

Can We Do More To Prevent PICU Admissions for Children Presenting with Severe Asthma? What are the Modifiable Factors?

M Mukerji, H Opstad, A Samanta, R Klaber, K Wood

History:

A 17-month-old boy presents with a one day history of melaena, coffee ground vomit and biphasic stridor. Over the previous 6-weeks, he had 3-episodes of “croup” that partially responded to dexamethasone. He also had a weak cry since birth, inability to vocalise, and chronic tiredness. Upon examination, he had signs of respiratory distress and saturations of 95% in room air.

Results:

A nasoendoscopy performed by ENT revealed papillomatosis on the larynx. Subsequently, microlaryngobronchoscopy (MLB) showed extensive respiratory papillomatosis to both vocal cords extending to the supraglottis. No part of the airway was visible. He underwent micro-debridement and laser ablation but had recurrent respiratory papillomatosis (RRP) that required 6-8 weekly micro-debridement. His respiratory distress significantly improved. He has not had any further gastrointestinal bleeding which was felt to be secondary to excessive steroid usage.

Conclusion and Discussion:

In clinical practice, we often see young children with recurrent stridor and we either reassure parents it is likely laryngomalacia or prescribe dexamethasone for croup. However, a detailed history may uncover key pointers to an alternative diagnosis. Recurrent respiratory papillomatosis is rare in childhood (1-4 cases in 100,000 births), usually presenting between infancy and 4 years, but is an important differential diagnosis to consider in a child presenting with persistent stridor. A hoarse voice followed by persistent stridor is the most common presenting complaint. Other red flags include abnormal cry and dysphonia or aphonia. Risk factors include maternal age less than 20 years, vaginal delivery and being a first-born child. In our case, he is the first born of a 22-year-old mother with a strong family history of cervical cancer. An effective multi-disciplinary team approach involving ENT, Respiratory and Gynaecology is vital in managing similar cases.