

A case of pyomyoma following uterine artery embolization for postpartum haemorrhage

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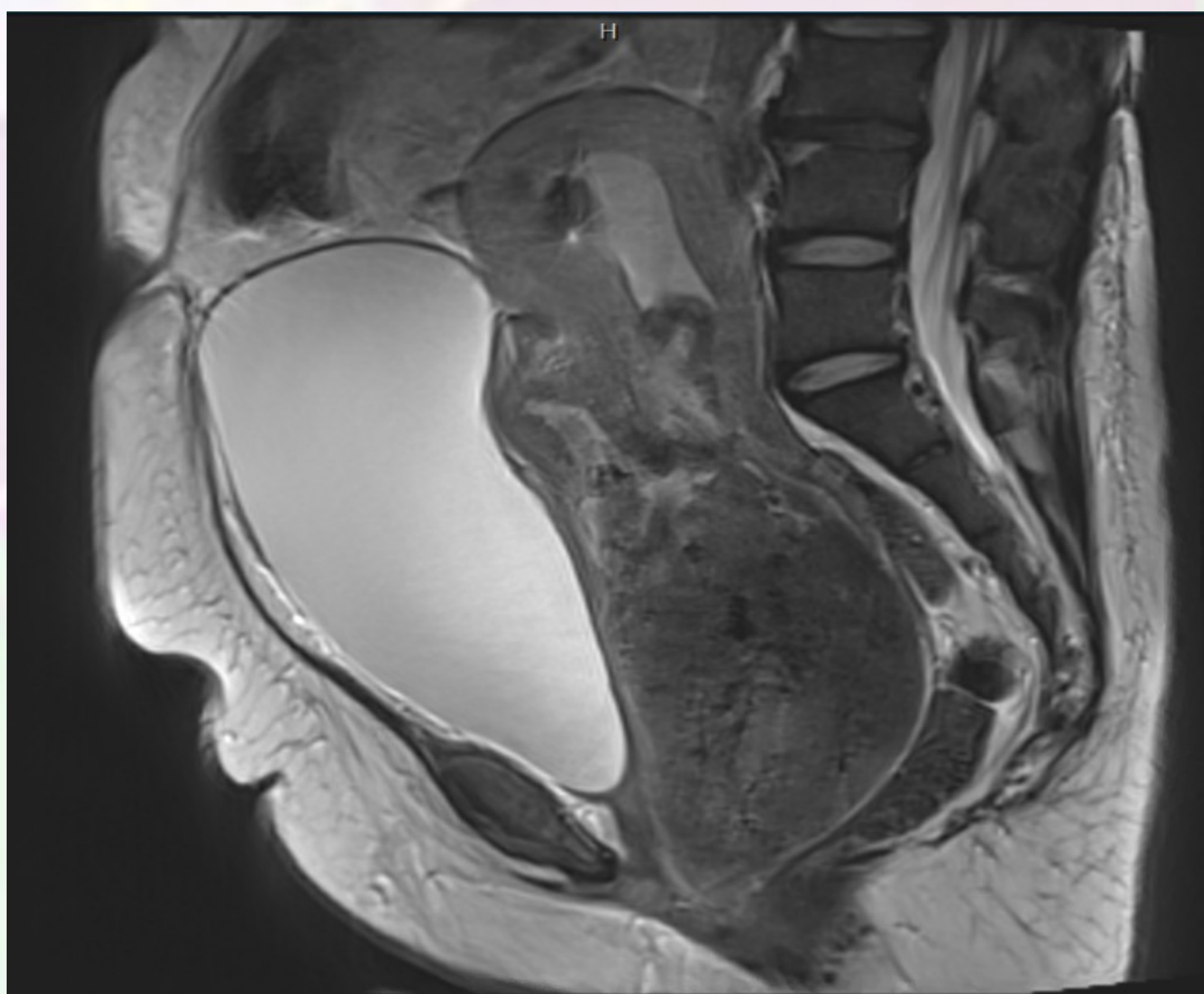
INTRODUCTION

Uterine artery embolization (UAE) has been used in the treatment of symptomatic fibroid to women who are not keen on surgical procedures or who are unfit for surgery. Although UAE for PPH is generally considered a safe and effective procedure, it may result in several significant medical complications such as uterine necrosis and pyomyoma. Pyomyoma in post-UAE patients is rare, and to the best of our knowledge, only 11 cases were reported in the literature. The diagnosis is arduous due to non-specific clinical and radiological findings.

CASE REPORT

This case follows a 31-year-old female with a known anterior wall fibroid (16.6x12x13) presented in active labour at 40 weeks and delivered vaginally. Delivery was complicated with major postpartum hemorrhage due to uterine atony, she received all the uterotonics, Bakri balloon was inserted, but patient continued to bleed, decision was taken for Uterine artery embolization. She had a few spikes of low-grade fever post embolization and was started on Intravenous tazocin after which the fever subsided. Estimated blood loss was 4 litres. She was discharged on the 9th postnatal day in good health on oral antibiotics. After 12 days she was readmitted with complains of fever and foul smelling lochia , with a clinical picture suggestive of suspected endometritis or post embolization syndrome. Abdominal examination revealed a non-tender pelvic mass of 22 weeks size .Per speculum showed a 4 cm necrotic fibroid protruding from the cervix into the vagina along with blood stained foul smelling vaginal discharge.

She was commenced on intravenous Tazocin and Vancomycin. MRI showed vagina very distended with compression on the rectum, containing very large fluid collection of mixed signal intensity as well as air. Expanded endometrial cavity. The anterior part of lower cervix and the lower part of the cervical canal was bulky. Overall image suggested fibroid sloughing. She continued to be febrile with a rising CRP, so in view of her worsening condition she was consented for examination under anesthesia followed by vaginal myomectomy and possible need for hysterectomy. Intraoperatively the whole 15cm fibroid prolapsed through the cervical canal into the vagina upon fundal pressure. foul smelling pedunculated fibroid, with avascular changes, majority on anterior wall of the uterus was seen. A Vaginal myomectomy was done.



MRI showing hugely distended urinary bladder due to compression effect from the mass occupying the vagina.



Intra op protrusion of pyomyoma through the vagina

DISCUSSION

The occurrence of pyomyoma after UAE poses a diagnostic challenge since its presentation resembles that of post-embolization syndrome (PES), which consists of fever, pelvic pain and leukocytosis within 1 week of UAE. PES is a self-limited complication occurring in about one-third of UAE cases and is typically managed conservatively with hydration, anti-inflammatory medications and pain control [5]. However, the development of fever, pelvic pain, and leukocytosis beyond one week following UAE should raise clinical concern for pyomyoma [6] In our case the patient had few spikes of fever after the embolization done for PPH and was started on broad spectrum antibiotics ,

which could have masked the initial presentation of a pyomyoma which lead her to get readmitted 12 days later with worsening symptoms and sepsis. Pyomyomas following pregnancy or abortion develop insidiously over days to weeks because of extension of infection from the uterine cavity, from adjacent structures or via hematogenous or lymphatic spread [5]. in our case could be from the Bakri balloon insertion. Without effective and prompt treatment, pyomyoma mortality might exceed 20%.

CONCLUSION

Hysterectomy along with broad-spectrum antibiotic treatment, is the treatment of choice for pyomyoma ,only a few cases of uterus-preserving management have been reported , our case is among one of them. Pyomyoma has a significant morbidity and mortality rate because it can cause sepsis, peritonitis and respiratory distress syndrome. Due to its rarity, accurate diagnosis depends on high degree of suspicion and quick treatment is advised to lower mortality. Diagnostic aids include ultrasound, computed tomography and magnetic resonance imaging. The prognosis is good after diagnosis and timely surgical management.

REFERENCES

1. Mutiso SK, Oindi FM, Hacking N, Obura T: Uterine Necrosis after Uterine Artery Embolization for Symptomatic Fibroids. Case Rep Obstet Gynecol. 2018;282018, 10:5994572. [10.1155/2018/9621741](#)
2. Song H., Seo J.W., Shin W: Pyomyoma after uterine artery embolization for postpartum hemorrhage misdiagnosed as uterine necrosis. J Korean Soc Radiol. 1:63-68. [10.3348/jksr.2018.78.1.63](#)
3. Clinical. Imaging and Procedural Risk Factors for Intrauterine Infective Complications After Uterine Fibroid Embolisation: A Retrospective Case Control Study. 2020, 43:1910-1917. [10.1007/s00270-020-02622-2](#)
4. Wang, J., Li, Z. & Sun, Y: Prolapsed submucosal pyomyoma postpartum, a rare complication of fibroids. BMC Pregnancy Childbirth 21. 132:10.1186/s12884-021-03619-6
5. Mason TC, Adair J, Lee YC: Postpartum pyomyoma. J Natl Med Assoc. 2005, 97:826-8.
6. Ezzedine D, Ndubizu C, Kayani S: David Pyomyoma after uterine artery embolization: A case report. Case Rep. Womens Health. 2020, 3:00186-10. [10.1016/j.crwh.2020.e00186](#).
7. Obele C.C., Dunham S., Bennett G., Pagan J., Sung L.Y., Charles H.W: A case of pyomyoma following uterine fibroid embolization and a review of the literature. Case Rep Obstet Gynecol. 2016;2016, 2016:2016. [10.1155/2016/9835412](#)
8. Iwahashi N, Mabuchi Y, Shiro M, Yagi S, Minami S, Ino K: Large uterine pyomyoma in a perimenopausal female: A case report and review of 50 reported cases in the literature. Mol Clin Oncol. 2016, 5:527-531. [10.3892/mco.2016.1005](#)
9. Chen ZH, Tsai HD, Sun MJ: Pyomyoma: a rare and life-threatening complication of uterine leiomyoma. Taiwan J Obstet Gynecol. 2010, 49:351-356. [10.1016/S1028-4559\(10\)60072-1](#)