Discussion

We describe a non-drug abuser who experienced seven episodes of endocarditis. Recurrent endocarditis is defined as repeated episodes of endocardial infection separated by intervals of at least 6 months or caused by different microorganisms.[5] In the patient described, all the episodes were compatible with the strict definition of infective endocarditis proposed by Von Reyn *et al.*[4] To the best of our knowledge, only few cases with similar or greater number of recurrences have been reported in the medical literature.[2-4] Von Reyn and his associates, Mokotoff and his coworkers[2] and Simonson and his group each documented a patient who had undergone six or more episodes of recurrent infective endocarditis. All three patients were drug abusers.

Although the number of patients with recurrent infective endocarditis is on the rise as a result of improved treatment, only three studies have dealt with the unique features of this recurrent disease.[1,5,6] It has been found that underlying abnormalities in cardiac structure and active intravenous drug abuse are associated with increased risk of recurrent infective endocarditis, with a greater propensity among males.[1,6] The valvular location of the infective process and the distribution of causative microorganisms are similar in both initial and recurrent episodes. Failure to eradicate a local nidus of bacteria (that is, verrucae or colonic polyp leading to increased mucosal permeability) may be responsible for recurrent infective endocarditis caused by the same microorganism. It is not clear why in some people recurrent episodes of infective endocarditis are caused by different microorganisms. Recurrent infective endocarditis is associated with a mortality rate of 25%, as compared with 9% in initial episodes.[1]

Prolonged survival of patients with recurrent infective endocarditis is attributable to intense workups and early institution of antimicrobial treatment, as well as prompt surgical intervention. Intense therapy is not devoid of severe side effects, however, as is clearly demonstrated in our patient.

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Intestinal prolapse through the vagina

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Summary: We describe the case of a 68-year-old woman who presented with an acute onset spontaneous vaginal vault rupture and intestinal prolapse through the vagina. Results of a literature survey are presented and the causes of vaginal vault rupture are discussed.

Introduction

Although vault prolapse and enterocele are known complications of vaginal hysterectomy, acute spontaneous vault rupture with small bowel prolapse is extremely rare.

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Case report

A 68-year-old woman presented as an emergency with a one week history of vaginal discomfort. Six hours before admission a gangrenous loop of intestine had prolapsed from the vagina. There was mild lower abdominal tenderness but no evidence of peritonitis or shock. Significant previous history included a vaginal hysterectomy and anterior repair 5 years earlier for benign disease and posterior vaginal repair of a rectocele 2 years before presentation. Three months before this admission, the patient had been diagnosed to have temporal arteritis for which she was taking prednisolone 25 mg daily.

Her obstetric history included two normal vaginal deliveries. There was no previous history of a vaginal discharge or bleeding or of any conditions causing an increased intra-abdominal pressure.

On admission, a frankly gangrenous loop of small bowel was seen prolapsing from the vagina (Figure 1). Abdominal radiography showed a few fluid levels but no evidence of free gas.

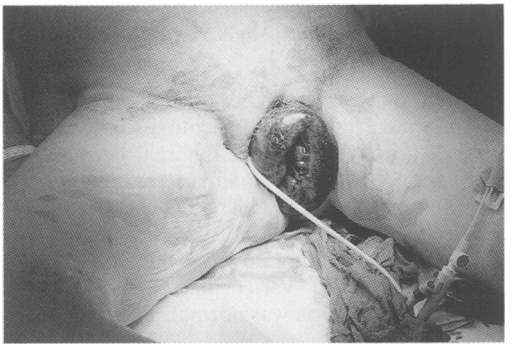

Figure 1 Gangrenous loop of bowel prolapsing through the vagina.

At laparotomy, a loop of distal ileum was identified entering the vaginal vault but could not be brought back into the pelvis because of severe distal oedema. The loop of bowel was transected and delivered through the vagina; the bowel ends were anastomosed within the abdomen. A 4 cm rent with severely inflamed edges was seen in the anterior fornix of the vaginal vault which was sutured. Histology of the resected bowel showed transmural venous infarction. The patient subsequently made a rapid and uneventful recovery.

Discussion

A survey of publications over the last 40 years reveals only three recorded cases of bowel prolapse through the vagina following vaginal surgery. Two of these have occurred after a Manchester repair[1,2] and one was secondary to rupture of an enterocele following a vaginal hysterectomy.[3]

Rupture of the vaginal vault is associated with a loss of the integrity of the lining peritoneum, fascia and the vaginal mucosa. Predisposing factors include pelvic irradiation, corticosteroid therapy and vaginal vault inflammation due to any cause. There was no obvious cause discernible in this patient, she had no factors causing an increased intra-abdominal pressure and her corticosteroids had been started almost 18 months after her posterior vaginal repair. The only significant factor present was the giant cell arteritis which had been diagnosed 3 months previously.

Giant cell arteritis is a systemic disease which affects the medium- and small-sized arteries. It is present in about 1 in 750 of the over 50 age group and is known to involve the female genital tract.[4,5]

In conclusion, it is possible that the giant cell arteritis may have set up a vaginal vault inflammation which, along with the concomitant steroid therapy, could have led to the vaginal vault rupture and the small intestinal prolapse.

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