IMAGES IN THORAX

A deadly web

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An 18-year-old patient with metabolic myopathy due to long-chain fatty acid coenzyme A dehydrogenase-deficiency^{1 2} presented with worsening positional dyspnoea. He had required invasive ventilation via tracheostomy 6 months earlier. Examination revealed respiratory distress, a prolonged inspiratory phase and abdominal paradox. Non-invasive ventilation improved dyspnoea but surprisingly high inspiratory pressures were required. CT imaging revealed subtle, subglottic irregularity. Volumetric reconstruction identified a thin tracheal web (figure 1). Diathermy via rigid bronchoscopy (figure 2) immediately improved ventilation. Our patient had the potentially deadly combination of a pinhole trachea with respiratory muscle weakness, unable to generate audible stridor. Clinicians should be aware of limitations in conventional CT assessment of the upper airway.

Figure 1 Multiplanar and volumetric reconstruction of the computer generated image of the trachea showing a tight but thin tracheal web with a maximum diameter of only 2 mm at the site of the previous tracheostomy.

Figure 2 Bronchoscopic view of the tracheal web.

Contributors AMN and MDH cared for the patient and wrote the manuscript. SJ performed rigid bronchoscopy and diathermy. SP reviewed and reconstructed CT images. MG provided intensive care management for the patient.

Competing interests None.

Patient consent Obtained.

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