

Ureteroileal fistula : an unusual complication of Crohn's disease

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Abstract

We report a case of ureteroileal fistula in a young 22 year-old man with Crohn's disease, who presented with microscopic hematuria and severe diarrhea. Excretory urogram and retrograde pyelography showed a fistula between the right ureter and the terminal ileum which was successfully managed with conservative approach using a double J ureteral stent. (*Acta gastroenterol. belg.*, 2000, 63, 312-313).

Key words : Crohn's disease, ureteroileal fistula, double J stent.

Introduction

Crohn's disease is a chronic panenteric inflammatory disease of unknown aetiology. Approximately one third of patients with Crohn's disease develop a fistula (1). The most frequent encountered are gastrovesical, colovesical, enterovesical or enterocutaneous (2). An ureteroileal fistula complicating Crohn's disease is uncommon.

Herein, we report an unusual case of ureteroileal fistula secondary to Crohn's ileitis which was successfully managed with double J ureteral stent.

Case report

A 22 year old man, who was diagnosed with Crohn's disease in 1987, was referred to our institution for investigation of microscopic hematuria. Immunosuppressive treatment was azathioprine and methylprednisolone. At the time of presentation he complained of severe diarrhea. There was no fecaluria and no pneumaturia. The temperature was 37° C. Abdominal examination showed no tenderness. Urine analysis was unremarkable except for microscopic hematuria. Computerized tomography showed no intra-abdominal collection. A cystoscopy was performed; the bladder mucosa was normal. Excretory urogram revealed normal upper urinary tract (Fig. 1). However at the end of examination, a contrast material was noted within the small intestine (Fig. 2). Retrograde pyelography demonstrated ureteroileal fistula between a lower portion of lumbar ureter and the ileum (Fig. 3). A double J ureteral stent was positioned without difficulty and was left indwelling for 8 weeks. The patient was treated with prolonged corticotherapy. Afterwards, microscopic hematuria and diarrhea resolved and there was no evidence of fistula on excretory urogram 2 months later. At 2 year follow-up, he remains in clinical remission with no late recurrence of the ureteral fistula.



Fig. 1.

Discussion

Ureteroenteric fistulas are rare and occur most commonly with ureteral calculi. The patient with Crohn's disease is at risk for fistula developing between the urinary tract and the bowel; The majority of fistulas involve the bladder. Ureteroileal fistula secondary to Crohn's disease is very rare (3).

The diagnosis of ureteroileal fistula is difficult and usually rests on a high index of suspicion. Although fecaluria, pneumaturia and recurrent urinary tract infection are typical symptoms, their absence doesn't exclude

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Fig. 2.

the diagnosis as in our case, in which microscopic hematuria pneumaturia may be explained by exclusive urinary leak from the ureter to the ileum as the result of the higher ureteral pressure.

Excretory urogram may be helpful for diagnosis and retrograde pyelography often demonstrates the site of fistula. Recently, magnetic resonance imaging (MRI) can accurately show enterourinary fistula (4).

Although treatment of Crohn's disease of the small intestine is at present principally medical, occurrence of fistulas is the common indication for surgical treatment, which requires the resection of the diseased bowel segment and usually nephroureterectomy. Obstruction which

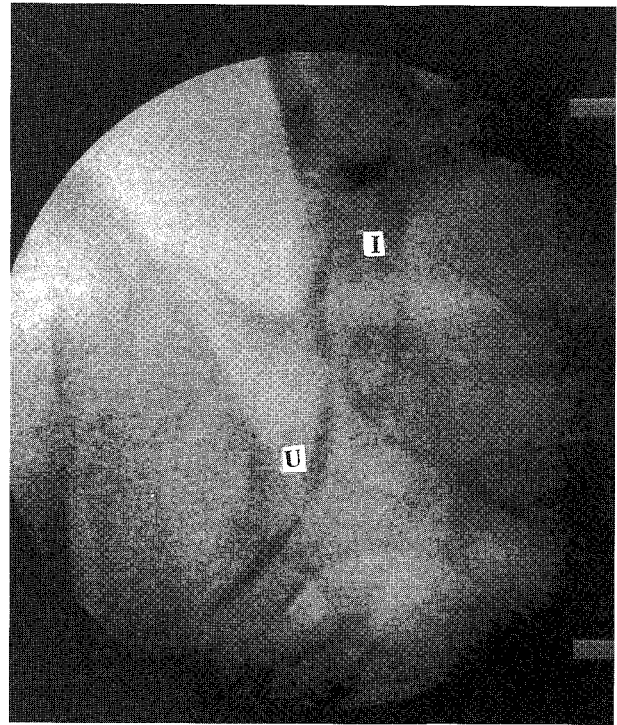


Fig. 3.

is no longer manageable with medication is another major indication for resection. Conservative management of our patient consisted of a double J ureteral stent which successfully closed the ureteroileal fistula. To our knowledge, it is the first report of the successful treatment of a Crohn's disease ureteroileal fistula, combining the placement of an ureteral stent with the medical treatment.

References

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