Spontaneous Parasitic myoma with the omental vessel: A Case report and literature review

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Case Report

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Abstract

Aim: The study is the Case Report of spontaneous parasitic myoma with omental vessel, and the management at Bahrain Defense Force Hospital.

Case Report: A 35years old female was diagnosed, almost 20 cm, sub serous myoma with the pedicle of 2cm from the fundus of the uterus. There was a feeding vessel from the omentum. She underwent myomectomy after the resection of pedicle and omental vessel .Post-operative period was uneventful.

Conclusion: Parasitic myoma is the type of subserous uterine myoma. Generally surgical management is required for the relief of symptoms and to avoid encroachment of nearby abdominal or pelvic structures which in turn leads to further complications.

Introduction

Parasitic myomas are the rare type of subserous uterine myomas^{1,2}. whenever the subserous myomas getting attachment to the surrounding structures ,they derive the feeding vessel from them and detach from the uterine blood supply and the uterine pedicle often dissipate^{3,4}. Parasitic fibroids frequently attached to omentum³.The other structures of attachment includes urethra ,bladder, Gastrointestinal tract ,intraperitoneal and retroperitoneal myomas^{5,6}. Mostly etiology is not well understood^{2,7}. One of the possibility is post laparoscopic removal of uterine myomas^{1,8,9}. Commonly they may not be symptomatic .Mostly diagnosis is incidental. However symptoms are in relation with the size, location, numbers and the attached structure⁸. The common symptoms include abdominal distension ,abdominal pain, pelvic pain and pressure symptoms^{2,10}. Diagnosis could be assisted by imaging such as ultrasonogram ,Computed tomography (CT scan)and Magnetic Resonance Imaging (MRI)^{3,8}. Management is generally surgical resection of feeding blood vessel and removal of parasitic myoma¹⁰.

Case Report

We report an infrequent case of spontaneous Parasitic Fibroid in a young unmarried Female.

35 years old, Unmarried Female with the Body Mass Index (BMI) of 23.14, who Presented to the Gynecology outpatient clinic, at Bahrain Defense Force Hospital, with the complaints of abdominal distension and pressure symptoms since two months according to her knowledge. Also she gave the

history of pulsations felt at the level of umbilical region. Her menstrual cycle was regular and for the past three months less menstrual flow with duration of one day. She had no medical illness, not gone through any surgical procedures either laparoscopically or via laparotomy. She was not known to have any relevant family history.

Examination of Abdomen appeared as palpable mass occupying almost the entire abdomen and 3 cm above the umbilicus, also up to the Right upper quadrant. Ultrasonogram of abdomen revealed multi lobulated subserous Fibroids each measuring nearly 8 to 10cm and all together approximately 20cm. Magnetic Resonance Imaging (MRI) pelvis reported enlarged uterus riddled with very large myomas measuring as a whole mass of almost 20x12x10cm which are avidly enhancing mostly sub serosal. Junctional zone is poorly defined due to the presence of extensive myomas. The endometrial stripe is not thickened. No pelvic lymphadenopathy.

Patient was counselled for myomectomy. Upon taking informed consent after explaining possible complications such as bleeding, blood transfusion and injury to bladder /bowel /urinary tracts, she was proceeded to surgery. Abdomen was opened through the vertical midline incision in view of the huge size of Myoma. Intraoperatively identified large lobulated Myoma, attached to the fundus of the uterus with 2 cm pedicle. Also noticed vessel supply arising from the omentum to the fibroid mass. Bilateral tube and ovary grossly normal. Uterus grossly normal. The Pedicle identified, which was attached to the fundus of the uterus was clamped cut and ligated. Vascular supply to the myoma was clamped, cut and double ligation done.

Myomectomy was performed and the myoma was extracted and sent for histopathological examination. Hemostasis was secured. In view of huge size Bladder integrity was checked with methylene blue instillation into bladder, and was intact. Abdomen was closed in layers with complete hemostasis. Procedure was uneventful with the Estimated blood loss approximately 500-600ml. Post-operative period was uneventful.

Laboratory Findings: HB 10.6, WBC 7.96, HCT 0.33, PLT 287. BL G A Positive

She was discharged on 2nd post-operative day without any undue effects.

Histopathology report reveled:

Macroscopic Examination: An irregular firm pale white tissue measuring 20x17x8cm and weighing 1502g; received with attached cord-like tissue of vessels measuring 31cm long. Cut surface is pinkish in colour. (1-6=fibroid, 7=cord like tissue)

Microscopic: Uterine leiomyoma of average cellularity. No significant mitosis or nuclear atypia seen.

Discussion

Kelly and Cullen described parasitic leiomyomas as early as 1909¹¹. Their presentation is varied. These unique fibroids were classified by Nezhat and Kho into three categories. The first category spontaneously develops from pedunculated fibroids which detach from the uterus and grow by gaining blood supply from adjacent organs. The second type develops due to reduction in blood flow to the uterus and the third category develops following uterine surgeries¹². Our case is a spontaneous fibroid in an unmarried lady which is of the second type. The third type of fibroid is suggested to be a complication of morcellator usage in laparoscopic surgeries, which occurs due to tissue growth spread in the pelvic cavity concluded Ladke AB and colleagues¹³. As a solution they suggested the usage of endobag morcellation. Genetic and hormonal factors may be responsible for parasitic fibroids where a history of morcellation is absent suggested AlTalib A and group¹⁴. A case report by Alnagar A et al revealed a different presentation of the parasitic fibroid where it was attached to the jejunum and the patient presented with small intestinal obstruction⁷. This brings out the complexity in presentation of these unusual leiomyomas.

A similar case to ours was reported by Mushtaq R et al where a parasitic fibroid along with tortuous omental vessels were identified¹⁵. Our patient's main concern was the abdominal distension and pressure symptoms. A literature searches on parasitic fibroids by Lete I et al gathered information on 274 patients. They found that the mean age was 40 years. 56% had no uterine surgery and 39% had a history of morcellation. The clinical symptom frequently encountered was abdominal pain which accounted for 49%¹⁶. Our patient was 35 years old and also did not have any kind of surgery. Ghamande SA and colleagues reported a case with high Ca²⁺ associated with parasitic leiomyoma¹⁷. Interestingly, Osegi N and group also published a case of a parasitic fibroid in a post-menopausal woman who had no history of any previous surgery⁴. Varun N and colleagues also presented a case of a parasitic fibroid in pregnancy¹⁸. A case report by Salih AM and group in 2017 concluded that these unique myomas presenting with vague symptoms are diagnosed by ultrasound and resection of the myoma is the management¹. We used ultrasound and MRI along with clinical assessment for the diagnosis and myomectomy along with the double ligation of the omental vessel as the management.

Conclusion

Parasitic leiomyomas have a diverse presentation and causes dilemma when the condition is not kept in mind when dealing with a mass per abdomen. Hence this condition should be considered as a differential diagnosis for early management.

Declarations

Conflicts of Interest: None.

Sponsorship: None.

Written consent: has been obtained from the patient.

Ethical Approval: The study was approved by the Ethical Committee and Research Centre in Bahrain Defense Force Hospital.

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Figures

Figure 1

Fibroid mass

Figure 2

Fibroid with omental vessel

Figure 3

Fibroid with omental vessel