

An unusual presentation of stridor in an infant

A 9-month-old boy presented with a 1-day history of fever and croupy cough. He had been diagnosed with laryngomalacia at 4 months of age and treated for recurrent croup and bronchiolitis. He was <0.4th centile for weight.

He had marked biphasic stridor in all positions along with tachypnoea. He showed some initial improvement with bronchodilators, steroids and antibiotics for suspected pneumonia, but his stridor persisted. He decompensated after 2 days of treatment.

Emergency intubation was performed in theatre followed by microlaryngoscopy. Figure 1 shows the findings of extensive laryngeal papillomatosis around the endotracheal tube. The child was transferred to a tertiary ear, nose and throat unit where he had microlaryngobronchoscopy and removal of papillomas, with intralesional cidofovir injections. He is now doing well.

This case highlights the importance of defining the quality of stridor and using this to formulate differential diagnoses.¹⁻³

Laryngeal papillomatosis is a benign growth of the epithelium of the larynx, trachea and bronchi caused by human papilloma virus types 6 and 11. The *Gardasil* vaccine may be used preventatively in mothers and potentially curatively in children.^{4 5}

Laryngeal papillomatosis is rare (incidence of 1–4 cases per 100 000 population⁶), but due to its morbidity¹⁻³ it must always

be included in the differential diagnosis of recurrent paediatric stridor with the following red flags:^{1-3 7 8}

- ▶ stridor at rest
- ▶ progressively worsening stridor over time
- ▶ abnormal cry
- ▶ severe respiratory distress (cyanosis with laryngomalacia is rare)
- ▶ biphasic/expiratory stridor
- ▶ failure to thrive
- ▶ hoarse voice/dysphonia/aphonia.

Arindam Das,¹ Jessica Bewick,² John Chapman,¹ Nuwan Siriwardasinghe,¹ Oluseun Tayo,¹ Maria Giakoumi¹

¹Department of Paediatrics, James Paget University Hospital, Gorleston, Great Yarmouth, UK

²Department of ENT, James Paget University Hospital, Gorleston, Great Yarmouth, UK

Correspondence to Dr Arindam Das, Department of Paediatrics, James Paget University Hospital, Gorleston, Great Yarmouth NR31 6LA, UK; drdasa@gmail.com

Contributors AD is the main author. Both JB and OT edited the article prior to submission. Images contributed by NS and MG. JC is the consultant clinician responsible for the care of this patient and provided the details of the clinical history.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.



CrossMark

To cite Das A, Bewick J, Chapman J, et al. *Arch Dis Child* 2015;**100**:599.

Accepted 27 November 2014

Published Online First 19 December 2014

Arch Dis Child 2015;**100**:599. doi:10.1136/archdischild-2014-307025

REFERENCES

- 1 Goon P, Sonnex C, Jani P, et al. Recurrent respiratory papillomatosis: an overview of current thinking and treatment. *Eur Arch Otorhinolaryngol* 2008;265:147–51.
- 2 Bjornson CL, Johnson DW. Croup. *Lancet* 2008;371:329–39.
- 3 Fasunla AJ, Lasisi OA. Diagnostic challenges of laryngeal papillomatosis and its implications among children in developing country. *Int J Pediatr Otorhinolaryngol* 2009;73:593–5.
- 4 Shah KV. A case for immunization of human papillomavirus (HPV) 6/11-infected pregnant women with the quadrivalent HPV vaccine to prevent juvenile-onset laryngeal papilloma. *J Infect Dis* 2014;209:1307–9.
- 5 Mudry P, Vavrina M, Mazanek P, et al. Recurrent laryngeal papillomatosis: successful treatment with human papillomavirus vaccination. *Arch Dis Child* 2011;96:476–7.
- 6 Larson DA, Derkay CS. Epidemiology of recurrent respiratory papillomatosis. *APMIS* 2010;118:450–4.
- 7 Harris AT, Atkinson H, Vaughan C, et al. Presentation of laryngeal papilloma in childhood: the Leeds experience. *Int J Clin Pract* 2012;66:183–4.
- 8 Coope G, Connett G. Juvenile laryngeal papillomatosis. *Prim Care Respir J* 2006;15:125–7.

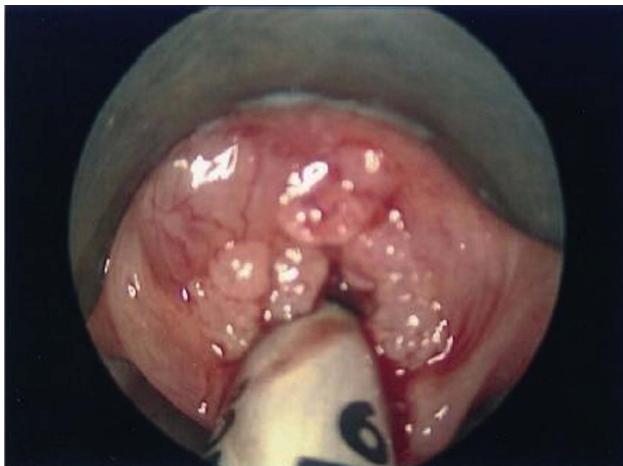


Figure 1 Microlaryngoscopic view of laryngeal papillomas.