Vallecular cyst in a neonate

A 25-day-old male infant was admitted to Kwong Wah Hospital, Hong Kong, in August 2000 with a 3-day history of shortness of breath and noisy breathing. There was no history of fever, cough, or stuffy nose. Feeding was poorly tolerated with subsequent vomiting. There was no history of choking. The rest of the family members were well with no coryzal symptoms. The patient was the second child in the family and was the elder twin of a spontaneous twin pregnancy. He was born at full-term by normal spontaneous delivery and weighed approximately 3.2 kg. The antenatal course was uneventful.

At admission, the patient was noted to have a weak cry. Later, he had an episode of breath holding when he became apnoeic and cyanotic after vigorously crying. The patient responded well to immediate facemask bagging. Stridor with desaturation was subsequently noted, which only improved when the baby was lying in the lateral position and given oxygen supplementation. Urgent flexible bronchoscopy revealed a large vallecular cyst compressing on the epiglottis. He was referred to the otorhinolaryngology surgeon for emergency operation. The child was intubated by a paediatric anaesthetist. The vallecular cyst can be readily reached through microlaryngoscopy (Fig 1). The lesion was completely excised with scissors. Thorough haemostasis was achieved after excision. This is important as postoperative bleeding from the vallecula epiglottica, which is situated just above the larynx, could lead to aspiration. Rigid endoscopic examination undertaken at the end of the surgery also revealed concomitant laryngomalacia (Fig 2). The patient tolerated the procedure well. He was extubated and transferred to the paediatric intensive care unit for observation. The respiratory distress improved after excision of the cyst. The patient made an uneventful recovery and was followed up in the clinic. His growth was satisfactory, and the stridor gradually improved and had resolved by the age of 1 year.

Stridor is a relatively common symptom during the neonatal period.1 Vallecular cyst is a rare and an unusual cause of stridor in the newborn.2-4 Laryngomalacia is a common association with vallecular cyst. Treatment of vallecular cyst is by surgical excision. Stridor may, however, persist as a result of concomitant laryngomalacia.

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References