

Bartholin Gland Excision: An Evaluation of 149 Cases

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Abstract

Objective: The purpose of this retrospective study was to examine cases with Bartholin gland excision due to Bartholin cyst or abscess.

Methods: The files of 149 patients who underwent total excision of the Bartholin gland due to cyst or abscess in İstanbul Kanuni Sultan Süleyman Training and Research Hospital between January 2011 and December 2016 were retrospectively evaluated for demographic features, obstetric and medical history of the patients, location and size of the Bartholin cyst or abscess, complaints, duration of operation, and postoperative complications.

Results: The mean age of the patients was 33.33 ± 7.126 years. The gravida and parity mean values were 2.11 and 1.56, respectively. Of the patients, 35 were nulliparous, and 108 had vaginal delivery. The mean diameter of the cyst was found to be 3.18 cm. There were 20 patients with recurrent cases of Bartholin abscesses. The mean duration of operation was 22.42 min. The most common complaint was pain.

Conclusion: Bartholin gland cyst or abscess is more prevalent in sexually active individuals in the reproductive age who has a history of surgical intervention in this region. In recurrent cases, total excision of the Bartholin gland is preferred despite the results, such as scarring and dyspareunia.

Keywords: Bartholin gland, cyst, abscess, excision

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INTRODUCTION

A Bartholin gland cyst or abscess is a common gynecological pathology seen in 2% of all women. Bartholin cysts are usually asymptomatic and cause pain and limitation of movement when they cause abscess development after being infected (1).

Risk factors include a history of Bartholin cyst, mediolateral episiotomy, or vulvar trauma; numerous sexual partners; and sexually transmitted diseases. Infection factor is usually polymicrobial (2).

The treatment includes aspiration, Word catheter application, total excision, marsupialization, silver nitrate application to the cyst cavity, and carbon dioxide laser (3). Our study aimed to examine the patients who underwent total excision of the Bartholin gland at our hospital due to Bartholin abscess or cyst.

METHODS

Our study was carried out between January 2011 and December 2016 by retrospectively reviewing the files of 190 patients who underwent total excision of the Bartholin gland due to Bartholin cyst or abscess at KSS Training and Research Hospital. The required approval for the study was obtained from the Sadi Konuk Training and Research Hospital Ethics Committee at July 2017 with no:2017/220.

Demographic characteristics of the patients, their obstetric and medical histories, the location and size of the Bartholin cyst or abscess, applied surgical procedures, complaints during admission, operation duration, and the complications developing after the operation were obtained by examining the medical records of the patients.

Forty-one patients were excluded from the study due to missing information in their files and on follow-ups, and a total of 149 patients were included in the study.

Statistical Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS Inc.; Chicago, IL, USA) for Windows 16.0 package program. The data were given as mean±SD for the variables showing normal distribution.

RESULTS

The files of the patients were reviewed retrospectively. The mean age of the patients was found to be 33.3±7.126. The mean values of gravida and parity were determined as 2.11 and 1.56, respectively. While 35 patients were nulliparous, 108 had a vaginal delivery, and 6 had a cesarean section (Table 1). While 81 (54.36%) of the patients had a cyst, the abscess was found in 68 (45.64%) of them.

Bartholin cyst or abscess was on the right side in 65 patients and on the left side in 84 patients. No bilateral cases were detected. The mean abscess diameter was 3.18 cm. The mean number of white cells at the time of admission was calculated as 10.572±2.891 mL/mm³. Twenty of the cases were recurrent cases of Bartholin abscess. The mean operation duration was 22.42 min. Hematomas developed in two patients postoperatively and were treated by draining. The mean recovery duration of the patients was 11.23±6.190 days (Table 1).

The distribution of patient complaints is summarized in Table 2. The most frequent complaint was a palpable mass with a rate of 51.67%.

DISCUSSION

The Bartholin gland was first described by the Danish anatomist Casper Bartholin in the 17th century. It is a pair of glands located in the lateral region of the bulbocavernosus muscles in the posterior region of the vaginal wall. It is an important part of the female reproductive system, and its function is to lubricate the vagina and vulva by secreting mucus during sexual intercourse. Occlusion of the Bartholin gland causes the accumulation of such secretions and formation of a cyst. The Bartholin abscess develops if the cyst is infected (4).

Bartholin gland cysts or abscess is a gynecological problem that can cause pain, discomfort, and limitation of movement and is the most common cystic formation of the vulva. Surgical conditions and traumas, such as mediolateral episiotomy and colporrhaphy posterior, can cause occlusion and cyst formation in the Bartholin gland (5).

Asymptomatic small cysts may not require treatment. In the literature, there are a number of treatment methods described for Bartholin cysts and abscesses. These include aspiration, com-

Table 1. Demographic and clinical data of patients

	n=149
Age (years)	33.33±7.126
Gravida	2.11±1.783
Parity	1.56±1.248
Nulliparity	35 (23.48%)
Those who had a cesarean section	6 (4.02%)
Those who had a vaginal delivery	108 (72.48%)
Sexually inactive	12 (8.05%)
Cyst diameter (cm)	3.18±1.034
Recovery duration (days)	11.23±6.190
Leukocyte count (mL/mm ³)	10.572±2.891
Recurrent cases	20 (6.71%)
Left side	84 (56.37%)
Right side	65 (43.63%)
Duration of operation (min)	22.42±7.225

Table 2. Distribution of patient complaints

	n=149
Palpable mass	77 (51.67%)
Pain	38 (25.50%)
Dyspareunia	12 (8.05%)
Asymptomatic	22 (14.76%)

plete cyst removal, marsupialization, silver nitrate, alcohol sclerotherapy, and Word catheterization. Until the late 1960s, the surgical treatment described for Bartholin cysts or abscesses was the complete removal of the gland; however, this procedure can lead to complications, such as hematoma, hemorrhage, and damage to surrounding tissues. As a result, methods have been developed in which the Bartholin gland is left in situ (6-9).

The superiority of the methods to each other could not be exactly demonstrated in studies. Although complete excision of the Bartholin gland is possible, it is not always preferred because it is longer than other methods and can lead to the formation of a hematoma. Apart from this, it may cause scarring and dyspareunia due to the removed tissue (10). Especially in postmenopausal patients, the excision of the cyst is the preferred method of treatment because of the increased risk of malignancy in Bartholin abscesses (11).

Polymicrobial agents cause Bartholin abscesses; therefore, the advantage of empirical antibiotherapy is limited. *E. coli* and *N. gonorrhoea* are most frequently isolated (12, 13). Since Bartholin gland infections are usually localized, bacteremia findings, such as leukocytosis and high fever, are not observed. We did not find any increase in the number of leukocytes in our study. Bartholin abscesses causing septic shocks have been reported in the literature (14). Bartholin cysts and abscess are more common in people at the age of reproduction and in sexually active people (15). In our study, we found that the average age of the patients was 33.33, similar to that reported in the lit-

erature. Risk factors include low socioeconomic levels, a history of surgical intervention in this region, and multiparity (16). In our study, consistent with the literature, we also observed Bartholin cysts and abscess more frequently in multiparous patients with a history of episiotomy.

Our study is a retrospective descriptive study and there is no control group. Rather, prospective randomized trials should be performed for the treatment of Bartholin cysts or abscess.

CONCLUSION

Bartholin gland cysts or abscess are more common in sexually active individuals who are at reproductive ages and who have a history of surgical intervention in this region. The total excision of the Bartholin gland in recurrent cases is the preferred method despite the consequences of scar formation and dyspareunia.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Sadi Konuk Training and Research Hospital (2017/220).

Informed Consent: Informed consent is not obtained due to the retrospective nature of this study.

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