



SUCCESSFUL CONSERVATIVE MANAGEMENT OF A LOCULATED POST-CAESAREAN PELVIC COLLECTION WITH SURGICAL-SITE INFECTION: A CASE REPORT

Dr Soumiyaa Carthigueane

MS OG, Department of Obstetrics and Gynaecology, Sri Venkateshwara Medical College and Hospital and Research centre, Ariyur, Puducherry.

Dr Kalaivani Thirupathi

MS OG, FMAS, FRM, Assistant Professor, Department of Obstetrics and Gynaecology, Sri Venkateshwara Medical College and Hospital and Research centre, Ariyur, Puducherry.

Dr Jayalakshmi Meganathan

MS OG, FMAS, Assistant Professor, Department of Obstetrics and Gynaecology, Sri Venkateshwara Medical College and Hospital and Research centre, Ariyur, Puducherry.

Dr Ammulu Srinivasan

MD OG, Professor, Department of Obstetrics and Gynaecology, Sri Venkateshwara Medical College and Hospital and Research centre, Ariyur, Puducherry.

ABSTRACT

Background: Post-caesarean pelvic collections accompanied by fever and surgical-site infection may raise concern for pelvic abscess and often prompt consideration of drainage. However, in clinically stable patients, carefully selected conservative management with appropriate antibiotics and close imaging surveillance may be successful. **Case Presentation:** A 28-year-old G4P1L1A2 woman with morbid obesity, GDM on metformin and hypothyroidism underwent emergency repeat LSCS at 33–34 weeks for preterm labour with scar tenderness. Postoperatively, she developed fever, wound dehiscence and serous discharge. Dengue IgM was positive and blood culture was sterile. POD 6 ultrasound showed a $6.7 \times 6.0 \times 5.0$ cm loculated right pelvic collection with a 2.9×0.8 cm subcutaneous wound collection. As she remained haemodynamically stable without peritonitis or persistent sepsis and responded to IV antibiotics, drainage was deferred. Serial imaging demonstrated significant reduction of the pelvic collection. Wound culture grew *E. Coli*, treated with cefoperazone-sulbactam followed by oral amoxicillin-clavulanate. Secondary wound resuturing was performed on POD 20 after healthy granulation, and she was discharged with satisfactory wound healing. **Conclusion:** Conservative management may be successful in stable patients with post-caesarean pelvic collections, with drainage guided by clinical response and serial imaging rather than size alone.

KEYWORDS :

INTRODUCTION

Post-caesarean surgical-site infection and pelvic collections are important causes of postpartum morbidity, particularly after emergency caesarean delivery. Postoperative fever requires evaluation for wound infection, endometritis and pelvic abscess.

Management of pelvic collections depends on clinical status, collection characteristics and response to antibiotics; drainage is considered when infection persists or the patient deteriorates. We report a case of a loculated post-caesarean pelvic collection with *Escherichia coli* wound infection that resolved successfully with conservative antibiotic therapy and serial ultrasonographic monitoring.

Case Presentation

A 28-year-old G4P1L1A2 woman with morbid obesity, gestational diabetes mellitus on metformin and hypothyroidism on thyroxine presented in preterm labour at 33–34 weeks of gestation. Her obstetric history included two previous second-trimester pregnancy losses requiring dilatation and curettage and a previous preterm caesarean delivery following cervical cerclage. In the current pregnancy, prophylactic cervical cerclage had been placed at 14 weeks. She subsequently developed gestational diabetes requiring metformin.

She presented with uterine contractions and scar tenderness. Examination revealed a cephalic presentation, contractions occurring three in 10 minutes and a cervix that was 80% effaced and 3–4 cm dilated, with the cerclage in situ. In view of previous LSCS with active preterm labour and scar tenderness, an emergency repeat LSCS with cerclage removal was performed. A live female infant weighing 2.16 kg

was delivered with Apgar scores of 8 and 9 at 1 and 5 minutes, respectively. The intraoperative period was uneventful.

During the postoperative period, she developed recurrent fever. On postoperative day (POD) 3, serous discharge from the incision was noted, followed by wound gaping measuring approximately 3×2 cm. Dengue IgM was positive, while blood culture remained sterile. Ultrasonography on POD 6, although technically limited by poor penetration, demonstrated a loculated right pelvic collection measuring $6.7 \times 6.0 \times 5.0$ cm (approximately 100 mL) and an ill-defined left subcutaneous collection measuring 2.9×0.8 cm at the incision site. The uterus showed expected postpartum changes without a focal lesion.

As the patient remained haemodynamically stable, without generalized peritonitis or persistent sepsis, and showed clinical improvement with intravenous antibiotics, drainage of the pelvic collection was deferred. Broad-spectrum intravenous antibiotics, supportive care, daily wound dressing and serial ultrasonographic monitoring were continued. (Figure 1)

On POD 9, repeat ultrasonography demonstrated significant reduction of the pelvic collection with minimal residual free fluid. The subcutaneous collection also showed reduction, measuring approximately 4.6×1.0 cm. Wound culture subsequently grew *Escherichia coli*, for which cefoperazone-sulbactam was continued for seven days, followed by oral amoxicillin-clavulanate. Repeat wound swab on POD 14 was sterile.

With resolution of fever, improvement in the pelvic collection and healthy wound granulation, secondary wound resuturing

was performed on POD 20 after optimization of glycaemic control. The patient remained clinically stable and was discharged on POD 22 with satisfactory wound healing.

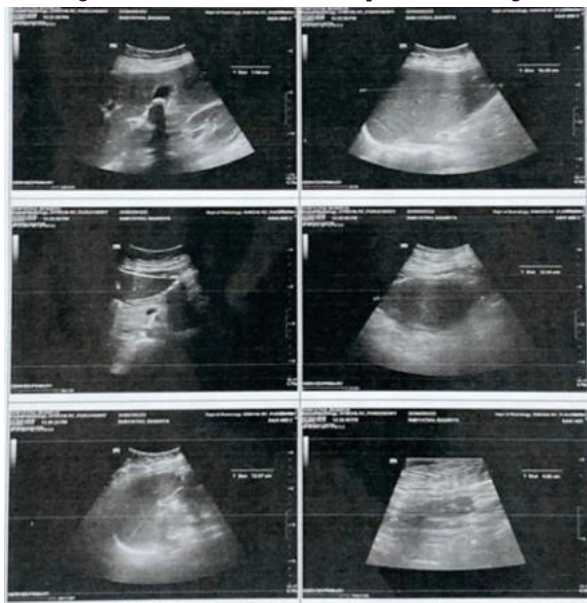


Figure 1- Ultrasonographic Image of Post Caesarean Pelvic Abscess

DISCUSSION

Post-caesarean infectious complications include wound infection, endometritis and pelvic abscess, with emergency caesarean delivery and labour before surgery increasing infectious morbidity. Obesity and diabetes may further predispose to surgical-site infection and impaired wound healing. Appropriate perioperative antibiotic prophylaxis remains an important preventive measure.

In the present case, postoperative fever was associated with wound dehiscence and a loculated right pelvic collection. The differential diagnosis included surgical-site infection, pelvic abscess and postpartum endometritis, while dengue IgM positivity provided an additional potential explanation for fever. However, the absence of persistent sepsis, peritonitis or significant uterine abnormality made definite attribution of the pelvic collection to endometritis uncertain. Persistent postpartum fever despite appropriate treatment should prompt evaluation for pelvic abscess and other causes of postoperative fever.

The principal management challenge was whether the approximately 6.7-cm loculated collection required drainage. Although drainage may be necessary for clinically deteriorating patients or collections that fail to respond to antimicrobial therapy, this patient remained haemodynamically stable and demonstrated clinical improvement with antibiotics. Serial ultrasonography showed significant reduction of the pelvic collection within 48 hours, supporting continuation of conservative treatment.

The wound culture grew *Escherichia coli*, allowing antimicrobial therapy to be guided by microbiological findings. Daily wound care and subsequent secondary resuturing after healthy granulation and glycaemic optimization resulted in satisfactory healing. This case emphasizes that collection size alone should not determine the need for drainage; clinical condition, evidence of sepsis, accessibility of the collection and response to antimicrobial therapy should be considered collectively.

CONCLUSION

A loculated post-caesarean pelvic collection can be

successfully managed conservatively in a clinically stable patient. Close clinical assessment, appropriate antibiotics and serial imaging may allow resolution without drainage, with intervention reserved for clinical deterioration or failure to respond to treatment.

REFERENCES

1. Hayasaka M, et al. Infection after cesarean delivery: diagnosis, pathophysiology, management, and prevention. *Am J Obstet Gynecol.* 2026.
2. World Health Organization. WHO recommendation on prophylactic antibiotics for women undergoing caesarean section. Geneva: WHO; 2021.
3. World Health Organization. Global guidelines for the prevention of surgical site infection. 2nd ed. Geneva: WHO; 2018.
4. World Health Organization. WHO recommendations for prevention and treatment of maternal peripartum infections. Geneva: WHO; 2015.
5. MSD Manual Professional Edition. Postpartum endometritis: diagnosis and management.