OPEN ACCESS

Saudi Journal of Medical and Pharmaceutical Sciences

Abbreviated Key Title: Saudi J Med Pharm Sci
ISSN 2413-4929 (Print) | ISSN 2413-4910 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: https://saudijournals.com

Case Report **Surgery**

Bartholin's Gland Abscess Due to Haemophilus Influenzae: Case Report and Literature Review

Elmostafa Benaissa[1]*, Yassine Benlahlou[1], Adil Maleb[2], Mariama Chadli[1], Mostafa Elouennass[1]

[1]Department of Clinical Bacteriology, Mohammed V Military Teaching Hospital, Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Morocco
[2]Laboratory of Microbiology, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy (University Mohammed the First), Oujda, Morocco

DOI: https://doi.org/10.36348/sjmps.2025.v11i08.006 | **Received:** 03.06.2025 | **Accepted:** 02.08.2025 | **Published:** 14.08.2025

***Corresponding author:** Elmostafa Benaissa
Department of Clinical Bacteriology, Mohammed V Military Teaching Hospital, Faculty of Medicine and Pharmacy of Rabat, Mohammed V University, Rabat, Morocco

Abstract

Bartholinitis is a common infection of the vulvar region, often polymicrobial in origin. While *Escherichia coli* and sexually transmitted pathogens are usually implicated, *Haemophilus influenzae* is rarely identified. We report a case of bartholinitis caused by *H. influenzae* in a young woman with no notable medical history. This case highlights the need to consider unusual pathogens in bartholinitis and the importance of an appropriate protocol for sample collection and culture.

Keywords: Bartholinitis, *Haemophilus influenzae*, Genital infection, Abscess.

INTRODUCTION

Acute bartholinitis is a localized inflammation of the Bartholin gland. Cysts and abscesses of this gland represent the most frequent cystic infectious pathology of the vulvar region [1]. The infection generally results from an ascending canalicular contamination, often of vaginal and sexually transmitted origin (*Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Mycoplasma spp.*) [2]. Other digestive origins may also be involved: Enterobacteriaceae, *Escherichia coli*, *Enterococcus spp.*, or anaerobes [3]. However, bartholinitis cases involving *Haemophilus influenzae* remain extremely rare [4,5]. We report an unusual case of *H. influenzae* bartholinitis in a young immunocompetent woman.

CASE REPORT

A 35-year-old woman with no significant medical or surgical history was admitted to the gynecology department for febrile vulvo-perineal throbbing pain evolving over two days. Obstetric history included two miscarriages and two full-term deliveries. Clinical examination revealed a 10 cm painful erythematous swelling on the left labia with purulent discharge. Surgical drainage through an incision at the nympho-hymenal sulcus allowed for abscess evacuation and antiseptic lavage. Hematic fluid was drained. Microscopic examination showed a predominance of neutrophilic polymorphonuclear cells.Gram staining revealed numerous Gram-negative bacilli. Aerobic culture on standard, selective, and enriched media yielded mucoid colonies.

Colony examination confirmed the presence of Gram-negative coccobacilli. Identification using API NH gallery confirmed *Haemophilus influenzae* with a high confidence level (99%). Biological tests showed leukocytosis (17 G/L) and elevated C-reactive protein (CRP: 37 mg/L). Antibiotic susceptibility testing revealed sensitivity to amoxicillin-clavulanic acid, cephalosporins, chloramphenicol, trimethoprim-sulfamethoxazole, fluoroquinolones, and rifampicin. The patient was treated with amoxicillin/clavulanic acid for 10 days, resulting in favorable clinical and biological outcomes.

DISCUSSION

Haemophilus influenzae is a commensal bacterium of the upper respiratory tract belonging to the *Pasteurellaceae* family. It can be responsible for invasive or opportunistic community-acquired infections. Its presence in the genital tract is uncommon but documented [4–6]. Genital infections due to *H. influenzae* are rare, with few reported cases in the

literature. Hall *et al.,* and Guine *et al.,* described isolates from vaginal swabs and cases of pyosalpingitis. Albritton *et al.,* reported a prevalence of genital isolation ranging from 0.3% to 0.5% [4–6]. Bartholinitis can result from de novo infections, superinfection of a pre-existing cyst, or postoperative complications (e.g., vulvovaginal surgery) [7]. Deliveries or episiotomies may lead to obstruction of the Bartholin gland duct, favoring infection [1,8].

Our patient, a multiparous woman, fits this physiopathological context. Pathogens commonly isolated in bartholinitis include Enterobacteriaceae and anaerobes, while gonococci are more frequently involved in bilateral cases [2,3]. The isolation of *H. influenzae* should prompt the use of enriched culture media and its consideration in atypical vulvar infections.

CONCLUSION

Bartholinitis caused by *Haemophilus influenzae* is a rare and probably underdiagnosed entity. It emphasizes the importance of a rigorous microbiological workup, including the use of enriched and selective media. Recognition of this organism is crucial for appropriate antimicrobial therapy and for preventing treatment failures.

Acknowledgements

We would like to thank all the technicians of the Bacteriology Laboratory of the Mohammed V Military Hospital in Rabat for their contribution to the achievement of this study.

Funding: No funding was received for this study.

Consent for publication: Not applicable.

Competing interests: The authors declare that they have no competing interests.

REFERENCES

1. Brook I. Microbiology of Bartholin gland abscess in adolescents. *J Pediatr Adolesc Gynecol*. 1995;8(4):170–2.
2. Wechter ME, Wu JM, Visco AG, Myers ER. Management of Bartholin duct cysts and abscesses: a systematic review. Obstet Gynecol Surv. 2009;64(6):395–404.
3. Van Eyk N, Allen LM. Infectious causes of vulvovaginitis in prepubertal girls. J Paediatr Child Health. 2011;47(3):133–6.
4. Guine M, Garbin F, Fournier P, Mensier E. Pyosalpingite à *Haemophilus influenzae*. Presse Med. 1997;26(20):938.
5. Hall GS, Procop GW, Javid D, Washington JA. Recovery of *Haemophilus influenzae* from vaginal cultures: a retrospective study. Diagn Microbiol Infect Dis. 1992;15(1):23–6.
6. Albritton WL. *Haemophilus influenzae* as a genital pathogen. Rev Infect Dis. 1984;6(5):693–703.
7. Kjaergaard N, Walter S. Bartholin's gland disease: a review of 17 cases. Acta Obstet Gynecol Scand. 1982;61(1):91–3.
8. Tapping CR, Byass OR, Cast JE. Needle aspiration of Bartholin's cysts and abscesses: a radiological approach to management. J Obstet Gynaecol. 2010;30(8):802–5.