Non-Typhoid Salmonellosis in Renal Transplant Patients

Report of a Case with Colonization of a Vascular Prosthesis

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Dear Sir,

In non-immunosuppressed patients non-typhoid Salmonella (NTS) infection produces a benign gastroenteritis. Renal transplant patients are a high risk group in whom the clinical and laboratory signs and course of NTS have many atypical features.

We observed a case of NTS in a 33-year-old patient with chronic glomerulonephritis. On November 24, 1971, he was given an 0 mismatch cadaver kidney and immuno-suppressed with prednisone and azathioprine. Until 1981 no sign of rejection has been observed and renal function remained completely normal. In 1978 an atheromatous fusiform aneurysm in the descending thoracic aorta made it necessary to implant a polyester fiber (Dacron®) prosthesis. In April 1981, he had a febrile episode and abdominal pain without any transit disorder. The results of urine and stool cultures were negative but Salmonella dublin was isolated from blood cultures. The patient made good clinical progress after 2 weeks of treatment with ampicillin (4 g/day). In January 1984, the patient presented with a severe infection, haemoptysis and an abscess of the apical area of the left lower lobe. S. dublin was again cultured from the blood and sputum. Computed tomography suggested the presence of a fissure of the aortic prosthesis. An operation on March 24, 1984 confirmed that the prosthesis had been partially displaced and was colonized by S. dublin. It was replaced but the patient died 2 days later.

Post-transplant NTS varies in prevalence according to geographic area: 1–2% in tropical or subtropical areas [1] as compared to temperate areas (1/238 among our patients). Although Salmonella typhimurium is largely preponderant, the incidence of S. dublin is increasing steadily in France and Belgium [2–3]. Most S. dublin infections are septicaemic. They usually appear in patients with normal, stable renal function who are being treated with low doses of immunosuppressants [1]. The course of NTS in an immunodeficient patient is often punctuated with

relapses in spite of correct treatment [4]. Our observation clearly illustrates the possibility of long clinical latency between several successive episodes.

The presence of a vascular anomaly should be considered as a favourable local condition because of the vascular tropism of NTS, particularly in devitalized areas [5]. Prolonging the antibiotic treatment well beyond the usual period is justified in renal transplant patients with a vascular prosthesis and NTS but the main problem is colonization of the prosthesis which inevitably leads to its destruction in the short or the long term. It therefore seems essential to consider replacing the prosthesis in spite of the risks this entails [6].

References

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