Croup

What is croup?

Croup is a common respiratory illness in young children which can cause narrowing of their airway. It usually occurs in children between 6 months to three years of age. Symptoms include a hoarse voice, a barking or “brassy” cough and noisy breathing. Croup can last for a few days and usually the symptoms are more severe at night. Before the cough develops, your child may have a sore throat, a fever, red eyes, a runny nose, or a poor appetite. With the cough, you might notice that the breastbone is drawn into the chest and a ‘crowing’ sound called stridor as your child breathes in may also be heard. Your child’s voice is usually hoarse and breathing can become difficult especially if he/she becomes upset.

Some children have many episodes of croup – these episodes usually occur at night and do not last long, often settling within an hour or so. This is sometimes called "spasmodic croup" and can come on suddenly even when your child does not have a cold. This form of croup is more common in children who either have asthma or have a family history of asthma and allergy.

Why does it happen?

When you breathe, air passes through the voice box (larynx) and windpipe (trachea) into the lungs. In croup, the voice box and windpipe become inflamed and narrowed because of swelling of the lining and increased phlegm. This blockage causes the windpipe to partly collapse - like when you suck hard on a blocked straw.

Young children who have small soft windpipes have the most difficulty. The size and strength of the windpipe increases as children grow up which is why croup is less common in older children.

What causes the blockage?

Most episodes of croup are due to viral infections however in spasmodic croup there may not be a trigger. Croup is more common in autumn and winter.

Treatment

Mild croup can be managed at home. The symptoms of croup are often worse at night when the air is cooler. Making the air moist and warm is often recommended but there is no information to prove that it does help your child. In fact having your child breathe warm and moist air makes the risk of hot water or steam burns much more dangerous than the croup itself and should be avoided.

Do not use steam for your child’s croup or cold.

Instead:
- Try to calm and comfort your child
- Encourage your child to drink plenty of fluids.
- If your child's croup gets worse and you are worried that it might be serious, take your child to their doctor or the nearest emergency department for help.
Croup is usually caused by a virus, so antibiotics will not help. However, oral steroid medication and adrenaline through a nebuliser have been found to be effective and are now routinely given in hospital to treat moderate or severe cases of croup. These medicines reduce the swelling in your child’s airway and help them to breathe easier. After treatment most children can be discharged home from the emergency department without need for admission.

**How long does it last?**

Generally, croup is worse during the first few days of the illness and may sometimes last up to a week. The cough usually lasts longer. There will be no permanent damage after an episode of croup.

### When to seek help

If your child has any of the following, go to a doctor or hospital straight away:

- breathing is difficult
- your child becomes pale or blue (cyanosed) which usually happens after a coughing spell
- your child becomes restless, irritable and/or delirious
- you notice the breastbone being drawn in severely
- your child has a high temperature and has increasing dribbling and/or drooling
- your child is not drinking enough
- the “crowing” noise made by your child is heard when they breathe in and out even when your child is resting
- If you suspect that your child has accidentally inhaled a foreign object
- you become concerned for any other reason.

### Remember:

- Croup is often a mild illness but can get worse quickly
- Croup is often worse at night
- Steam does not help and may lead to accidental burns
- If there is severe breathing difficulty, or, if your child is distressed, contact your doctor or local hospital
- Croup can quickly become serious, so do not hesitate to get medical help
- There is effective treatment for severe episodes of croup.