Lower recurrence rate of the Bartholin gland cysts or abscess after lavaj-drainage and marsupialization

Abstract

Bartholin gland cysts and abscesses are real issues in women of every age, being a high risk condition for patients when symptoms occur. The study was performed on a group of 120 patients who had Bartholin cyst or abscess. About 81.66% patients has presented pain of high intensity, with extension to the entire vulvar area, 16.66% of the patients dyspareunia and senzation of local pressure, and only 1.66% patients vulvo-vaginal pressure sensation and pain only at deep palpation of the area. After marsupialization, only 3.33% patients had recurrence of the cyst or abscess and were submitted to a second and successful session. In the present study, the post-marsupialization recurrence rate of the Bartholin gland cyst or abscess was lower, without major complications. The Bartholin cysts or abscess approach by marsupialization can be used as an effective management with low rates of recurrence, or other complications, without involving hospital admission. **Keywords:** Bartholin cyst, abscess, lavaj, marsupialization, recurrence, treatment

Introduction

The greater vestibular glands (also known as Bartholin glands) are mainly located on labia minor externally. The first person who described these glands was Kaspar Bartholin in 1977 and when are stimulated, these glands release a fluid⁽¹⁾.

The cysts or abscess of these glands, although being a benign condition, present a significant discomfort for the women. The mainly symptoms which appear are local pain, which could be worsted even at walking. Sometimes, the symptoms could be more severe until nausea, vomiting or fever like every infection condition⁽²⁾.

Bartholin glan cysts are more seen in single women⁽¹⁾ and the diagnosis is made by physical examination, the fluctuating liquid in one of the labia⁽³⁾. Different studies have been showed based on the fluid cytology that the content could present agents like *Neisseria gonorrhoeae*, *Chlamydia trachomatis* or *Escherichia coli*^(1,3).

Various management options are nowadays available for Bartholin gland cysts and abscesses like incision and drainage, marsupialization, carbon-dioxide laser, and application of silver nitrate with different failure rates^(4,5).

In the present study, we preset the marsupialization management of 120 patients having Bartholin gland cysts or abscess.

Methods

The study was conducted on a group of 120 patients for 5 years, from June 2012 to July 2017, at Santerra Medical Center and "Sf. Apostol Andrei" SCJU Constanta, from Romania. Patients had Bartholin cysts or abscess where the incision, lavage, and drainage of the cysts followed by marsupialization of the Bartholin gland were performed. The informed consent was taken from each patient.

The exclusion criteria were represented by bilateral cysts or abscesses and suspicious masses in labia majora. The patients were counseled about the procedure and regardless of the content and size of the cyst.

Cyst or abscess diameters have been clinically appreciated and ranged from 1 to 4 cm tumor mass externally palpating from the hyaline ring in the inferior region of the vulva, unilateral.

After the patients were placed in the lithotomic position, infiltration of 2% lidocaine to the skin just lateral to hymen was achieved. After the stabilization of the cyst/abscess manually, a 1.5 to 2 cm vertical incision was made with a thin-edged scalpel. The incision of the cyst/abscess was performed in the maximum fluctuation zone on the inner surface of the cyst. Then, the drainage and exploration of the cavity with a gauze compression soaked in polyiodine caught in a Kocher cleat was achieved. Finally, the marsupialization of the Bartholin gland was achieved by suturing the edge of the cyst or abscess wall at the adjacent edges of the skin with a no. 000 soft resorbable material⁽³⁾.

All patients received prophylactic antibiotic intervention, which consisted in Ciprofloxacin 500mg/1tb /12h (5 days) and Ketoprofen 2 suppository/day (5 days).

Healing was defined as epithelization of the wound. The patients were examined for early complications at the first 3 follow-up visits.

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Results

In one study comprising 83 patients submitted for marsupialization, only 24.1% presented recurrence with the most often post-operative symptom seen like labial edema⁽⁶⁾. Another study reported for Bartholin cyst a 2% of all gynecologic visits per year and a global recurrence rate of maximum 25%⁽⁷⁾, being in accordance to our results. Moreover, if the cyst or abscesses develop at menopausal age, the biopsy is recommended in order to evaluate the possible malignancy rate⁽⁸⁾.

In our study, from 120 patients, 81.66% patients presented pain of high intensity, with extension to the entire vulvar area, 16.66% of the patients dyspareunia and senzation of local pressure, and only 2 1.66% patients vulvo-vaginal pressure sensation and pain only at deep palpation of the area. These complain urged the patients to program at the physician.

After 3-month of follow-up, the recurrence rate was seen only in 4 (3.33%) cases out of 120, the rest of the patients did not need other surgical intervention during evaluation.

All four patients had relapsed lavaj-drainage post-incision, as follows: 50% patients of the 4 were at the first postlavaj-drainage relapse and the first post-marsupialisation; 25% patients was at the second post-lavaj-drainage relapse and the first post marsupialization, and 25% patients- had more than 3 post-incision lavaj-drainage incision relapse and the first post-marsupialisation relapse.

It is important to note that all 4 patients worked in a 12-hour shift system, during which it was impossible to mention adequate hygiene of the vulvo-vaginal region. At the end of the 3 month, all patients had a complete regeneration of the tissue without any scar formation.

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Discussion

The diagnosis and treatment of Bartholin gland cysts or abscess will continue to be a mainstay of gynecology. Various methods have been described with variable recurrence rates. Conventional treatment is marsupialization. When a blockage occurs, it leads to the formation of the cyst or even worst, to an abscess⁽⁹⁾. Small cysts could be asymptomatic and could reabsorbed without any treatment, but large cysts or abscesses will require treatment⁽⁹⁾.

Another study achieved in Austria on 30 patients with Bartholin cysts or abcesses showed a 87% rate of success and 3.8% recurrence rate in women treated with Word catherization comparing to those treated by marsupialization⁽¹⁰⁾.

In different studies, the evaluation of quality of life and sexual activity were evaluated after the treatment by marsupialization for Bartholin gland cysts or abcesses which showed improved pain or discomfort⁽¹¹⁾.

Moreover, it is sustained the fact that the history of recurrence post-incision-lavaj-drainage without marsupialization increases the rate of recurrence of gland cyst or abscess post-marsupialization.

Conclusions

In the present study, the post-marsupialization recurrence rate of the Bartholin gland cysts or abscess was lower, without major complications. The Bartholin cysts or abscess approach by marsupialization can be used as an effective management with low rates of recurrence, or other complications, without involving hospital admission.

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