

## Bronchoscopic Findings in Children Less Than 2-Year-Old with Stridor

**Panida Srisan, Sorasak Lochindarat, Pravit Jetanachai, Chalermthai Aekasilp.**

Division of Pulmonology and Critical Care, Department of Pediatrics,  
Queen Sirikit National Institute of Child Health, Bangkok, Thailand.

### Abstract

**Background:** Stridor, a variably pitched respiratory sound, is often the most prominent symptom of upper airway obstruction, which is a common and distressing problem in infants and young children. Bronchoscopy, provided the direct evaluation of the airway, remains the most important diagnostic tool.

**Objectives:** To evaluate bronchoscopic findings, clinical presentations, treatments and outcomes in children less than 2-year-old with stridor.

**Methods:** Retrospective study was performed by reviewing the medical records of children less than 2-year-old with the presenting symptom of stridor who underwent bronchoscopy at Queen Sirikit National Institute of Child Health from January 1998 to December 2005.

**Results:** There were a total of 123 children of which 58% were male. The mean age at onset of stridor was 2 months, and the mean age at diagnosis was 3.9 months. The most common cause of stridor was laryngomalacia (76.4%), followed by vallecular cyst, tracheobronchomalacia and subglottic hemangioma. Synchronous airway lesion was found in 23 children (18.7%). Thirty-five children (28.5%) had GER. Stridor and clinical courses were improved in most cases (64%). Surgical interventions, including excision, marsupialization, laser and surgical correction of the vascular ring, were performed in 18 children (14.6%) with good results. There were 1 death (0.8%) and nine children (7.3%) requiring tracheostomy.

**Conclusions:** Laryngomalacia was the most common cause of stridor in children less than 2-year-old. Most had onset of symptoms within the first month. The synchronous airway lesion was diagnosed in 18.7%. GER was found in 28.5%. The clinical course was improved in the majority of children. Bronchoscopy is a safe and useful procedure for both diagnostic and therapeutic purposes in children.