Urethrovaginal Fistula Developing After an Vaginal Abscess: A Case Report

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Abstract

Urethravaginal fistulas are rarely seen. In comparison to vesicovaginal fistulas, they are more difficult to diagnose and treat. In this report, we aimed to discuss management of an urethrovaginal fistula developing after an vaginal abscess.

Keywords: Urethrovaginal fistulas, abscess

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Introduction

Urethrovaginal fistulas (UVF) are generally seen after vaginal surgeries, trauma and urethral diverticulectomy. Behçet’s disease or Crohn’s disease can rarely cause fistulas (1,2). Dyspareunia and recurrent urinary tract infections are common symptoms of UVF. A diagnosis can be done with voiding cystourethrography or cystoscopy. In the management, transvaginal surgical excision of fistula tract can be performed if catheter drainage is unsuccessful(1,3). After a review of relevant literature, we have not encountered any report about an UVF developing after an abscess. Our aim is to discuss the management of the fistula developing after an abscess.

Case Report

A 36-years old patient applied to our clinic with complaints of painful swelling in her vagina. The medical history revealed that the patient had two prior cesarean deliveries and did not have any systemic illness, vaginal infection or any history of trauma related with the genital area. She also stated that the previous routine gynaecological examinations were all normal. During the gynaecological examination, a painful fluctuating swelling which was 3-4 cm in diameter was observed between the vagina and the bladder. There was no rebound and defance in the abdomen. According to the transvaginal ultrasonography findings, uterus and ovaries had normal appearance. Complete blood count and routine biochemical parameters were at their normal values. Taking the history of the case into consideration and on the basis of current findings, the patient was admitted to clinic with a pre-diagnosis of paraurethral gland abscess. Medical treatment consisting of ceftriaxone and gentamicin were started.
Upon the patient’s report of a micturation problem and development of urinary retention, it was decided to perform abscess drainage. Before the operation, the abscess was localized and a small amount of pus leaking from the urethra was observed (Figure 1).

![Image](https://via.placeholder.com/150)

**Figure 1:** Pus leakage from the urethra

Taking into consideration of a possible fistula, cystoscopy was performed. In the cystoscopic examination, the bladder was seen as normal. There was a fistula with pus drainage into the urethra at an approximate distance of 2 cm to the external urethral meatus and in front of the distal 1/3 urethra (Figure 2).

![Image](https://via.placeholder.com/150)

**Figure 2:** A fistula with pus drainage into the urethra in the cystoscopy
Due to the small size of the fistula tract and its localization, it was decided to be followed-up after the abscess drainage. Subsequently, a longitudinal incision was performed from 2 cm below the external urethral meatus and the abscess was drained. A drainage tube was inserted. In the post-operative stage, an urethral catheterization was performed for six hours. In microscopical examination of the abscess material, gram-negative bacilli were seen; no leucocyte was observed. In the culture, there was no growth of microorganisms. During follow up of the patient, fistula tract were closed and there were no pathological findings.

Discussion
UVF can develop as a result of a foreign body, trauma, long-term catheterization, difficult vaginal delivery, anterior colporrhaphy, sling operations, periurethral injections, radiation, urethral diverticulectomy or urethral polyp cryotherapy(4). Patients complain about a leakage which is usually independent of her position, dyspareunia, dysuria or recurrent urinary tract infections. Fistula localization can progress asymptptomatically in the 1/3 distal of the urethra. In order to diagnose, physical examination, complete urinalysis, urethroscopy and urethrocysctoscopy can be performed. In urodynamic examinations, detrusor instability and intrinsic sphincter dysfunction may be detected. Since multiple genitourinary fistulas can be seen as high as %20 concurrently, the whole urinary tract must be examined in case of a fistula (5).

The selection of the method of treatment depends on the fistula localization and its cause. The best results are obtained when the trauma were noticed as early as possible; otherwise, fistula repairment must be delayed until the next two months (5, 6). Primarily local treatment, abscess drainage and antibiotic treatment are performed for acute fistulas of traumatic origin or secondarily infected fistulas. A few months are necessary for tissue healing. During this period, even some rectovaginal fistulas, which develop especially as a result of obstetric or operative trauma, heal in their entire and do not require additional treatment (7). In this case, as UVF were seen as a result of the abscess without any surgical operation and we decided to follow-up the patient after the abscess drainage and observed that the fistula tract was closed after antibiotherapy. In cases where expectant approaches are not successful, the fistula tract must be removed and the urethra must be repaired. Urethral defect should be sutured transversely when possible in order to prevent stenosis (5). The submucosal region must be protected as much as possible in the surgery of lesion near the urethra to resume blood supply of urethra[4,6]. In cases of the urethral defect that can not be sutured primarily, recurrent fistula or repairment of radiation induced fistula where the quality of texture is bad, rotational flap or Martius flap can be used (3,6).

Labial skin, martius interposition flap, anterior bladder flaps, posterior bladder flaps and buccal mucosa flaps have all been used for urethral reconstruction in various cases, there is a specified success rate of 74-90% (1,3,5).

UVF in proximal urethra may be associated with incontinence. Therefore, incontinence surgeries should be performed [4]. However, there is no need for incontinence surgery in the distal part of urethral fistula or defects. In the presence a fistula, the patient must be informed with regard to stress urinary incontinence, fistula recurrence and obstructive complications. The incidence of urethral stenosis increases
in each surgery performed for recurrence and fistula reparation(5).
As a consequence, abscess drainage should be first line treatment in UVF’s that develop after an abscess. In follow-ups, fistula tract excision should be performed for only cases that fistula tract exists.

Conflict of Interest: None

References