International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Figueroa HM et al. Int J Reprod Contracept Obstet Gynecol. 2026 May;15(5):1803-1806
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20261290

Case Report

Spontaneous peri-clitoral abscess in two nulliparous women: a case report

Hillary Mercado Figueroa[1], Itzamar Pastrana Echevarria[2]*, Keishla Rios Cardona[3]

[1]Centro Médico Hospital Episcopal San Lucas, Department of Obstetrics and Gynecology, 917 Av. Tito Castro, Ponce, Puerto Rico
[2]Centro Médico Hospital Episcopal San Lucas, Department of Graduate Medical Education, 917 Av. Tito Castro, Ponce, Puerto Rico
[3]Mayagüez Medical Center, Department of Obstetrics and Gynecology, PR-2, Mayagüez, Puerto Rico

Received: 13 March 2026
Accepted: 09 April 2026

***Correspondence:**
Dr. Itzamar Pastrana Echevarria,
E-mail: 121ipastrana@uccaribe.edu

ABSTRACT

Peri-clitoral abscess in an uncommon vulvar infection with limited data available in the literature. Most published information consists of isolated case reports, and standardized management guidelines have not been established. We report two cases of peri-clitoral abscess in previously healthy women aged 22 and 33 years who presented with acute pain localized to the peri-clitoral region and swelling of the clitoral hood. Neither patient had identifiable risk factors such as trauma, prior vulvar surgery or hidradenitis suppurativa. Physical examination demonstrated localized erythema, edema, and a fluctuation consistent with abscess formation. Both patients underwent incision and drainage under anesthesia with careful preservation of the clitoral neurovascular bundle. Culture-directed antibiotic therapy was administered. Both patients experienced rapid postoperative improvement with complete resolution and no recurrence or functional complications at follow-up. These cases highlight that peri-clitoral abscess can occur in otherwise healthy women without identifiable risk factors. Early recognition, careful surgical drainage, and culture-guided antimicrobial therapy are essential for successful management while preserving clitoral neurovascular integrity.

Keywords: Peri-clitoral abscess, Vulvar abscess, Clitoral infection, Incision and drainage, Female genital infection

INTRODUCTION

Peri-clitoral abscess is a rare vulvar infection characterized by a localized collection of purulent material in the tissue surrounding the clitoris.[1] Clinically, it presents as an acute, painful, erythematous, and fluctuant mass enveloping the clitoral region and may be accompanied by dysuria.[1] Due to the limited medical literature, consisting primarily of isolated case reports, there are no established data regarding its incidence or prevalence.[2] Available reports suggest that the condition predominantly affects adolescent girls and young women.[2]

No specific risk factors or predisposing conditions have been clearly identified, largely because large-scale epidemiologic studies are lacking. Unlike other vulvovaginal abscesses, in which diabetes mellitus and additional systemic comorbidities have been implicated, peri-clitoral abscesses have not been consistently associated with underlying medical conditions. Among published case reports, potential contributing factors have included genital trauma, pilonidal disease, and inflammatory disorders such as Crohn's disease; however, the exact etiologic mechanisms and risk factors remain uncertain.[3]

The underlying pathophysiology is not fully understood. It has been hypothesized that retained foreign material, such as hair, may act as a nidus for abscess formation.[4] Diagnosis is primarily clinical, based on physical examination findings, while laboratory and imaging studies serve supportive roles when needed.[1] Because of the rarity of this condition, no standardized management guidelines have been established. Nevertheless, incision and drainage remains the mainstay of definitive treatment.[5] The procedure is typically performed under anesthesia, and meticulous surgical technique is essential, as preservation of the dorsal artery of the clitoris is critical to prevent ischemic injury to the glans and to maintain sexual function.[1]

To date, no official guidelines exist for the management of peri-clitoral abscess, as nearly all available literature consists of isolated case reports or small case series. Notably, "spontaneous" cases occurring in otherwise healthy women without trauma or systemic disease have been only sparsely documented. The two cases presented herein contribute to the limited body of evidence by demonstrating that pre-clitoral abscess can occur in the absence of identifiable risk factors, thereby underscoring the need for increased clinical awareness and further investigation.

CASE REPORT

Two nulliparous women aged 22 and 33 years, both without significant past medical or surgical history, presented separately to the emergency department with acute pain localized to the periclitoral region. Neither patient reported prior trauma, female genital mutilation, recent shaving or waxing injury, sexual trauma, hidradenitis suppurativa, prior vulvar surgery, or history of sexual transmitted infections. Both denied systemic symptoms including fever, chills, or malaise.

On physical examination, both patients were hemodynamically stable and afebrile. Inspections of the external genitalia revealed localized erythema, induration, and edema confined to the clitoral hood. Palpation elicited marked tenderness and fluctuation consistent with abscess formation. No extension into the labia majora or minora was observed, and there were no signs suggestive of necrotizing soft tissue infection. The bartholin glands were normal bilaterally. No inguinal lymphadenopathy was noted.

Both patients were admitted for analgesia and initiation of intravenous broad-spectrum antibiotic therapy. They subsequently underwent incision and drainage of the peri-clitoral abscess under anesthesia. Surgical planning emphasized preservation of the dorsal artery of the clitoris and associated neurovascular structures. A carefully oriented vertical incision was performed to allow adequate drainage while minimizing risk to the clitoral neurovascular bundle.

In the 22-year-old patient, a cyst-like structure with necrotic tissue was identified intraoperatively, excised and sent for histopathologic evaluation. Histopathology demonstrated ulcerated clitoral mucosa with underlying abscess necrosis and aggregates of granulation tissue formation. Wound cultures grew *Escherichia coli, Enterococcus faecalis,* and *Staphylococcus haemolyticus*. Based on culture sensitivities, the patient was treated with ceftriaxone 2 g IV every 24 hours and linezolid 600 mg IV every 12 hours for 14 days. On the other hand, in the 33-year-old patient, wound culture grew *Escherichia coli* alone. She was treated with culture-directed intravenous antibiotics followed by oral therapy to complete the prescribed course.

In both patients, by postoperative day five, vulvar edema, erythema, and drainage had markedly improved, and pain had resolved. Their hospital courses were uncomplicated. They were discharged home to complete antibiotic therapy with instructions for outpatient follow-up. At subsequent evaluation, both exhibited complete clinical resolution without recurrence, sensory changes, or functional complications.

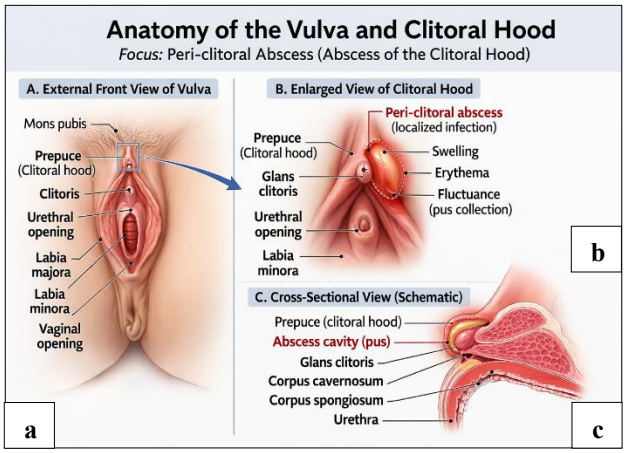

Figure 1: Anatomical representation of the vulva and peri-clitoral abscess localization, (a) external anterior view of the vulva demonstrating normal anatomical landmarks, including the mons pubis, prepuce (clitoral hood), clitoris, urethral opening, labia majora, labia minora, and vaginal opening; (b) enlarged view of the clitoral hood illustrating a peri-clitoral abscess characterized by localized swelling, erythema, and fluctuation consistent with purulent collection; and (c) schematic cross-sectional view demonstrating the anatomical relationship of the abscess cavity within the prepuce to adjacent structures, including the glans clitoris, corpus cavernosum, corpus spongiosum, and urethra. This representation highlights the proximity of the infection to the clitoral neurovascular bundle, underscoring the importance of meticulous surgical technique to preserve vascular supply and sensory function.

DISCUSSION

The two cases presented herein contribute to the limited literature describing spontaneous peri-clitoral abscess in otherwise healthy women. While prior reports have emphasized potential precipitating factors such as genital trauma, pilonidal disease, inflammatory disorders, or prior surgical manipulation, neither of our patients had identifiable risk factors.[2-4] This reinforces the observation that peri-clitoral abscess may arise in the absence of systemic disease or local insult, complicating attempts to define clear etiologic pathways.

Recurrence has been frequently reported in the literature. Koussidis documented recurrence in the majority of cases reviewed, and Dielentheis et al highlighted recurrent peri-clitoral abscess as a challenging clinical problem, sometimes requiring repeated intervention.[2,4] Erdogan Atalay similarly described cases requiring further surgical management after initial treatment.[3] In contrast, both of our patients achieved complete resolution following a single incision and drainage procedure combined with antibiotic therapy. This suggests that early recognition and definitive drainage before chronic tract formation or abscesses capsule formation may influence outcomes, although larger studies would be required to validate this hypothesis. Prior reports indicate that recurrent abscesses may harbor retained foreign material or sinus tracts, and thorough evacuation may reduce the risk of re-accumulation.[4]

Microbiologically, peri-clitoral abscesses demonstrate variability and are frequently polymicrobial. Reported organisms include *Staphylococcus aureus, Staphylococcus epidermis, Streptococcus bovis*, bacteroides species, and diphtheroid bacteria.[1] In our series, the 22-year-old patient's abscess grew *E. coli, Enterococcus faecalis*, and *Staphylococcus haemolyticus*, while the 33-year-old patient's culture yielded *E. coli* alone. These findings highlight that both enteric organisms and skin commensals may contribute to periclitoral infections. The presence of enteric flora suggests potential contamination from the perineal environment or microtrauma. These results further underscore the importance of obtaining cultures and tailoring antibiotic therapy accordingly.

Another important clinical consideration is surgical approach. Because of its rarity, peri-clitoral abscess lacks evidence based-guidelines. Clinicians rely on general principles for skin and soft tissue infections and anatomical considerations.[1] Unlike more common vulvar abscess, peri-clitoral abscesses occur in proximity to the dorsal neurovascular bundle of the clitoris. Injury to these structures carries the potential risk of sensory loss, ischemia, or long-term sexual dysfunction.[9] In our cases, careful operative planning and preservation of the dorsal artery were prioritized, and no postoperative sensory deficits were observed.

The differential diagnosis of peri-clitoral abscess is broad and includes Bartholin gland abscess, infected epidermal inclusion cyst, hidradenitis suppurativa, infected Skene's gland cyst, and sexually transmitted infections complicated by secondary abscess formation. Precise anatomical localization is critical in distinguishing these entities. For example, Bartholin glands are anatomically located posterolaterally and not within the clitoral hood. Pilonidal disease, although uncommon in the vulva, has been reported in the clitoral region.[7,8] Classic descriptions by Palmer and Betson et al documented pilonidal cysts and sinus tracts involving the clitoris.[7,8] These reports suggest that some cases clinically diagnosed as peri-clitoral abscess may represent infected pilonidal disease, which may influence recurrence risk and the need for excision rather than simple drainage.

The prognosis of peri-clitoral abscess is generally favorable with prompt recognition and appropriate management. However, recurrence remains a significant concern. A 2012 review of 18 cases reported recurrence in 14 patients.[2] In the limited case series available, recurrence has been documented following both conservative management with antibiotics alone and after incision and drainage procedures.[4] In one premarchal case, this approach resulted in spontaneous drainage and complete healing with normal appearance at 6 month follow-up.[6] Nonetheless, early intervention combined with appropriate antimicrobial therapy may reduce the likelihood of chronicity or repeat infection.

CONCLUSION

Taken together, these cases highlight several practical considerations. First, peri-clitoral abscess, although rare, should be included in the differential diagnosis of acute peri-clitoral pain and swelling, particularly when Bartholin pathology is excluded by location. Second, given recurrence patterns described in reviews and case reports, clinicians should consider the possibility of an underlying nidus in persistent or recurrent presentations. Third, incision and drainage remains the cornerstone treatment, with antibiotics individualized and ideally guided by culture results. Finally, given the proximity to structures essential for sexual function and perfusion, meticulous preservation of the clitoral neurovascular bundle must be an integral component of operative management.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Ferhi M, Marwen N, Alouen C. Clitoral Abscess: A Case Report Highlighting an Uncommon Source of Gynecological Emergency. Cureus. 2023;15(12):e50114.

2. Koussidis GA. Gynecologic rarities: a case of periclitoral abscess and review of the literature. Am J Obstet Gynecol. 2012;207(5):e3-e5.
3. Erdoğan Atalay N, Çalışkan Ş. Periclitoral abscess: Two case studies. Pelviperineology. 2025;44(2):82-5.
4. Dielentheis K, Samant S, Dropps K. Periclitoral Abscess: A Recurrent Problem. J Pediatr Adolesc Gynecol. 2022;35(3):393-5.
5. Stevens DL, Bisno AL, Chambers HF, Dellinger EP, Goldstein EJC, Gorbach SL, et al. Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2014;59(2):e10-52.
6. Lara-Torre E, Hertweck SP, Kives SL, Perlman S. Premenarchal recurrent periclitoral abscess: a case report. J Reprod Med. 2004;49(12):983-5.
7. Palmer E. Pilonidal cyst of the clitoris. Am J Surg. 1957;93(1):133-6.
8. Betson JR Jr, Chiffelle TL, George RP. Pilonidal sinus involving the clitoris: a case report. Am J Obstet Gynecol. 1962;84:543-5.
9. Sönmezer M. Neurovascular bundle-sparing ventral clitoroplasty in adult patients: description of the technique and long-term outcome on clitoral functions. J Turk Ger Gynecol Assoc. 2023;24(2):109-13.

Cite this article as: Figueroa HM, Echevarria IP, Cardona KR. Spontaneous peri-clitoral abscess in two nulliparous women: a case report. Int J Reprod Contracept Obstet Gynecol 2026;15:1803-6.