



Chronic Salmonella Cervical Lymphadenitis and Abscess in a Diabetic Patient

Phillip Richards, MD; Scott Mann, MD; Nathan Grohmann, MD

Department of Otolaryngology—Head and Neck Surgery, University of Colorado Anschutz

INTRODUCTION

- *Salmonella* infections typically present as gastroenteritis
- Less than 1% of cases involve extraintestinal manifestations
 - Most commonly in immunocompromised hosts
 - HIV
 - Diabetes
 - Immunosuppression
 - Rarely, head and neck infections have been described
 - Lymph node abscess
 - Intramuscular abscess
 - Necrotizing soft tissue infection
 - Thyroid abscess

IMAGING



CASE PRESENTATION

- Patient: 51-year-old male with poorly controlled type 2 diabetes (HbA1c 11.6%) and hypertension
- Presentation:
 - Three-month progressive left neck swelling, night sweats, and weight loss
 - Three-week rapid enlargement, new-onset pain, erythema, odynophagia, fever
 - No gastrointestinal symptoms
- Diagnostics:
 - CT neck with contrast:
 - Multistation left-sided cervical lymphadenopathy
 - Dominant centrally necrotic cystic left level 2A lymph node 3.0×4.2 cm
 - Blood cultures negative
 - Collected after initiation of antibiotics
 - Concern for malignancy
- Initial treatment:
 - IV antibiotics
 - IR-guided aspiration and biopsy
 - Culture: Purulent fluid, *Salmonella* species
 - Pathology: benign reactive lymphadenopathy

Figure 1. Initial CT imaging

CASE RESOLUTION

- Further course:
 - Persistent symptoms, residual fluid on CT
 - Surgical incision and drainage
 - Culture: Gram-negative bacilli, no acid-fast bacilli
 - Pathology: reactive lymph node tissue with paracortical hyperplasia, suppurative granulomas, polytypic plasmacytosis
 - Reactive process without malignancy
- Resolution
 - Improvement, discharge on oral antibiotics, resolution of symptoms

DISCUSSION

- Deep neck infections due to *Salmonella* are extremely rare
- Diabetes is a key predisposing factor
- Clinical and radiologic mimicry of malignancy complicates diagnosis
- Likely pathogenesis: GI infection with transient bacteremia and seeding of cervical nodes
- Management requires:
 - Early imaging
 - Drainage for source control
 - Culture-directed antibiotic therapy
 - Multidisciplinary coordination

CONCLUSION

- Malignant-appearing neck abscesses can be caused by *Salmonella* lymphadenitis
- Diabetes predisposes to extraintestinal salmonella infections
- A high index of suspicion and interdisciplinary team is required to address rare infections in diabetic patients

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