

Surgical Management of Intra Myometrial Haematoma Post Myomectomy - A Case Report

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Abstract

Uterine fibroids are the most common benign neoplasm of the uterus. With increasing number of patients opting for myomectomy, there is increase in the number of procedure related complications that are being reported. We report one such complication of intra-myometrial haematoma requiring re-laparotomy after 1 year of the primary procedure. The incidence of intra-myometrial haematoma in various studies have been reported from 0.43% to 1.03%. Intra-myometrial haematoma after myomectomy resolve over time. Those requiring drainage are mostly in the immediate post-operative period. The rarity of the case lies in its delayed presentation and need for a re-laparotomy. Gynaecologists must be well equipped not only to deal with the common procedure related complications, but must also have high clinical suspicion of the not so common complications, as this will aid in early diagnosis, so that timely intervention can be offered to the patient.

Keywords: COVID-19 Pandemic; SARS-CoV-2 Infection; Safety Management; Surgery

Abbreviations

MRI: Magnetic Resonance Imaging; OPD: Out Patients Department; UF: Uterine Fibroid, Intra-op: Intra-Operative

Introduction

Uterine fibroids (UF) are the most common benign neoplasm of the uterus and a major source of morbidity for women in reproductive age, affecting up to 4.5 - 68.6% women [1]. Though most women with UF are asymptomatic, approximately 30% of them will present with severe symptoms which can include abnormal uterine bleeding, anemia, pelvic pain and pressure, back pain, urinary frequency, constipation, or infertility, and will require intervention [2]. The current options for treatment include expectant, medical, surgical management, and interventional radiology procedures. Complications post myomectomy have increased over the years, as patients opting for conservative surgical procedures have increased. In this case report we discuss one such complication post myomectomy, which is intra-myometrial haematoma.

Case Report

41 yrs, P3L3A1, presented to gynaec out patient department (opd) with chronic pain lower abdomen past one year. Her pain was on and off, requiring need for pain killers very often. Her cycles were regular, with normal flow and had congestive dysmenorrhoea.

She gives history of undergoing open myomectomy for fibroid, one year back (as she was keen to retain her fertility). The immediate post operative recovery was uneventful.

Initial gynaec examination when patient presented in opd was normal. However, ultrasound examination showed 3x3 cms hypoechoic lesion in the post myometrium. Endometrial cavity was distorted by the lesion. Magnetic resonance imaging (MRI) confirmed ultrasound findings, it showed well defined non-enhancing hyperintense cystic lesion (3.7-3.5-3.4 cm) with fluid level noted within the posterior myometrium of the body of uterus compressing adjacent myometrium - likely represent intramyometrial hematoma.

After thoroughly explaining the patient about her condition, consent was taken for laparotomy and haematoma drainage.

Under anaesthesia, abdomen opened in layers by supra pubic transverse incision, a 4x4 cms firm swelling felt on the post wall of uterus. Transverse 4 cms incision was given over the swelling, collected old blood came out like a jet (Image 1), as it was under pressure. Myometrium was deficient till the endometrial lining (Image 2), After draining the haematoma, uterine defect was closed in layers with vicryl (Image 3). Abdomen was closed in layers. In the post-operative period patient did well and was discharged on 2nd day following surgery.



Image 1: Gush of blood coming out on incising haematoma.



Image 2: Myometrium deficient till the endometrial lining.



Image 3: Final image after uterine closure in layers.

Discussion

The current options for treatment of UF include expectant, medical, surgical management, and interventional radiology procedures [2]. Choice of treatment is governed by size and location of UF, severity of symptoms and desire to retain fertility. Hysterectomy is the definitive treatment of fibroid, but cannot be offered to women desiring to retain fertility. With Conservative managements becoming more popular, there is an increase in number of women opting for myomectomy. Hence, complications post myomectomy have increased over the years. Its important to discuss the procedure, immediate and long term risks invoved with myomectomy with the patient, so that she can take an informed decision.

Complications associated with myomectomy can be immediate like fever, urologic complications, manipulator injuries, bowel injury, hematomas, anemia, redo surgeries, uterine rupture, procedure failings, and long term like sarcomas [3] and intra abdominal adhesions. The incidence of intra-myometrial haematoma in various studies have been reported from 0.43% [3] to 1.03% [4]. Non of these studies have mentioned re-laparotomy for intra-myometrial haematoma. Which means most of them are asymptomatic, rarely requiring surgical intervention or they resolve over time. Those requiring drainage are mostly in the imeediate post-operative period. The rarity of our case lies in its delayed presentation. In our case, patient had chronic pelvic pain which was hampering her quality of life, not responding to conservative management and had to be taken for surgery. Intra-operatively, when the incision was given collected blood spurted out, which indicates the pressure under which the haematoma was, thus explaining patient's chronic pain.

Intra myometrial haematoma requiring immediate surgical intervention presents as rapid fall in haemoglobin in the post operative period. One study suggested that myomectomy fever in the post-operative period can be due to hematoma formation in the myoma cavity or collection of blood in the pelvis [5], thus fever can be another presentation of intra myomterial haematoma.

Another study tried to explain that pathophysiology of intra-myometrial haematoma, postulating that pseudocapsule vessels, that join at the base of the fibroid creat a little foot that often bleeds during an extra-capsular myomectomy, which creates a hematoma, that is seen as an avascular echoic area on ultrasound [6].

Bipolar coagulation of large vessels, while avoiding carbonization and myometrium gaps after suturing, may decrease the risk of myometrial hematoma [7]. Principles of surgery followed in our case were, use of absorbable suture, reinforcing the myometrium in layers, achieveing proper haemostasis and not leaving any dead space.

Conclusion

With increasing number of patients opting for myomectomy there is an increase in the number of procedure related complications being reported. Gynaecologist must be well equipped not only to deal with the common procedure related complications, but must also have high clinical suspicion of the not so common complications, as this will aid in early diagnosis, so that timely intervention can be offered to the patient.

Disclosure

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