

Ruptured postnatal pyomyoma causing sepsis: Challenges in diagnosis and management

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Background

A pyomyoma is a rare but potentially severe complication of uterine leiomyoma. It has a mortality of 20-30% which has remained unchanged despite widespread availability of antibiotics ^{1,2} owing to its rarity. Therefore, pyomyomata pose a diagnostic dilemma, which may delay definitive treatment.

- It is caused by infarction, necrosis and subsequent infection of a degenerating fibroid.

- The diagnosis should be considered in women with pre-existing fibroids presenting with abdominal pain with symptoms or signs of infection.

- It most commonly presents in pregnancy or postnatally, but can also occur in postmenopausal women.

- We present herein a successfully managed case of a ruptured pyomyoma in a postnatal woman.

Patient Presentation

A 44-year-old primiparous woman with known fibroids presented 22 days post uncomplicated ventouse delivery with a distended abdomen, abdominal pain and pyrexia.

Computerised tomography (CT) imaging demonstrated a left sided intra-abdominal collection measuring 28 x 26 x 20 cm in continuity with the uterine wall, which was thought to be a haematoma or seroma (fig. 1a &b) .

Her blood results showed a white cell count of 22.5 x10⁹/L and a C-reactive protein of 363.9mg/L. The patient was commenced on broad spectrum antimicrobial therapy.

Following the development of sepsis, and in the context of an acute abdomen, she underwent an emergency exploratory laparotomy.

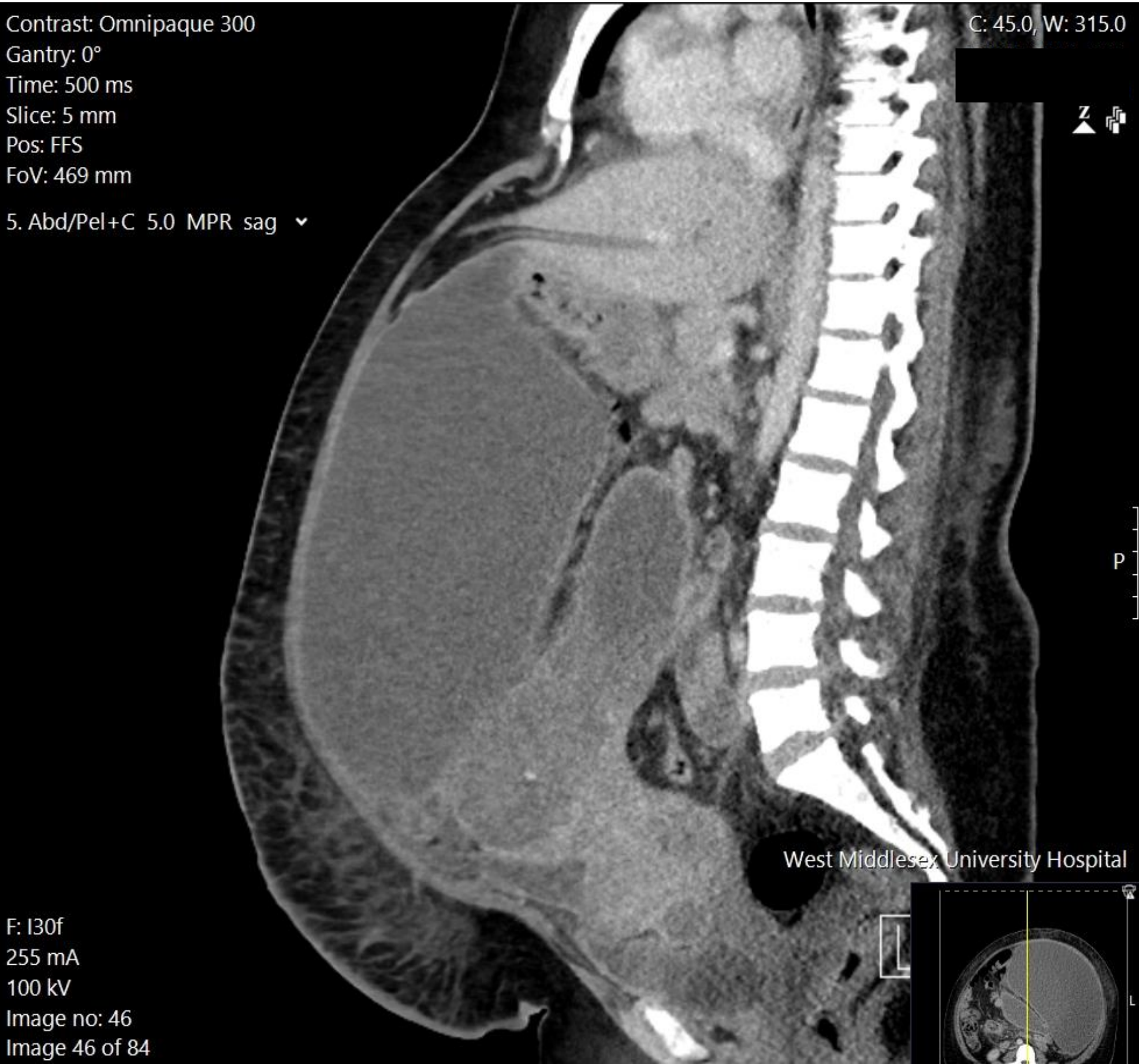


Fig. 1a

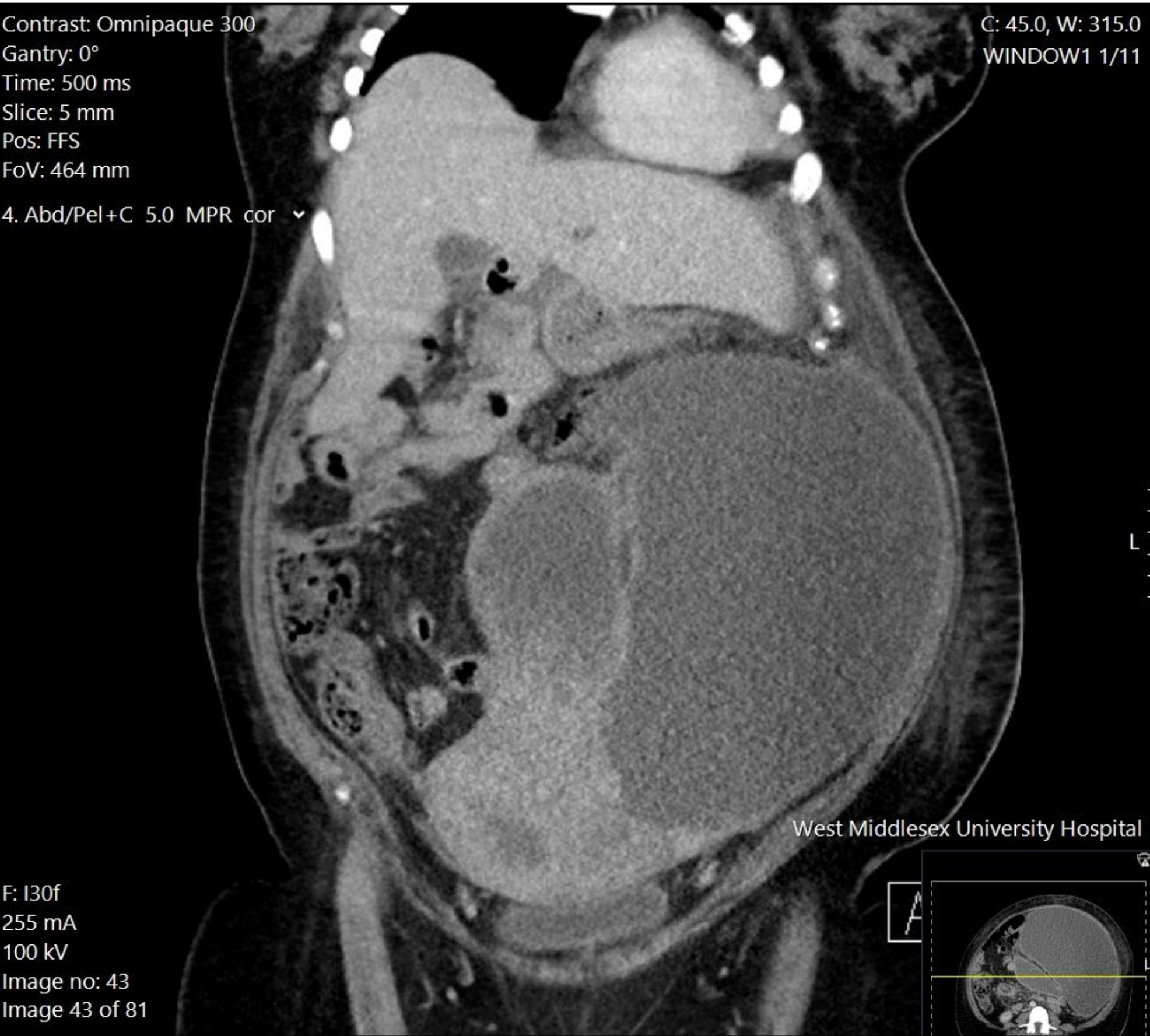


Fig. 1b

Fig. 1a & b. CT images showing a large intrauterine collection in continuity with the uterine wall. The collection extends from the pelvis to the epigastrium anteriorly.

Intra-Operative Findings

- Intraoperative findings included an abdominal collection containing 5700ml of purulent fluid in continuity with a 12 cm ruptured posterior fibroid.

- Multiple additional intra-abdominal collections were identified between bowel loops, and the rectovaginal and uterovesical spaces.

- Following extensive adhesiolysis and drainage of the collections, a myomectomy was performed.

Fig. 2. Image of the ruptured posterior uterine leiomyomoma after myomectomy.

Point of rupture can be seen on the superior aspect of the specimen.

It measures 15cm x 12cm. Histology of this specimen confirmed this to be an apoplectic fibroid.



Post-operative care and recovery

- The patient fully recovered, and was discharged from hospital 11 days post operatively

- The patient completed 4 weeks of intravenous antibiotics.

- Subsequent cultures identified *Prevotella bivia*. Histological analysis was consistent with an apoplectic leimyoma.

Discussion

Postnatally there are complex mechanical and cellular mechanisms involved in uterine involution. These can have a significant impact on fibroid regression as illustrated here.

This case demonstrates the unique disease manifestation of *P. bivia* in the context of a pyomyoma.

- P. bivia* is an anaerobic commensal of genital tract.
- It is more commonly associated with pelvic inflammatory disease ³.

Above all case demonstrates importance of considering pyomyoma as part of the differential diagnosis in a patient with the triad² of:

- Postpartum sepsis and pain.
- Presence of known fibroids
- No other apparent source of infection

Conclusion

- As pyomyoma is a rare condition, with unspecific symptoms,
- An early diagnosis may be challenging.

- This case exemplifies the need for prompt surgical intervention.
- It is important to consider pyomyoma as a differential diagnosis in pregnant or postnatal women with known fibroids, who present with abdominal pain, and sepsis.

References

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