



# Heterotopically Located Bartholin's Cyst

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## Abstract

Bartholin's gland is about 1 cm in size located in vulvar vestibule adjacent to the hymen. It opens into the introitus with an almost 2,5 cm length duct. The Bartholin's duct obstruction can occur as a result of non-infectious occlusion of the ostium or from infection and edema compressing the duct. In this paper we present a patient admitted to our clinic with severe vulvar pain. Her gynecological examination revealed a painful firm necrotized mass which was 4 cm in diameter on the outer side of left minor labium. The mass was excised completely and the material was send to pathology for definitive diagnosis. Histopathological examination revealed Bartholin gland cyst. To our knowledge, there isn't any case of heterotopically located bartholin cyst when the previous literature is reviewed up to now.

**Key Words:** Bartholin's gland, heterotopically location, labia minora

## Heterotopik Yerleşimli Bartolin Kisti

Bartolin bezi, yaklaşık 1 cm boyutunda ve vulva vestibulünde himene komşu yerleşimdedir. Takriben 2,5 cm uzunluğunda kanalla intraitusun içine açılır. Bartolin kanal tıkanıklığı, ostiumun enfeksiyöz olmayan tıkanıklığı veya enfeksiyon ve ödem nedeniyle kanalın kompresyonu sonucu oluşabilir. Bu yazıda, kliniğimize şiddetli vulva ağrısı ile başvuran bir hasta sunduk. Jinekolojik muayenesinde, sol labia minora dış yüzünde 4 cm çapında ağırlı, nekrotik bir kitle saptandı. Kitle tamamen çıkartıldı ve kesin tanı için patolojiye gönderildi. Histopatolojik inceleme ile bartholin bezi kisti tespit edildi. Bilgimize göre, bugüne kadar olan önceki literatür gözden geçirildiğinde heterotopik yerleşimli bartolin kisti vakası yoktur.

**Anahtar Kelimeler:** bartolin bezi, heterotopik yerleşim, labia minora

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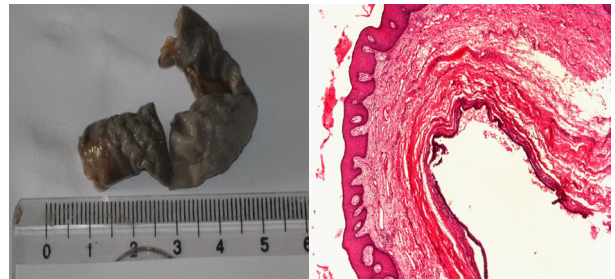
## INTRODUCTION

The major vestibular gland known as Bartholin gland is an anatomic structure neighboring to the hymen which is located under labia majors on vulva. Its mission is to produce mucus which provides lubrication and moisturizing of introitus. The Bartholin gland opens through introitus with an almost 2,5 cm length duct. Occlusion of the duct because of infection or noninfectious reasons causes mucus accumulation and cyst formation that grows in the gland (1). The prevalence of the structure named as Bartholin cyst, is estimated approximately as 2%. Risk factors for Bartholin cyst or abscess is not known accurately (2).

We present an unusual case of Bartholin cyst which was located heterotopically in labia minora and it had polypoid morphology. To our knowledge, there is no Bartholin cyst located ectopically in labia minora in previous publications.

## CASE

A 45-year-old woman, G4P4, was admitted to our clinic with painful perineal swelling started three days ago. Her past medical history revealed asymptomatic swelling existing for the last 4 years. Her gynecological examination revealed a painful firm hyperemic mass which was 4 cm in diameter on the outer side of left labia minora. There was not any significant finding in her gynecological examination. In the ultrasonographic observation, the uterus and adnexial structures were normal. Pap smear test and cervical culture were performed. The painful mass was considered to be an infected fibroepithelial polypoid. Because she was suffering from severe pain, the operation was carried out urgently. Under local anesthesia, the mass was excised completely and the material was sent to pathology for definitive diagnosis. The patient was discharged in the first day after operation without any complication. Histopathological examination revealed a 5 cm cystic mass macroscopically (Figure 1) and Bartholin gland cyst consisted of some layered epithelial cells surrounding the lumen full of proteinous secretion microscopically (Figure 2). Pap smear result was class 2 cervicitis and culture was reported as negative. During the postoperative follow up period, the patient recovered completely with no recurrence of the lesion.



**Figure 1.** Macroscopically, 5 cm cystic mass **Figure 2.** Bartholin gland with acini

## DISCUSSION

Bartholin's gland is about 1 cm in size and lie at the 4- and 8-o'clock positions of the vulvar vestibule adjacent to the hymen. It opens into the introitus with an almost 2,5 cm length duct. The Bartholin's glands are tubuloalveolar glands with acini composed of simple columnar mucus secreting epithelium. The Bartholin's ducts are prone to obstruction. Obstruction can occur as a result of non-infectious occlusion of the ostium or from infection and edema compressing the duct (1). Such obstruction results in subsequent accumulation of secretion with associated cystic dilatation of the duct. Acute inflammation of the Bartholin's gland named Bartholinitis and primary infection of gland or secondary infection of cyst named Bartholin's abscess. Bartholin cysts may be small and asymptomatic but if it is large, it can be presented with pain, dyspareunia and limitation of daily activity (2). Treatment is not necessary in women younger than 40 unless the cyst becomes infected or enlarges enough to produce symptoms (3). Bartholin's cyst presenting with swelling of vulva are confused with other vulvar masses. Fibroadenoma, fibroma, lipoma, papillary hidradenoma, syringoma, hematoma, mucous cyst, cyst of the canal of Nuck, epidermal inclusion cyst, accessory breast tissue, endometriosis, inguinal hernia extending down the labium majus, adenocarcinoma of the Bartholin gland, metastatic cancer must be considered differential diagnosis (4,5,6). Fibromas are the most common benign solid tumors of the vulva and usually found in labia majora. Smaller fibromas are firm but larger ones can become cystic after undergoing myxomatous degeneration. Lipomas are soft tumors and usually smaller than 3 cm in diameter. Hidradenoma is small, benign vulvar tumor that originates from apocrine sweat glands of the labia majora and nearby perineum and might be cystic

or solid. Syringoma is a very rare, cystic, asymptomatic, benign tumor that is usually located in the labia majora and less than 5 mm in diameter. Hematomas of the vulva are usually secondary to blunt trauma and have typical appearance. Epidermal inclusion cysts are most common small vulvar cysts and most commonly found in labia majora. These cysts are usually multiple, mobile, round, nontender and vast majority being less than 1 cm in diameter. Epidermal inclusion cysts are asymptomatic unless they are secondarily infected. Nodule or nodules of endometriosis of vulva may be cystic or solid and vary from a few millimeters to several centimeters in diameter. These lesions usually located at the site of an old, healed obstetric laceration, episiotomy site, an area of operative removal of a Bartholin's duct cyst or along the canal of Nuck. The classic history of vulvar endometriosis is cyclic discomfort and an enlargement of the mass associated with menstrual periods.

Although a pre-diagnosis of Bartholin gland abscess was made considering the patient's complaint of severe pain and asymptomatic vulvar swelling in her past medical history in our case, a mass originating from labia minora was detected in the gynecological examination.

The mass had a hyperemic appearance locating the outer superior site of labia minora. It was thought to be an infected fibroepithelial polypoid structure with a peduncle. The histopathological examination was reported as Bartholin cyst after total surgical excision. This is the first case of heterotopically located Bartholin cyst when the previous literature is reviewed up to now.

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