Non-typhoidal *Salmonella* severe sepsis in an immunocompetent young woman

Joana Ramalho, João Correia

Department of Medicine,
Centro Hospitalar do Porto-
Hospital de Santo António,
Porto, Portugal

Correspondence to
Dr Joana Ramalho,
jasorblue@gmail.com

DESCRIPTION

A previously healthy, immunocompetent 24-year-old woman presented with onset of diarrhoea (without blood or mucus), vomiting and abdominal pain within 6 h of evolution. She stated a consumption of well water and tomato pulp a few days ago and no recent history of travel abroad.

At hospital admission, she was dehydrated, with shivering, tachycardia, hypotension and painful abdominal palpation, but without signs of peritoneal irritation.

In a few hours, there occurred clinical deterioration with shock, acute abdomen with peritoneal irritation and pancytopenia.

CT showed ascites and marked ileo-colon oedema and distension (figures 1 and 2). Stool and blood cultures turned positive for non-typhoidal salmonella (NTS), D group.

She went on vasoactive amine support and completed 14 days of ciprofloxacin with gradual improvement.

NTS serotypes are major causes of food-borne infections, which most often result in self-limited gastroenteritis. However, serious extraintestinal manifestations may occur, such as bacteraemia and subsequent focal infections.¹

Despite the worldwide increasing prevalence of NTS infection among immunocompromised patients owing to conditions such as HIV infection, this entity remains rare in immunocompetent persons.²

Hohmann *et al*¹ report a 5% NTS bacteraemia frequency in individuals with gastrointestinal illness and that most patients have extremes of age and

Figure 2 CT transversal image showing colon oedema.

immunosuppression, such as malignancies, HIV infection or connective-tissue disorders.³

This case illustrates a severe invasive disease with haematogenous spread, septic shock and marked intestinal distension with risk of rupture, in an immunocompetent woman without comorbidities, from a pathogen that usually causes self-limiting gastrointestinal manifestations.

Learning points

- ▶ Non-typhoidal salmonella (NTS) infection often results in self-limited acute gastroenteritis; however, invasive disease can occur with bacteraemia and subsequent focal infections.
- ▶ NTS invasive disease is a rare entity in immunocompetent persons.
- ▶ Worldwide, there is an increasing prevalence of NTS infection among immunocompromised patients because of conditions such as HIV infection.

Competing interests None.

Patient consent Obtained.

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Figure 1 CT coronal image showing marked ileocolon oedema and distension.

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