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Quality of life and sexual activity during treatment of Bartholin's cyst or abscess with a Word catheter

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ABSTRACT

Objectives: Cysts and abscesses of the Bartholin glands are a common occurrence in gynecologic or general practice. Little is known about restrictions in patient's daily life and sexual activity during treatment of Bartholin's cysts in general and especially with the Word catheter. This study is to assess the Quality of Life and Sexual Activity during treatment of Bartholin cyst's and abscesses with the Word-catheter.

Study design: Between March 2013 and May 2014 30 women were included in the study. Pain before treatment and during catheter insertion and removal was assed using a standardized VAS scale. Health-related quality of life was assessed with the Short-Form-12-Health-Survey. Fallowfield's Sexual Activity Questionnaire was administered to investigate sexual limitations. During treatment patient self-reported to a pain-diary (VAS 0–10).

Results: Pain levels decreased from a 3 [0–10] on day 1 to 0 [0–6] on day 6 with the median staying at 0 for the remaining treatment period. Discomfort and pain during sexual activity decreased significantly from initial presentation to end of treatment. The mental component summary score of the SF 12 increased significantly from 46.94 ± 10.23 before treatment to 50.58 ± 7.16 after treatment ($p = 0.016$); the physical component summary score did not change significantly.

Conclusions: The Word catheter is well tolerated for the treatment of Bartholin's cysts and abscesses with few and no serious side effects and little impingement of sexual health. A more relevant informed consent ahead of treatment, specifically with regard to pain in the first few days after catheter placement, might further increase acceptance of the catheter and adjust patient expectations.

Introduction

Cysts and abscesses of the Bartholin glands are common in gynecologic or general practice, occurring in about 2% [1] of women. Clinical presentation varies from asymptomatic masses to painful, rapidly developing abscesses. Surgical marsupialization is the standard treatment at most gynecology units and is associated with the lowest recurrence rates [2], but is invasive and requires anesthesia [2–4]. Comparatively simple alternatives for treatment in the office or outpatient setting with devices such as the Word catheter [5] have been known for years but have not been adopted widely. The trend towards minimally invasive treatment options with quick recovery times and feasible in the office setting have prompted a new look at the Word catheter in Europe.

Little is known about restrictions in patient's daily life during treatment of Bartholin's cysts in general and especially with the Word catheter. Previous studies have focused on recurrence rates; there are almost no data on other outcomes, such as quality of life (QoL) or sexual health. Gennis et al. [6] only report the patient's satisfaction to be high, but lower as if using an alternative device called Jacobi ring. Haider et al. [7] assessed a pain score after one week of Word catheter in situ and summarize the method as being well tolerated. In contrast, Mercado et al. [8] reported catheter application to be painful in some patients despite local anesthesia. As research into treatment options has been largely neglected [9] and the optimal treatment is still unclear [2], we used validated tools to study QoL and sexual activity during treatment of Bartholin's cyst or abscess with a Word catheter.

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Materials and methods

Clinical intervention and procedure

Between March 2013 and May 2014 women presenting with a Bartholin's cyst or abscess at our institution were offered a Word catheter placed with local anesthesia in an outpatient setting in lieu of hospital admission and marsupialization under anesthesia. Women opting for treatment with the Word catheter were invited to participate in the study. The ability to complete German-language questionnaires was an inclusion criterion; women with recurrent or bilateral cysts/abscesses or loculations on ultrasound were excluded. The study was approved by the local Ethics Committee (IRB00002556) and all patients gave written informed consent.

Word catheters (Cook Medical Inc., Bloomington, IN, USA) were placed as follows. After local injection of 2% lidocaine a 5-mm stab incision was made and the contents of the cyst/abscess evacuated. The catheter was inserted and blocked with 3 ml of saline. If the catheter balloon was superficial it was secured with a suture. If a balloon could not be inserted we extended the incision and performed a small marsupialization.

Word catheters were scheduled for removal 4 weeks after insertion. Patients were prescribed diclofenac as needed after the intervention. Patients were clearly informed that they had no restrictions and that sexual activity including intercourse was permitted. In case of Word catheter loss, catheters were reinserted if necessary.

Patient-reported outcomes

Patients were asked to quantify pain before treatment and during catheter insertion and removal using a standardized visual analogue scale (VAS 0–10). While the catheter was in situ women were asked to rate their pain on a visual analogue scale (VAS 0–10) in a diary with daily entries in the first week and weekly entries in weeks 2 to 4. The diary included three additional questions (''The balloon causes pain'', ''The balloon causes a foreign-body sensation'', ''The balloon causes a feeling of pressure'') with response scales from 0 (not at all) to 10 (very much). Patients were asked to record pain medication.

Questionnaire

Participants were asked to answer 2 questionnaires concerning their current mental & physical QoL and sexual activity before and at the end of treatment after 4 weeks. In case of earlier removal or catheter loss the questionnaires meant for the end of treatment were completed at that time. Patients were asked to answer the questions with a response frame of 4 weeks before the initial visit, which presumably implies a disease-free and pain-free period for most patients.

Health-related QoL was assessed with the German version of the Short-Form-12 Health Survey (SF-12) (10). The SF-12 was derived from the SF-36 measuring physical and mental health. It comprises 12 questions concerning general health perception and general mental health, including psychological distress and psychological well-being, physical and social functioning, role limitations because of physical health problems or emotional problems and questions on vitality and bodily pain. The SF-12 is completed autonomously by the patient and is easily incorporated into clinical routine.

Fallowfield's Sexual Activity Questionnaire (SAQ) [11] was administered to assess sexual function in terms of activity, pleasure, and discomfort. The SAQ is divided into three sections: the first investigates if women are sexually active or not; the second explores reasons for sexual inactivity; the third assesses sexual functioning and is completed only by sexually active women. This section includes 10 questions concerning sexual pleasure, sexual discomfort, and sexual habits/frequency. The psychometric data showed that the SAQ is a reliable questionnaire [11]. We additionally included three specific single items about diseases and treatment-related limitations in sexual health before and during treatment. Response scales are from 0 to 3, with a low score representing low limitations.

Patient management

Follow-up was done by phone with an interval of at least 1 month after catheter removal/end of treatment. Patients were contacted by telephone and asked about signs of recurrence, subsequent treatment and whether they would again chose treatment with the Word catheter. As there was no predetermined interval for the follow-up calls, an additional final electronic check of the study patient's histories in the outpatient's records was performed, to minimize that bias. In this final run-through no other case of recurrence was revealed.

Statistical analysis

Data were analyzed using the Statistical Package for the Social Sciences 21.0 (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.). Descriptive statistics were used to characterize the study sample in terms of sociodemographic and medical variables.

The items of the SF-12 depict a physical (PCS) and a mental component summary score (MCS). Scores were calculated according to the guidelines for scoring the SF-12 questionnaire. These scores were transformed into standard values with a mean of 50 and a standard deviation of 10 according to the scoring rules [10].

The SAQ questions were scored using a Likert format from 0 to 3. The factors 'Habits/Frequency', 'Pleasure', and 'Discomfort' were generated by adding the raw scores for each of the relevant questions. The Pleasure score ranges between 0 and 18, a low score representing low sexual pleasure. The Discomfort score ranges between 0 and 6, a low score representing high discomfort. The scale 'Habits/Frequency' ranges between 0 and 3 (0 = less than usual; 3 = much more than usual).

Significance was assessed by using the Willcoxon test for data of the SF12 and SAQ and by Kruskal–Wallis-test for data of the pain dairy. Significance level alpha was set at 0.05.

Results

A total of 30 women (mean age, 31.3 years [18.8–59.6]) consented to be included in the study. None of the patients had clinical signs of additional genital infections at initial presentation. Parity ranged from 0 to 4 with a mean of 1.6. 20/30 women were using contraception (11/30 oral contraception, 5/30 IUD, 3/30 MPA, 1/30 contraceptive patch). Fifteen had a Bartholin's cyst, 15 an abscess. The median diameter of the lesions was 4 [1–5] cm. 3/30 patients underwent outpatient marsupialization and 1/30 marsupialization under general anesthesia after unsuccessful Word catheter attempt. Those women were excluded, leading to a final group of 26 patients included in the study. Two patients lost the catheter after 2 and 11 days, refused reinsertion and underwent marsupialization to complete treatment. Balloon loss before the end of the 4 weeks treatment period was quite common and occurred in 11/26 cases with a mean residence time of 19.1 (±10.0) days. Recurrence occurred in 1 case (3.8%) after full 4 weeks Word catheter treatment.

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