complaint of abdominal pain. Patient's haemoglobin preoperatively was 10.4 gm/dl. Intraoperatively a large sub-mucosal fibroid in posterior wall of uterus compressed by baby's head of about 7x8 cm was noticed (Figure-1). An alive female baby of 3.0 kg was delivered followed by placenta and membranes. Haemostasis was secured, and estimated blood loss was 600 to 700 ml. Patient was kept on Syntocinon infusion for 12 hours postoperatively anticipating risk of Postpartum haemorrhage.

After 10 hours of surgery, the patient complained of vaginal bleeding. On examination, there was old brown



Figure-1: Uterus with large submucosal fibroid.

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Figure-2: Sagittal MRI of degenerating Uterine Fibroid.

coloured 250ml of clot which was removed from vagina but there was no active bleeding. Patient was kept under strict observation with half hourly monitoring of vitals, intake output and blood loss vaginally. Patient suddenly become hypotensive about 20 hours after surgery. Her blood pressure dropped to 70/40 mmhg, pulse 90 b/min, patient was drowsy but arousable and started complaining of severe pain in sacral area. Immediately call for help was given. Patient was resuscitated with fluid replacement and blood sent for crossmatch and complete blood count. Her urgent Hb showed a drop to 6.4gm/dl. It was then planned to examine the patient under anaesthesia. On examination under anaesthesia, cervical os was open with lower segment ballooned up and fibroid felt protruding from cervical os. Upper segment was well contracted with mild pervaginal bleeding. Intrauterine balloon tamponade with vaginal packing was done. Patient remained stable vitally during the procedure.

Post EUA and tamponade, blood transfusion was commenced but patient persistently complained of severe pain in sacral area despite opioid infusion and became tachycardic (pulse 130 to 140b/m), so on suspicion of degenerating fibroid and need of tertiary



Figure-3: Sagittal MRI of Degenerating Uterine fibroid prolapsing with balloon tamponade insitu through cervix.

care and imaging patient was shifted to tertiary care centre.

MRI was done (Figure-2) which showed a soft tissue lesion arising from the posterior wall of uterus and hanging into the endometrial cavity. It measured approximately 50 x 68 x 133 mm in AP x T x CC dimensions respectively, having low signal intensity on T1, heterogenous lesion hyperintense signal on T2 and heterogenous postcontrast enhancement with central areas of nonenhancement. These signals suggested acute haemorrhage and necrosis within the soft tissue. The lower end of this soft tissue was in contact with tamponade balloon. Overall appearances represented a large degenerating fibroid arising from posterior wall of the uterus.

Patient was managed conservatively with blood transfusion, broad spectrum IV antibiotics and balloon tamponade was retained for 48 hours. Patient remained stable and tamponade was removed and patient discharged on day 4 postoperatively.

On day 30 postoperatively patient presented in clinic with complaint of increased foul smelling vaginal discharge, and

fever spikes on and off for one week. She was examined and found to have fibroid occupying half of upper vagina with foul smelling discharge. Her Repeat MRI was done which showed a broad based fibroid originating from uterus and protruding through cervix now comparatively reduced in size to 6*8*8cm. It was planned to resort for abdominal myomectomy which was successfully performed on 10 December 2016. Patient remained stable.

Discussion

To the best of our knowledge this is the first report in literature of a prolapsed degenerating uterine fibroid postpartum. It also highlights the dearth of evidence based information in management of these rare complications of fibroids associated with pregnancy.

Leiomyoma's are the most common pelvic tumour in women with a 1% incidence in pregnancy. Ultrasound studies have shown that about 20% of fibroids increase in size and similar percentage decrease during pregnancy. The greatest increase in volume occur before the 10th gestational week.¹ Fibroids are associated with an increased risk of threatened miscarriage, threatened preterm delivery, abruption, pelvic pain, which is often due to degeneration of the fibroid, and usually managed conservatively during pregnancy. There is high incidence of caesarean section in women with leiomyomata, with a large proportion being directly related to the fibroid.² Myomectomy at the time of caesarean section is known to be hazardous because of uncontrollable haemorrhage. Most obstetricians advise against myomectomy at the time of caesarean section, unless the myoma is pedunculated.^{2,3} Three cases have been described where myomectomy was performed to achieve delivery.^{4,5} Most uterine fibroid either stopped growing or decrease in size postpartum. One study on 32 patients with leiomyomas showed that the size at 6 weeks postpartum did not differ significantly from size during pregnancy⁶ but another of 34 women who underwent ultrasound scan four weeks after delivery showed that myomas become smaller, shrinking back to their initial size at the commencement of pregnancy.¹ In our case uterine fibroid increased more than four fold in volume during first post-operative day. Such rapid growth of uterine leiomyoma in early postpartum period has never been reported in the literature, only one case reported by Manyonda et al.⁷ A rapidly growing uterine fibroid postpartum, was done. As leiomyoma enlarge they may outgrow their blood supply

resulting in various types of degeneration. This drastically alters the appearance of the tumour and creates difficulty in establishing diagnosis; the differential diagnosis of leiomyoma includes adenomyosis, adnexal mass and uterine leiomyosarcoma. MRI is the most accurate imaging technique for detection and localization of leiomyoma. Degenerated leiomyoma can have varying appearances. Rapid growth of degenerative fibroid is mainly due to necrosis, infarction and cystic changes. In our case MRI findings were suggestive of degenerated fibroid. This is the second case report describing a large benign degenerated leiomyoma that grew postpartum and was managed conservatively with balloon tamponade. It also demonstrates the possibility of confusion in diagnosis arising with such findings.

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