

Laryngomalacia

What is laryngomalacia?

Laryngomalacia is the most common cause of noisy breathing (stridor) in infants. It occurs as a result of the floppy portion of the voice box (larynx) that has not yet developed the strength to provide rigid support to the airway. When your child breathes in (inspiration), negative pressure is created through the larynx, which results in collapse of these structures into the airway and a narrower breathing passage. This partial obstruction is the source of the noise with breathing.

What are the characteristics of laryngomalacia?

The hallmark sign is an intermittent high pitched or squeaking sound noted mostly when breathing in. It is usually more prominent when the infant is lying on his/her back, crying, feeding, excited, or has a cold. This is usually first noticed in the first few weeks of life, and may worsen over the first few months and become louder. This is because as the baby grows, the inspiratory force is greater, causing more collapse of the structures around the airway. The noise is usually at its worst at age 3-6 months and then gradually improves as the voice box becomes more rigid. Most children are symptom free by age 12 months.

Is laryngomalacia a dangerous condition?

It is usually not serious and does not interfere with a child's growth and development. More worrisome symptoms to be mindful of include difficulty with feeding, poor growth, inward collapse of the chest wall above or below the ribs during inspiration (retractions), and color changes to pale or blue.

How is laryngomalacia diagnosed?

The diagnosis of laryngomalacia is made using a flexible telescope that is passed through the nose to allow the doctor to view the voice box. This procedure is performed in the doctor's office with the baby awake. After a detailed examination, the doctor will characterize the condition as being mild, moderate or severe.

How is laryngomalacia managed?

Mild laryngomalacia may be managed by periodic observation only. Moderate obstruction may require home monitoring of breathing and a more detailed assessment. Severe conditions may require a surgical procedure to relieve the obstruction and correct the abnormality.

Is laryngomalacia associated with other conditions?

Laryngomalacia is often associated with stomach acid reflux. All infants have reflux or spitting up to some degree. However, infants with laryngomalacia often have more stomach acid reflux than babies without laryngomalacia. When the stomach acid regurgitates to the level of the voice box, it can cause irritation or swelling of the airway and worsening of the noisy breathing. The child should be held in an upright position for 30 minutes after feeding and never fed lying down. If the reflux is significant, medicine may be prescribed and thickening of feeds may be recommended.

Take your child to the hospital if:

- Your child stops breathing for longer than 10 seconds
- Your child becomes dusky or blue around the lips
- Your child has retractions that do not stop with repositioning or waking up