

INTRODUCTION

Tularemia, a zoonotic disease caused by *Francisella tularensis*, a highly virulent gram-negative species of bacteria. Transmission occurs by bites from ticks, mosquitoes, and flies, though inhalation of contaminated aerosols or ingestion of infected food/water. Tularemia is a notifiable disease in Ireland, with no domestically reported cases since its inclusion in 2012 and one internationally acquired case reported in 2023.

CLINICAL COURSE

- PRESENTING COMPLAINT**
- 6-year-old female attended the Paediatric Emergency Department, UHL
 - Anterior and posterior cervical chain confluent, swollen, abscesses increasing in size, unwell with viral-like symptoms 3/52
 - Pain while eating
 - No cough, weight loss or night sweats
 - No joint pain, not pale
 - Unvaccinated, travel to Islamabad, Portugal and May in months previous
 - No past medical history

- ON EXAMINATION**
- Neck: Abscesses tender on palpation, red, hot, swollen, fluctuant
 - 1x small inguinal lymph node (<1cm), no axillary involvement
 - Afebrile, vitally stable
 - Abdomen soft, no hepatomegaly, chest clear on auscultation

- INVESTIGATIONS**
- **Bloods & Chest X-ray:** NAD
 - **NPS:** Rhino enterovirus positive
 - **Ultrasound (US) Neck:** Multiple enlarged cervical nodes throughout the left side of the neck.
 - Necrotic and fluctuant, Largest: 2x2.6x3.5cm
 - **Impression:** cervical lymphadenitis with several level II and Ib/VI necrotic fluctuant nodes
 - **Blood cultures:** NEGATIVE
 - **TB :** QuantiFERON, Mantoux,
 - Abscess fluid culture, 16SRNA and 18S RNA: NEGATIVE.

- MANAGEMENT**
- IV flucloxacillin initially
 - Added on PO clindamycin, per local guidelines.
 - Switched to IV ceftriaxone
 - Incision and Drainage (I&D) of abscess by **Ear Nose & Throat (ENT) Surgeons.**
 - Soft tissue biopsy reported inflammatory cell exudate with necrotic cell debris & xanthogranulomatous reaction favouring ruptured sebaceous cyst
 - **Microbiology** advised IV/PO Augmentin 2/52 post drainage
 - **D/C** home on PO Augmentin for a further 9/7

An Uncommon Cause of Cervical Lymphadenitis in a Paediatric Patient: A Case of Glandular Tularemia

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CLINICAL COURSE

- 1/52: DAY WARD REVIEW**
- Doing well, dressings being changed post drainage, investigates to date negative
- 1/12:RECURRENT SUPRACLAVICULAR ABSCESS**
- **Infectious Disease** (ID) Children's Health Ireland (CHI) consultation: I&D by ENT, cultures, US abdomen ?generalised adenopathy, repeat QuantiFERON, bartonella and brucellosis
 - Admitted

- OTHER INVESTIGATIONS:**
- Brucella, Toxoplasma, HIV 1& 2, RPR syphilis oxidative burst test, immunoglobulins, Leishmaniasis, NTM: NAD
 - Supraclavicular biopsy and culture
 - **Histology** referral
 - **Tissue Viability Nurse (TVN)**
 - **D/C**

- The next 2/12: DAY WARD**
- Healing
 - DNA'd ID clinic



CLINICAL COURSE

- 1/12:**
- DERMATOLOGICAL MANIFESTATION OF BULLOUS LESIONS**
- INVESTIGATIONS:**
- Discussion with ID in CHI
 - **Tularaemia serology**
 - Hand swabs
- MANAGEMENT:**
- **MRSA:** HSE guideline for eradication
 - **Serologically:**
 - **Confirmed Tularaemia**
 - **Commenced on Ciprofloxacin 2/52** with complete resolution of symptoms.



DISCUSSION

Tularaemia, although a rare and notifiable disease, can be considered as a differential diagnosis in cases where standard diagnostic pathways fail to yield a definitive result. Additionally, the diagnosis and management of this case was facilitated by a multidisciplinary approach, emphasising the necessity of collaboration among teams when dealing with complex or refractory cases.

CONCLUSION

This case report serves to raise awareness of tularaemia as a differential diagnosis for paediatric cervical abscesses in Ireland, particularly in cases with an unclear aetiology. It also represents the diagnosis of a rare, notifiable disease, necessitating public health investigation.

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