## PP84 BREATHING THROUGH A STRAW: A CASE SERIES OF TRACHEAL STENOSIS

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## **INTRODUCTION**

Managing airway due to tracheal stenosis can be a great challenge in the emergency department if not detected early.

## **CASE**

We report two cases of tracheal stenoses presented to our emergency department. Patient A was a 22-year-old gentleman with a background of disseminated tuberculosis and multiple history of intubation for various lung infections. He presented with progressive breathlessness over three days. Upon arrival he was alert but tachypneic and was speaking in short sentences. He had audible inspiratory and expiratory wheeze and auscultation of his lungs revealed generalised rhonchi. In view of impending respiratory collapse, the patient was prepared for intubation. Video laryngoscopy demonstrated the level of airway obstruction below the subglottic region suggestive of tracheal stenosis. The attempts at intubation were unsuccessful and he was temporarily ventilated using laryngeal mask airway prior to definitive airway management via an emergency tracheostomy. Patient B was a 29-year-old gentleman who presented with worsening breathlessness and reduced effort tolerance over a period of one week. He had a history of intubation three months ago following a motor vehicle accident. He was alert, had good saturation and clear lungs on auscultation. However, he spoke in short sentences and with a high-pitched voice. Although chest x-ray and blood gas analysis were unremarkable, a cervical xray was done in view of a suspected upper airway obstruction. This revealed narrowing of the airway at C7-T1 region. Further investigation with CT neck and thorax corroborated the finding of a patient tracheal stenosis. This underwent an emergency tracheostomy.

## **DISCUSSION & CONCLUSION**

Tracheal stenosis is a known complication of prolonged or multiple endotracheal intubation. Therefore, it should suspected in patients with upper airway obstruction and history of prior intubation. Tracheal stenosis is a subset of upper airway obstruction which may not be emergency overcome by cricothyroidotomy. Other potentially more effective alternatives are the fiber-optic and rigid bronchoscopes which could provide simultaneous visualisation and dilatation of the stenosis. These methods are also less invasive than an emergency surgical airway.

**KEYWORDS**: airway, tracheal stenosis