

The York Mason method used in rectovesical fistula treatment – case report

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ABSTRACT

Recto-urinary fistulas are a rare complication of prostate cancer treatment. There is no consensus in the scientific community about the procedure to be followed in the event of a fistula. One of the treatment options is the York Mason procedure using the

transsphincteric approach. This work is a description of a clinical case of a patient after prostatectomy with vesico-rectal fistula, who successfully undergone the described method.

Keywords: rectourinal; fistula; York Mason; case report.

INTRODUCTION

Recto-urinary fistula is a rare complication of prostate cancer treatment and a significant problem for the affected patients. It constitutes a significant challenge for urologists and colorectal surgeons specializing in this area. This type of fistula can manifest as a complication of surgery or radiotherapy. Factors that impair wound healing, e.g. immune disorders, patient malnutrition, etc., may also increase the risk of fistula formation. Patients undergoing prostatectomy are especially at risk of developing urinary fistulas, which is associated with the operated area. The risk of developing a fistula after the procedure is low [1, 2]. However, due to the significant number of prostatectomies performed every year and the fact that the majority of the resulting rectourinary fistulas require subsequent surgical intervention [2], this problem may become a noticeable burden for the health system.

CASE REPORT

A 68-year-old patient previously undergoing surgery due to prostate cancer (condition after laparoscopic prostatectomy) was referred to the Department of General Surgery due to a chronic, iatrogenic vesicorectal fistula. Until the admission, several unsuccessful attempts were made to manage the fistula and a colostomy was formed. The patient had an indwelling Foley catheter but this treatment did not bring the expected results. The patient complained of fecaluria and leakage of urine through the anus. He denied other ailments related to the fistula. Moreover, the patient had a history of internal diseases – asthma, chronic obstructive pulmonary disease, diabetes. Condition after splenectomy. Nicotinism in medical history. During qualification for surgery, an open fistula was found in anoscopy at 12 a.m., which caused leakage of urine despite the use of a Foley catheter. The patient was qualified for surgical treatment of the vesicorectal fistula using the York

Mason method. Before performing the procedure, the surgical team underwent training in anal sphincter reconstruction under the supervision of professor Kołodziejczak from Warsaw. Before the surgery, the patient was prepared with rectal infusions. Prophylactic antibiotic therapy was administered: Biofazolin 1 g + Metronidazole 500 mg intravenously. After establishing access through the posterior anal wall (Fig. 1), the fistula was closed (Fig. 2). The anterior wall was then reconstructed by mobilizing the wall and suturing it using the overlap technique. Sphincters in the area of the posterior wall in the incision line were reconstructed (Fig. 3). In the postoperative period, antibiotic prophylaxis was extended and anti-embolism prophylaxis was administered. The patient was required to stay in bed and was prohibited from lying on his back. Traces of serosanguineous contents were found in the drain left below the subcutaneous tissue – the drain was removed on the 2nd day after the procedure. There was no leakage of urine from the anus after the surgery. The urine in the bag was straw-colored. The patient was discharged from the department 7 days after the surgery. During a follow-up visit, 1 week after discharge from the hospital, a small inflammatory infiltrate was found in the upper pole of the wound, near the coccyx. The wound was reinspected, which resulted in a leakage of a small amount of serosanguineous contents. No other lesions were found. During subsequent visits, proper wound healing was observed. Sphincter function and tone remained normal. During exertion, coughing, and physical activity, the patient did not observe any urine leakage from the anus. On physical examination – no symptoms of fistula recurrence were revealed. Magnetic resonance imaging of the pelvis performed by the patient was non-diagnostic in terms of fistula recurrence. The patient was referred for cystography and cystoscopy which did not show any recurrence of the fistula. The patient was qualified for the restoration of gastrointestinal tract continuity during subsequent hospitalization – the patient is currently awaiting surgery.

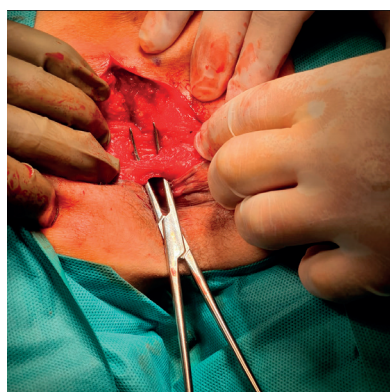


FIGURE 1. Intraoperative view during the preparation of sphincters

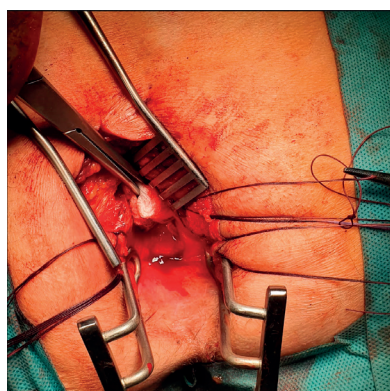


FIGURE 2. Intraoperative view of the rectovesical fistula



FIGURE 3. Intraoperative view during the reconstruction of sphincters

DISCUSSION

The transsphincteric approach for rectal surgery was developed in the 1960s by Aubrey York Mason of St. Helier University Hospital in London [3]. It was first used to treat a rectourinary fistula in 1969 by Kilpatrick and Mason [4]. The method consists in obtaining access through the posterior wall of the rectum by making an incision radially to the anus, laterally to the coccyx, and (after excision of the fistula) anatomically reconstructing the anal sphincters [5]. Only a few studies have been conducted so far that analyzed up to 50 cases operated at a given center [6]. The research results published to date show that this method is

highly effective [6, 7, 8] and may be repeated in case of failure. A repeated procedure increases the likelihood of complete fistula closure. Some publications even indicate 100% curability on the 3rd attempt [8, 9]. At the same time, the method does not require any specialized equipment or operating room, which increases its availability [10]. However, the required detailed knowledge of the anatomy of the operated area on the part of the surgeon constitutes a certain limitation. Despite the incision of the sphincters with their subsequent reconstruction, this procedure does not adversely affect their function, which is confirmed by the case presented above and studies from centers performing procedures using this method – even in cases of its repeated performance [9]. The advantage of the presented method over alternative methods is the avoidance of extensive abdominal surgery, which is important for patients and especially those with a history of internal diseases, and convenient access enabling proper management of the fistula, which is often impossible in the case of transanal methods. In the case of the York Mason method, the creation of a decompression stoma before surgery does not seem to be obligatory [11] but it is advisable to further investigate this aspect of treatment. According to the authors of the study, the high efficacy of this method should be taken into account when planning treatment for patients with recto-urinary fistulas, especially in the case of conservative treatment failure.

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