# #25792 Vesicoperineal Fistula a rare rectal cancer treatment complication



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## Introduction

Vesicoperineal fistula is an uncommon entity described as an aberrant tract between the bladder lumen and the cutaneous surface of the perineum, resulting in a recurrent infections, discomfort, disability and poor quality of life. Risk factores include trauma, bladder calculi, surgery and pelvic radiotherapy. The onset of symptoms is widely variable and timely diagnosis and management are often complex. Detailed knowledge of the fistula's size and location, etiology, integrity of anal and urethral sphincters, bladder functional status, extent of pelvic radiation damage and the patient's overall performance and nutricional status are essential for tailoring the appropriate approach.

## Study design, materials and methods

Case report and literature review.

## **Case Report**

We present a case of a 78-year-old male diagnosed with non-metastatic locally advanced rectal cancer.



Fig. 3: Positioning and surgical demarcations.



Figure 1 represents the timeline of events up until the presentation of a vesicoperineal fistula.





Five years later, he complained of buldging and pelvic discomfort, related with a pelvic floor hernia and was submitted to a perineal mesh repair.



Who underwent abdominoperineal resection (APR) and peri-operative chemoradiotherapy for it's treatment.



Few months later, complaints of worsening pain, with persistent drainage of clear fluid and repeated urinary tract infections.

Fig. 1: Timeline of events since the diagnosis of rectal cancer and the presentation of a vesicoperinel fistula.

The patient underwent cystography, cystoscopy and magnetic resonance that confirmed the diagnosis of vesico-perineal fistula trough the coccyx.

Fig. 4: Fistulectomy and resection specimen.



Fig. 5: A - Surgical wound; B - Post operative cistography.

There was a partial wound infection and skin dehiscence, that was successfully treated with negative pressure therapy and antibiotics.

At 14 months post-op the was no recurrence of symptoms nor any late complications.

### Interpretation of results

This case represents a late complication of rectal cancer treatment. Particularly associated with a perineal hernia mesh repair, several years later an APR for locally advanced rectal cancer, with peri-operative chemoradiotherapy. Several risk factors were present in this case, that may have contributed for this occurrence: the surgical trauma of the APR; the late effects of radiotherapy; the scaring and possible tissue erosion from the mesh repair; aside from the repeated urinary tract infections that on this particular case seem to be more of a consequence than a cause for the fistula. The delayed diagnosis may result in physical, psychological and social consequences for the patients, requiring a raised awareness of this entity.

### **Concluding message**

Fistulas secondary to radiotherapy are complex and difficult to treat. They can be associated with concomitant pelvic affections such as fecal/urinary incontinence or urethral/vaginal strictures.



**Fig. 2:** A - Cistosgraphy portraing the fistula; B - Cystoscopy showing the bladder orifice to the fistula.

The patient was submitted to fistulectomy with coccygectomy, partial cystectomy and reconstruction with gluteus retail and skin flap.

To this date, there is no standardized approach for such fistulas, given it's seldom occurrence and lack of studies and surgeon experience on large case series. Management should be based on a case-by-case approach.

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