Spontaneous Streptococcal Peritonitis in Renal Transplant Recipient

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Dear Sir,

Discussion

Spontaneous bacterial peritonitis is a rare disease. In adults it occurs mostly in patients with serious underlying diseases associated with ascites, in particular alcoholic cirrhosis of the liver [1].

Spontaneous bacterial peritonitis in renal transplant recipients has not been reported previously except on one occasion [2]. In this review of 28 cases of peritonitis occurring in 686 renal transplant recipients, 1 case, described as primary, was due to Salmonella group B, and occurred shortly after transplantation. The patient died, apparently of continuing intraperitoneal infection. No further details are provided.

We would like to report a fatal case of spontaneous bacterial peritonitis in renal transplant recipient, emphasizing the various predisposing factors which make renal transplant recipients prone for the infection.

Case Report

A 24-year-old man with end-stage renal disease due to heredo-familial amyloidosis, on chronic hemodialysis, received a cadaver kidney. After operation he was treated with 150 mg prednisone and 150 mg azathioprine daily. In addition, amphotericin B, 100 mg weekly, was given because of clinical, bacteriologic and endoscopic evidence for Candida esophagitis. Severe leukopenia necessitated discontinuation of azathioprine after 2 weeks. Graft nephrectomy was performed after 3 weeks because of acute rejection. Two days later the patient started complaining of severe abdominal pain associated with vomiting. Body temperature was 38.6°C, blood pressure 90/60 and pulse 130 beats/min. The abdomen was diffusely tender, but without rigidity or rebound. Laboratory examinations revealed mild leukocytosis and normal serum amylase. Plain abdominal film failed to reveal free air in the abdomen. On explorative laparotomy diffuse purulent peritonitis was found, without intraabdominal source of infection. Peritoneal fluid and concomitant blood cultures yielded growth of Streptococcus hemolyticus group B. The patient died 2 days later in septic shock, despite intensive care.

Renal transplants, especially recipients of cadaver kidneys [2], are prone to intraperitoneal infection by a wide variety of organisms. Impaired host defenses, associated with underlying diseases, use of high-dose corti-costeroids, other immunosuppressive agents, graft irradiation, graft nephrectomy, rejection episodes (have been previously noted to often occur close in time to

bacterial and viral infections [3,4]) in addition to chronic hemodialysis [5], may predispose renal transplant recipients to spontaneous bacterial peritonitis, and should alert the clinician for the possibility of this rare disease.

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