

中文題目：非傷寒性沙門氏菌引起腮腺膿瘍的病例報告

英文題目：Case report: Parotid abscess due to nontyphoidal Salmonella in an immunocompetent adult

作者：林聖淳<sup>1</sup>，黃建賓<sup>2</sup>

服務單位：<sup>1</sup>大林慈濟醫院內科部，<sup>2</sup>大林慈濟醫院感染科

**Introduction:** The incidence of extra-intestinal infections from non-typhoidal salmonella was increased during the past two decades. Salmonella subspecies (subsp.) cause a spectrum of diseases in humans and animals, including wild mammals, reptiles and birds. Immunocompromised adults, children and particularly infants at high risk of infection, often these infections are invasive and cause serious complications such as meningitis, septicemia, and osteomyelitis. We report a case of an otherwise healthy, immunocompetent 85-year-old man with a left parotid abscess caused by non-typhoidal salmonella and review its clinical features.

**Case presentation:** A 85-year-old man presented to our emergency department due to fever with left facial pain for 1 day. He had the medical history of hypertension, type 2 diabetes mellitus, chronic obstructive pulmonary disease, chronic kidney disease and persistent atrial fibrillation. He had no headache, cough with sputum, diarrhea, vomiting, abdominal pain, dysuria, joint pain, or open wound. He did not have any exposure to pets or personal contact with ill persons.

At emergency department, his vital signs were blood pressure of 161/71 mmHg, heart rate of 83 beats per minute and her temperature of 38.6° C. Notable laboratory findings included a hemoglobin 12.3 g/dL and a white blood cell count of  $10.32 \times 10^3/\text{ul}$ . Amoxicillin and clavulanic acid were given, and his fever subsided. However, his left facial pain progressed. He was admitted under the tentative diagnosis of left bacterial parotiditis.

After admission, we used Augmentin for his infection, and his fever quickly subsided. However, he had progression on his left facial redness, swelling, and pain with trismus and dysphagia. Neck CT with contrast revealed left parotid abscess with deep neck infection(Fig.1). He underwent incision and debridement, and pus was sent to our microbiological laboratory for culture. Teicoplanin was added for his infection. Later, group D Salmonella non Typhi was isolated from the sample, so antibiotic was adjusted to Ceftriaxone. The stool, urine, and blood cultures were negative. The patient was treated with Ceftriaxone every day for 4 days, with complete remission of symptoms. He was discharged from the hospital with oral antibiotic with Cefixime for 3 more days.

**Discussion:** Salmonella are facultative anaerobic gram-negative bacilli, which always transmitted by fecal-oral route. Salmonella can be divided into two categories according to the clinical syndromes in human, typhoid and non-typhoid serotypes, respectively. Typhoid serotypes include Salmonella typhi and Salmonella paratyphi, which cause classic typhoid fever. Non-typhoidal Salmonella or NTS often causes gastrointestinal symptom, such as nausea, vomiting, abdominal pain, and bloody diarrhea. Common extraintestinal sites of infections include urinary tract, the endovascular structure, joints, long bone, and brain.

In this paper, we present a case of a relatively healthy immunocompetent adult with a parotid abscess due to infection with non-typhoidal salmonella. Many adults infected with non-typhoidal salmonella become bacteremic after invasion of the bacteria and subsequent extra-intestinal organ involvement is frequent. In immunocompromised hosts bacteremia may occur in up to 80%. Soft tissue infections occur mostly in patients with chronic underlying conditions and immune deficiency. In our patient, uncontrolled type 2 DM was the only predisposing factor for non-typhoidal salmonella infection.

**Conclusion:** Non-typhoidal Salmonella systemic infections often occur in patients who are immunocompromised. The clinicians should keep in mind that Salmonella can be a possible agent in patients who have a localized infection and defective immune status and the microbiology laboratory should be warned. In our case, the likely route of transmission remains unclear and requires further follow up. In conclusion, we present a case of a parotid abscess caused by non-typhoidal salmonella in an immunocompetent adult without other abnormality of the parotid glands.