CLINICAL STUDY

Enterovesical fistulas in Crohn’s disease

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Abstract

Background: Crohn’s disease is a chronic inflammatory disease of the bowel, that may affects the urinary system. Although fistula formation has been reported in up to 35 % patients suffering from Crohn’s disease, urinary fistulas affect only 2 to 8 % patients.

Patients and methods: Authors have done a retrospective study with the aim to investigate the incidence of enterovesical fistulas in patients admitted due to Crohn’s disease to the IInd Department of Surgery of the Comenius University Medical School and Department of Surgery of University Hospital Nitra during 10 years long period.

Results: The overall incidence of enterovesical fistulas in our clinical material was 6.83 %. All patients underwent elective surgery. There were no serious postoperative complication. A two stage approach was necessary due to severe inflammation in one patient. Severity of inflammation decreased later on, after treatment with anti TNF α, which allowed subsequent elective surgery.

Conclusion: Authors consider elective surgery as a treatment of choice in the managernet of enterovesical fistulas in Crohn’s disease. Surgery is effective and safe (Fig. 2, Ref. 3). Full Text (Free, PDF) www.bmj.sk.

Key words: enterovesical fistulas, Crohn’s disease, inflammation.

Crohn’s disease is a chronic inflammatory disease of the bowel, that may affects the urinary system. Fistula formation has been reported in up to 35 % patients suffering from Crohn’s disease (1). The number of fistulas and septic complications is still rising. Although the incidence of urinary fistulas is reported only in 2 to 8 % patients, they represent a serious diagnostic and therapeutic problem (2). That was why we decided to investigate the incidence of enterovesical fistulas in our patients and evaluate the results of their operative treatment.

Patients and methods

From January 1, 1995, to December 31, 2005, 319 patients suffering from Crohn’s disease have been admitted for elective and urgent surgery to the IInd Department of Surgery, Faculty of Medicine, Comenius University. In these 319 patients 444 operations have been done. The most common indications for surgery were obstruction, abdominal mass formation with abscess and fistulas. There were 20 patients with preoperative confirmed enterovesical fistulas. The most helpful preoperative diagnostic examination was contrast enhanced CT, which confirmed free air in the bladder in every patients. Direct communications between the bowell and the bladder was seen on CT scans only in 4 patients. In contrast, barium swallow and enema or cystography and cystoscopy confirmed diagnosis in less than 50 % of the patients. The most common symptoms were pneumaturia, fecaluria and recurrent urinary tract infections. All patients underwent elective surgery. The main goal of surgery was to perform resection of the involved segment of the bowel and suturing of the target organ – urinary bladder. Foley catheter was inserted in all patient and left in place for at least 7 postoperative days and was removed after a cystogram shows no bladder leak.

Results

The enterovesical fistulas were confirmed during surgery in 20 patients. It represents overall incidence 6.27 %. There were 8

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ileo-vesical, 9 ileo-colono-vesical and 3 sigmo-(recto)-vesical fistulas. In 9 cases of ileo-colonovesical fistulas, a interansal abscess was found very often (7 out of 9). During surgery, the fistula’s tract was identified with subsequent closure of the defect in the bladder wall and resection of the involved bowel (Fig. 1). Postoperative drainage of the abdominal cavity was performed for several days and Foley catheter was left in place at least 7 days. The postoperative mortality was 0 %. There were no serious postoperative complications. The inflammation of the surgical wound was found in 7 patients, with no need for specific treatment. In one patient, two stage procedure was done due to severe inflammation in the pelvis, so it was impossible to identify the fistula tract. Derivation of the bowel content by ileostomy was done at fist stage. Subsequent fistula closure was done electively after treatment with anti TNF α, when inflammation disappeared.

Conclusion

The incidence of enterovesical fistulas in Crohn’s disease is small, in our material 6.27 % out of all surgical procedures performed due to Crohn’s disease. This incidence is similar to that, reported in the literature (1, 2). The pneumaturia and recurrent urinary tract infections are the most significant symptoms for the presence of the enterovesical fistulas (3). According to our experience we consider CT scans as the most useful preoperative diagnostic tool. Surgical treatment of enterovesical fistulas is indicated in almost every patients as the spontaneous closure or closure after conservative treatment is very rare due to distal bowel obstruction with necessitate surgical intervention (Fig. 2). We consider surgical treatment as effective and safe.

Reference


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