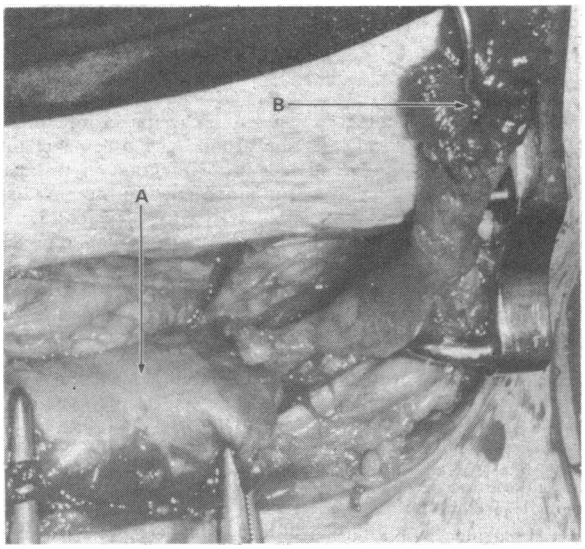
SHORT REPORTS

Peritonitis associated with vaginal leakage of dialysis fluid in continuous ambulatory peritoneal dialysis

As the use of continuous ambulatory peritoneal dialysis for the treatment of end-stage renal failure increases so rarer complications of this treatment are being recognised.[1] We report a case of peritonitis with leakage of dialysis fluid from the peritoneum by way of the Fallopian tubes and uterus into the vagina.

Case report

This 17-year-old girl had been born with an imperforate anus and recto-vaginal fistula, which was treated by a rectal cut-back. Because of recurrent urinary tract infections associated with ureteric reflux and hydronephrosis bilateral ureteric reimplantation and an ileal loop bladder were performed in childhood. She was treated with haemodialysis at 15 years of age because of reduced renal function. A year later she received a cadaver transplant which drained into the ileal loop. At this operation interperitoneal adhesions were present but the Fallopian tubes were normal. She was again treated with haemodialysis six weeks later after a transplant nephrectomy for severe irreversible rejection. Because of problems of vascular access continuous ambulatory peritoneal dialysis was begun in October 1980.



Laparotomy photograph showing uterus (A) and enlarged left Fallopian tube with a probe in the dilated lumen (B).

She had had her menarche aged 13 but had secondary amenorrhoea from the age of 15½ until she menstruated again in December 1980 two and a half months after starting continuous ambulatory peritoneal dialysis. Three days after menstruation she developed a coagulase-negative staphylococcal peritonitis which was treated with gentamicin and cloxacillin. During the next three months she had recurrent infections due to coagulase-negative staphylococci with different antibiotic sensitivities. In March 1981 *Streptococcus faecalis* was isolated from the peritoneal fluid and the infection was treated successfully with ampicillin. In April 1981 she complained of leakage of peritoneal fluid from the vagina, which was confirmed by intraperitoneal injection of methylene blue. Further infection with coagulase-negative staphylococci and *S faecalis* failed to respond to antibiotics. Vaginal leakage continued and peritonitis due to *Candida albicans* developed in July 1981. At laparotomy the peritoneal cavity was reduced with numerous adhesions and the peritoneum was grossly thickened. The left Fallopian tube was enlarged with a dilated lumen and appeared to be the site of the fistula (see figure). Sterilisation was performed by ligation, the medial ends of the tubes being buried in the broad ligament. She was subsequently treated with haemodialysis using a subclavian cannula. On restarting peritoneal dialysis four weeks later there was no further vaginal leakage or peritonitis. Nevertheless, the peritoneal cavity was decreased considerably in size, thus giving inadequate dialysis. Haemodialysis was, therefore, restarted using a Gortex graft in October 1981.

Comment

Peritonitis is still a major cause of morbidity and mortality with continuous ambulatory peritoneal dialysis.[1] Coagulase-negative staphylococci account for about 40% of cases; they probably result from accidental contamination and usually have a good response to antibiotic treatment.[2]

In a report of a large series of patients undergoing continuous ambulatory peritoneal dialysis[1] a similar instance of vaginal leakage occurred in a patient who also had candidal peritonitis. This was treated by temporarily removing the dialysis cannula and ligating the Fallopian tubes.

Our patient had recurrent peritonitis despite a good technique of bag-exchange. The cause of the initial episodes of peritonitis before the appearance of the vaginal leakage is uncertain, but these attacks were precipitated by menstruation and perhaps retrograde passage of infected material. Retrograde flow of infection with peritoneal spread is well known in cases of salpingitis.[3] In patients undergoing continuous ambulatory peritoneal dialysis the dialysis fluid may become blood-tinged during menstruation, which can result in eosinophilic peritonitis,[4] which our patient did not have.

Vaginal leakage of uninfected dialysis fluid through a structurally normal genital tract is unknown. The cause of the Fallopian tube damage and dilatation is uncertain but may have been related to the peritonitis. We recommend that in patients who develop a vaginal leak of dialysis fluid a cause should be looked for and corrected immediately, as delay may lead to loss of peritoneal surface from prolonged peritonitis.

[1] Khanna R, Oreopoulos DG, Dombros N, *et al.* CAPD after three years. Still a promising treatment. *Peritoneal Dialysis Bulletin* 1981;1:24-34.
[2] Vas S. Peritonitis during CAPD. *Peritoneal Dialysis Bulletin* 1981;1:47-9.
[3] Jeffcoate N. *Principles of gynaecology.* 4th ed. London: Butterworth, 1975:320.
[4] Gokal R, Ramos JM, Ward MK, Kerr DNS. Eosinophilic peritonitis in continuous ambulatory peritoneal dialysis (CAPD). *Clin Nephrol* 1981; **15**:328-30.

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Recurrent trimethoprim-associated fixed skin eruption

I describe a case of fixed skin eruption associated with ingestion of trimethoprim in a patient known to be allergic to co-trimoxazole. This case emphasises that sulphamethoxazole should not always be assumed to be the culprit in co-trimoxazole-associated cutaneous reactions. I am not aware of any previous reports of a fixed skin eruption associated with trimethoprim used as a single agent.

Case report

A 49-year-old woman presented with a history of recurrent attacks of a well-circumscribed, non-irritating area of swelling at a fixed site on the left side of her neck. She had suffered eight or nine self-limiting attacks in the past two years and could definitely associate one of the episodes with ingestion of co-trimoxazole (trimethoprim plus suphamethoxazole). She had been taking propranolol 40 mg/day, cyclopenthiazide 0·25 mg/day, and glyceryl trinitrate for 18 months for hypertension and angina, but there was no apparent direct association between these drugs and her skin problem. She also frequently took antibiotics for recurrent urinary tract infections.

Initial examination showed evidence of her previous attacks—namely,