

Case Report
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A State of Septic Shock Revealing a Pyomyoma as An Exceptional Complication Post Abortum

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ABSTRACT

Pyomyoma is a pyogenous infection of a leiomyoma and occurs when a leiomyoma undergoes infarction and subsequent infection. It is a rare, yet potentially fatal complication of uterine leiomyoma.

We report the case of a 42-year-old Tunisian woman, 20 weeks of gestation, who presented with rupture of membrane. In her ultrasonography, in 20 weeks of gestation, she had 18 cm × 16 cm sub-mucosal to intramural myoma and a normal fetus. A cesarean section was performed for suspected chorioamnionitis with a failed induction. Seven days later, she presented with fever and lower abdominal pain. In physical examination, she had blood pressure: 100/70 mmHg, pulse rate: 110 beats per minute and temperature: 39.5°C. She had tenderness on uterus and uterine height was 24 weeks. Ultrasonography showed a hetero-echoic mass (18 cm × 16 cm × 12 cm) in posterior side of uterus and endometrial thickness was 8 mm. With diagnosis of endometritis or infected myoma, she was admitted and received intravenous.

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Received: September 21, 2023; **Accepted:** September 29, 2023; **Published:** October 09, 2023

Introduction

Pelvic CT-Scan showed a hyper-dense mass (20 cm × 16 cm) in pelvic cavity (infected degenerated myoma). Due to persistent fever and the development of septic shock, she was candidate for myomectomy.

To conclude, Pyomyoma is an unusual complication of leiomyoma. It is more common during pregnancy due to rapid growth of leiomyoma.

The diagnosis can be difficult. Triad of fever, leiomyoma and absence of other sources of fever is diagnostic.

Uterine leiomyomas are the most common neoplasms of the uterus. Many women who have fibroids do not have any symptoms. Pyomyoma is a pyogenous infection of a leiomyoma and occurs when a leiomyoma undergoes infarction and subsequent infection. It is a rare, yet potentially fatal complication of uterine leiomyoma [1]. It is more usual in pregnant women and postmenopausal women who have vascular disease [2-4].

Case Report

The patient was a 42-year-old Tunisian woman, 20 weeks of gestation, who presented with rupture of membrane. She did not have any history of medical disease. She had cesarean section 2 years ago and had history of secondary infertility who was candidate for myomectomy but she became pregnant in spontaneous conception. In physical examination, she had blood pressure: 120/80 mmHg, pulse rate: 87 beats per minute, temperature:

37°C and uterine height: 28 weeks. In vaginal examination, she had rupture of membrane and 2 centimeters dilatation of cervix. In her ultrasonography, in 20 weeks of gestation, she had 18 cm × 16 cm sub-mucosal to intramural myoma and a normal fetus. A cesarean section was performed for suspected chorioamnionitis with a failed induction.

She was discharged in good condition four days after curettage. Seven days later, she presented with fever and lower abdominal pain. In physical examination, she had blood pressure: 100/70 mmHg, pulse rate: 110 beats per minute and temperature: 39.5°C. She had tenderness on uterus and uterine height was 24 weeks. Ultrasonography showed a hetero-echoic mass (18 cm × 16 cm × 12 cm) in posterior side of uterus and endometrial thickness was 8 mm. With diagnosis of endometritis or infected myoma, she was admitted and received intravenous antibiotics. Pelvic CT-Scan showed a hyper-dense mass (20 cm × 16 cm) in pelvic cavity (infected degenerated myoma). Due to persistent fever and the development of septic shock, she was candidate for myomectomy. During operation, she had infected degenerated myoma (20 cm × 16 cm) and myomectomy was done. Antibiotics continued after operation and 48 hours later, she was afebrile. She was discharged in good condition, 10 days after operation.

Discussion

The possible routes of infection for the development of pyomyoma have been described as contiguous spread from the endometrial cavity, direct extension from the adjacent bowel or adnexa, or haematogenous or lymphatic spread from infection elsewhere in

the body [5].

Delayed diagnosis may result in serious complications, such as rupture into the abdominal or endometrial cavity, septicaemia, respiratory distress syndrome and even mortality. In the vast majority of these cases, total abdominal hysterectomy is required to avoid severe morbidity and potential mortality.

Management during pregnancy is complicated by the desire to avoid hysterectomy and to preserve future fertility, particularly when the pyomyoma is associated with late miscarriage, factors which contribute are curettage, gynecological surgery, cervical stenosis, or immunodeficiency. The incidence of pyomyoma has increased in recent years due to uterine artery embolisation. A leiomyoma may get infected by direct spread from the adjacent endometrial cavity, bowel or adnexa, and by hematogenous or lymphatic spread. The infection is usually polymicrobial. The common organisms include *Staphylococcus aureus*, *Streptococcus haemolyticus*, *Proteus*, *Streptococcus agalactiae*, *E. coli*, *Enterococcus faecalis*, and *Sphingomonas paucimobilis*. *E. coli* were cultured in a vaginal swab in this patient. The most common symptom is fever [5-9].

Differential diagnoses to be considered include: pyometra, tubo-ovarian abscess, red degeneration of leiomyoma, or septic abortion. This case presented with fever and abdominal pain. Pyomyoma should be considered in the broad differential diagnosis of postpartum fever, especially if concomitant with bacteraemia and uterine fibroids but no other obvious source of infection. Pyomyoma is critical because the mortality rates approach 21-30%. Sonographic findings of pyomyoma include an enlarging pelvic mass with solid or cystic component. The presence of gas in leiomyoma is diagnostic of pyomyoma. CT scan findings of pyomyoma would include heterogeneous density mass with a solid and cystic component and the presence of gas and debris [10].

CT scan is more useful. The definite treatment of uterine pyomyoma consists of aggressive antibiotics and myomectomy or hysterectomy or CT-guided drainage. Drainage or myomectomy was performed instead of hysterectomy, if the woman was desirous of future fertility, as myomectomy in our case. Most of the reported cases in the literature show that definitive management requires myomectomy or hysterectomy and IV antibiotics.

Conclusion

Pyomyoma is an unusual complication of leiomyoma. It is more common during pregnancy due to rapid growth of leiomyoma. The diagnosis can be difficult. Triad of fever, leiomyoma and absence of other sources of fever is diagnostic. Ultrasound and CT scan can help diagnosis. Surgical treatment is often indicated.

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