Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas

Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)

ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

CHOICE OF SURGICAL TREATMENT METHOD FOR PILONIDAL ABSCESS IN PREGNANT PATIENTS

F.D. Ikramova
Associate Professor, Department of General Surgery and Transplantology
Andijan State Medical Institute Andijan, Uzbekistan.

Abstract

Background. Acute suppurative processes of the sacrococcygeal region in pregnant patients present a challenging clinical dilemma due to the critical need to balance surgical radicality with the minimization of fetal risks.

Objective. To evaluate the efficacy and safety of various surgical approaches for pilonidal abscess (PA) management in pregnant patients across different trimesters of gestation.

Materials and Methods. A retrospective analysis of 42 pregnant patients treated for PA was conducted. Patients were divided into two groups: Group I ($n=22$) underwent radical excision of the abscess along with adjacent soft tissues; Group II ($n=20$) underwent a two-stage approach (minimally invasive incision, drainage, and delayed radical surgery in the postpartum period).

Results. In Group I, the wound complication rate was 13.6%, with a mean hospital stay of $9,2 \pm 1,4$ days. In Group II, no wound complications were recorded during the gestational period, and the mean hospital stay was $4,1 \pm 0,8$ days. Uterine hypertonus was observed in 18.1% of cases in Group I versus 5.0% in Group II; the threat of preterm labor occurred in 13.6% and 5.0% of cases, respectively.

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas

Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)

ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

Conclusion. The two-stage treatment method for PA in pregnant women is the strategy of choice, as it reduces surgical trauma, minimizes anesthesia exposure time, and mitigates obstetric risks.

Keywords: Pilonidal sinus, abscess, pregnancy, minimally invasive surgery, obstetric complications.

1. Introduction

Pilonidal sinus disease (PSD) is a congenital anomaly of the skin in the sacrococcygeal region, occurring in 1–2% of the population. Pregnancy acts as a potent trigger for the manifestation or exacerbation of latent PSD, leading to the development of a pilonidal abscess (PA). This is driven by the combined effects of several pathophysiological factors:

1. Physiological lordosis and a shift in the center of gravity, which increase mechanical load and friction within the intergluteal cleft.
2. Progesterone-induced hyperhidrosis and alterations in the architecture of sebaceous and sweat glands.
3. Natural gestational immunosuppression, which reduces resistance to opportunistic microflora (predominantly *Staphylococcus aureus* and *Bacteroides spp.*).

The fundamental dilemma of treating PA in pregnant patients lies in the conflict between the rules of radical septic surgery and the principles of perinatal safety. Radical excision of PSD during acute purulent inflammation requires extensive anesthesia, carries a high risk of bleeding due to tissue engorgement during pregnancy, and demands a prolonged period of secondary intention wound healing. Conversely, inadequate drainage threatens the development of systemic inflammatory response syndrome (SIRS) and intrauterine infection.

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas
Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)
ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

Objective: To optimize the surgical management strategy for pregnant patients presenting with acute pilonidal abscess based on a comparative analysis of immediate surgical and obstetric outcomes.

2. Methods

This retrospective comparative study included 42 pregnant patients diagnosed with "Pilonidal cyst with abscess" (ICD-10: L05.0) who received treatment between 2020 and 2025.

Inclusion Criteria:

- Confirmed pregnancy (any trimester).
- Acute stage of inflammation (abscess formation).
- Absence of severe, decompensated somatic comorbidities.

Patients were allocated into two groups based on the chosen surgical approach:

- **Group I ($n=22$):** Patients underwent one-stage radical excision of the abscess, epithelial tracks, and surrounding altered tissues down to the sacral fascia, followed by partial wound closure or management by secondary intention (open wound).
- **Group II ($n=20$):** A two-stage strategy was applied. The first stage (during gestation) involved minimally invasive, out-of-focus incision of the abscess, debridement, and drainage. The second stage (3–6 months postpartum) planned for definitive radical excision of the pilonidal sinus.

Anesthesia and Monitoring Methods:

In Group I, spinal anesthesia or intravenous general anesthesia was predominantly utilized ($n=15$). In Group II, local infiltration anesthesia using a 1% procaine or lidocaine solution under ultrasound guidance was performed in 85% of cases ($n=17$). Fetal cardiotocography (CTG) monitoring was mandatory before and after every surgical intervention.

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas
Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)
ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

Statistical analysis was performed using Student's t-test for continuous variables and the Chi-square (χ^2) test for categorical data. Differences were considered statistically significant at $p < 0.05$.

3. Results

The evaluation of clinical efficacy revealed significant differences between the two groups across key surgical and obstetric parameters (Table 1).

Table 1. Comparative treatment outcomes of patients in Groups I and II

Clinical Parameter	Group I (n=22)	Group II (n=20)	p-value
Duration of surgery (min)	$38,5 \pm 5,2$	$12,3 \pm 2,1$	$< 0,01$
Volume of blood loss (mL)	$65,0 \pm 12,0$	$10,0 \pm 3,0$	$< 0,01$
Pain intensity via VAS (Day 1)	$6,4 \pm 0,8$	$2,8 \pm 0,5$	$< 0,01$
Time to wound bed clearance (days)	$7,2 \pm 1,1$	$3,4 \pm 0,6$	$< 0,05$
Hospital stay (days)	$9,2 \pm 1,4$	$4,1 \pm 0,8$	$< 0,01$
Postoperative uterine hypertonus, n (%)	4 (18.1%)	1 (5.0%)	$< 0,05$

In Group I, due to the extensive size of the wound defect, 3 cases (13.6%) experienced wound infection progression that required secondary necrectomy. In Group II, no abscess recurrences were recorded during the gestational period; wounds healed with the formation of a stable, non-acute fistula sustained until delivery.

Obstetric complications, specifically the threat of preterm labor requiring tocolytic therapy, were significantly more frequent in Group I (13.6% vs. 5.0%), directly correlating with the duration of postoperative pain and the volume of anesthetics administered.

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas
Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)
ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

4. Discussion

The findings demonstrate a distinct advantage for the minimally invasive, two-stage approach (Group II) in the management of PA during pregnancy. Radical surgery performed amid acute inflammation (Group I) not only extends fetal exposure to xenobiotics (anesthetics) but also establishes a massive pain focus within the highly reflexogenic sacrococcygeal zone. This induces a surge of catecholamines, causing placental vasoconstriction and triggering uterine hypertonus.

The selection of surgical tactics must be strictly tailored to the specific trimester of pregnancy:

- **First Trimester:** The period of organogenesis. Any radical intervention is strictly contraindicated due to the teratogenic risks of anesthetics and the high risk of miscarriage. Only needle aspiration or micro-incision for decompression is permitted.
- **Second Trimester:** A relatively stable period. However, massive wounds in the sacrococcygeal region following radical excision severely restrict patient mobility, significantly elevating the risk of thromboembolic complications.
- **Third Trimester:** Radical procedures are impractical because secondary intention wound healing cannot be completed prior to onset of labor. Furthermore, an open, suppurative wound in close proximity to the birth canal amplifies the risk of ascending infectious complications during delivery.

Thus, palliative incision and drainage effectively resolve the primary clinical objective—eliminating the acute purulent focus and mitigating systemic intoxication—allowing the pregnancy to safely progress to spontaneous term delivery.

Eureka Open Access Journals
Open Access | Peer Reviewed | International Journals | Multidisciplinary Areas

Eureka Journal of Health Sciences & Medical Innovation (EJHSMI)

ISSN 2760-4942 (Online) Volume 2, Issue 6, June 2026

https://eurekaoa.com/index.php/5

5. Conclusion

1. Radical excision of a pilonidal abscess during pregnancy is associated with a high risk of obstetric complications (18.1% rate of uterine hypertonus, 13.6% rate of preterm labor threat) and prolonged hospitalization up to $9,2 \pm 1,4$ days.
2. The method of choice for PA in pregnant patients is minimally invasive incision and drainage under local anesthesia, with the radical stage of treatment postponed to the postpartum period (3–6 months after delivery).
3. This clinical strategy minimizes the pharmaceutical burden on the fetus, reduces pain scores on the VAS by 2.2-fold, and ensures a safer gestational period.

References

1. Vorobyov G. I. Fundamentals of Coloproctology. — Moscow, 2006. (In Russ.)
2. Khubezov D. A. et al. Selection of treatment method for pilonidal sinus in the acute inflammation stage // Koloproktologia. — 2018. — No. 2 (64). — P. 24–29. (In Russ.)
3. Cirocchi R. et al. Minimally invasive surgery for pilonidal disease: a systematic review and meta-analysis // Tech Coloproctol. — 2021. — Vol. 25, N 10. — P. 1095–1107.
4. Garg P. et al. Laying open (fistulotomy) versus excision and healing by secondary intention in pilonidal sinus disease: a systematic review and meta-analysis // International Journal of Surgery. — 2023. — Vol. 109, N 3. — P. 450–459.
5. Doll D. et al. Long-term recurrence rate after pilonidal sinus disease surgery // Deutsche Medizinische Wochenschrift. — 2019. — Vol. 144, N 11. — P. 747–753.