

Excretion of Urine Mixed with Air and Fecal Material

A 19-year-old man visited our clinic with dysuria, pneumaturia, and fecal material in the urine. He had a 5-month history of recurrent cystitis. The abdomen was soft with mild suprapubic tenderness. Urinalysis revealed 25–30 white blood cells and 5–9 red blood cells per high-power field. Cystography disclosed a communication between the bowel and bladder (Fig. 1). Colonoscopy showed multiple aphthous ulcers and a pus-like discharge with a fistula in the ileocecal valve area.

Crohn's disease is the most common cause of an ileovesical fistula. The diagnostic features of a fistula to the urinary system are pneumaturia, fecaluria, and recurrent or persistent urinary tract infections. Several diagnostic tests are used to confirm the clinical suspicion, including endoscopic and radiographic procedures. Cystoscopy will confirm the diagnosis. Computed tomography (CT) is a useful noninvasive confirmatory modality; it not only provides important information on the intra-abdominal extent of disease, such as Crohn's disease, but also establishes the presence of fistulas to the urinary system. Colonoscopy is helpful in determining the extent and location of Crohn's disease. Historically, surgery has been the treatment of choice.

In this case, the colonoscopic biopsy findings showed Crohn's disease. Cystoscopy disclosed an abnormal erythematous mucosal lesion and polypoid lesions in the right bladder wall. CT showed thickening of the bladder wall, an ileovesical fistula, and air in the bladder, indicating the presence of communication with the ileum (Fig. 2). Our patient was treated with infliximab to induce remission in the Crohn's disease. After four cycles of infliximab treatment, the activity index of Crohn's disease decreased, and the clinical appearance was improved.

In conclusion, clinicians should suspect an enterovesical fistula with pneumaturia and fecaluria and confirm the diagnosis with cystoscopy, colonoscopy, and CT to institute the appropriate treatment.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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Figure 1. Cystography showed a communication between the bowel and bladder (arrows).



Figure 2. Computed tomography showed thickening of the bladder wall, an ileovesical fistula, and air in the bladder, indicating presence of communication with the ileum (arrow).

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