Tracheomalacia can produce expiratory stridor in the paediatric population. A thorough history, examination and investigations are required for accurate diagnosis.

We present a rare case of severe tracheomalacia in a neonate secondary to prevertebral abscess.

Introduction
A 3-week-old 2.5kg female infant was admitted under paediatrics with pyrexia 39° C, WCC 22, CRP 90 and Staph Aureus positive blood cultures. She was commenced on broad spectrum intravenous antibiotics. During admission she developed noisy breathing, cyanotic episodes and increasing difficulty feeding.

Background
• Born at 38 weeks, normal delivery
• Jaundice day 1 requiring phototherapy
• NICU admission day 3 for partial dilutional transfusion to treat polycythaemia
• Foster care from birth
• Birth mother had history of drug abuse – substances unknown

ENT findings
On examination, the child had a weak cry and expiratory stridor with mild tracheal tug and subcostal recession. Flexible nasolaryngoscopy revealed a normal larynx with mobile vocal cords but induced a cyanotic episode.

Within 24 hours, the child deteriorated. Emergency microlaryngoscopy and bronchoscopy was performed showing severe posterior mid tracheal extrinsic compression, and the child was subsequently intubated.

Imaging
Emergency CT and MRI was performed

Fig 3 - Axial CT with contrast showing large rim enhancing prevertebral abscess compressing the trachea, ET tube in situ

Management
Multiple blood tests were carried out including immunoglobulins, hepatitis, HIV and syphilis all of which were negative.

Following discussion with other specialist teams, the infant was managed successfully with CT guided drainage obtaining 6ml of pus and long term IV antibiotics. Pus culture also grew staph aureus, negative for TB. She was extubated 7 days post op in theatre. Repeat MLB showed resolution of tracheomalacia.

Follow-up
Currently feeding well with no focal neurology and requires an orthopaedic brace for transfers only.

Conclusion
• Consider broad differential diagnosis in a child with stridor and blue spells
• Expiratory stridor indicates tracheobronchial obstruction
• Microlaryngoscopy and bronchoscopy is required for diagnosis