Chronic *Salmonella eimsbuettel* septicaemia presenting with intermittent sweats and haematuria

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Summary

An unusual presentation is reported of salmonellosis, frank haematuria and chronic septicaemia arising during an outbreak of food poisoning caused by *Salmonella eimsbuettel*. The patient whose gut was colonized gave a history of chronic pyrexia and weight loss and suffered an intermittent urinary infection but had no gastroenteritis.

Introduction

Chronic septicaemias due to *Salmonella* sp. are uncommon: a patient is reported who developed a chronic pyrexial illness associated with a *S. eimsbuettel* septicaemia, whose illness arose during an outbreak of food poisoning associated with this organism.

Case report

A retired plasterer, aged 55, was admitted with a 4-week history of intermittent sweats. Two weeks earlier he had had dysuria and nocturia, and passed blood clots in his urine. He was vomiting nearly every morning, was constipated and had lost 20 kg in weight. He had suffered from chronic backache for many years. On examination his temperature was 38.3°C, BP 150/100 mmHg and the spleen was just palpable. Initial investigations showed Hb 12.4 g/dl; WBC $8.7 \times 10^9/l$ (76% neutrophils); ESR 63 (Westergren); chest X-ray, an old calcified focus in the right upper zone. Gastric parietal cell antibodies were present in the serum transiently. The ANF titre was 500. An IVU showed a bulge on the left renal outline so, in view of the haematuria, a left renal angiogram was performed, by which a renal carcinoma was excluded. A Mantoux test was strongly positive to one unit of PPD, although

microscopy and culture of urine and sputum for *Mycobacterium tuberculosis* were subsequently negative. Although liver function tests were normal, ⁹⁹Tc-colloid scan showed a patchy distribution of activity in a normal sized liver, and a hyperactive, enlarged spleen, typical of mild liver parenchymal disorder. Although previous cultures of urine were negative, one week after admission a further culture grew a significant number ($> 10^5/ml$) of a non-lactose fermenting coliform and in view of his deteriorating condition, treatment was started with tobramycin. A similar Gram-negative rod was grown from his blood culture taken one week before and a Widal test was positive for *S. paratyphi* B, H antibody, at a titre of 640. Both organisms were identified as *S. eimsbuettel*, the H antigen of which cross-reacts with that of *S. paratyphi* B. A faecal culture was also positive for this organism, which was sensitive to co-trimoxazole. In view of this, his treatment was changed to co-trimoxazole, 2 tablets twice daily, and he made an uneventful recovery, with a fall in the ANF titre to 1/10 within 2 months. An oral cholecystogram, a bone scan and a repeat liver and spleen scan performed during convalescence were normal. At the time of the onset of his symptoms there was an outbreak of *S. eimsbuettel* gastroenteritis associated with pork pies (unpublished report, 1977), for which the patient had a particular liking. He always ate them cold (without reheating) and his wife did not keep any meat overnight, anything uneaten being discarded.

Discussion

Continuing contamination of mass-produced food with *Salmonella* spp. is a regrettable, but as yet, unsolved problem. Because a large inoculum is generally required to cause clinical illness, proper storage and cooking will usually be preventative. This patient was unfortunate in developing an

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uncommon form of salmonellosis, a septicaemic illness, frank haematuria (which led to unnecessary angiography), an intermittent bacteriuria and colonization of the gut without gastroenteritis. There was no evidence of endocarditis, hepatic or renal abscesses or an aortic aneurysm to account for the continuing bacteraemia. The only hint of a persistent site of infection was the demonstration of patchy parenchymal uptake in the liver with increased splenic uptake on the initial scan, which subsequently had resolved on the scan taken 4 weeks later.

The patient was successfully treated with oral co-trimoxazole in ordinary dosage. A long course was

given because his backache, which was poorly localized and rather variable, improved when treatment was started. This may have been due to treatment of foci in the kidney, but an early vertebral osteomyelitis could not be excluded.

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CORRIGENDUM

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for KEITH E. BRITTEN read KEITH E. BRITTON.