

CROUP

WHAT IS CROUP

Croup is a clinical condition in which there is obstruction of the breathing passage, leading to noisy respirations, breathing difficulty and a characteristic cough.

Croup is also known as *Laryngo-tracheo-bronchitis*.

WHAT CAUSES CROUP

Any kind of obstruction of the upper airway can result in Croup. However, the term Croup commonly refers to an acute viral infection of the upper airway. Many viruses can cause Croup, but the commonest are *Parainfluenza*, *Adenovirus* and *Respiratory Syncytial Virus*.

HOW DOES SOMEONE GET CROUP

Because it is a viral respiratory infection, people who are infected spread the virus in their respiratory secretions. When a susceptible person breathes these particles, he can get infected. Croup is more common in the winter months.

WHAT ARE THE CLINICAL MANIFESTATIONS OF CROUP

The illness usually affects small children, between 6 months and 3 years of age. It usually starts like a cold, with a cough that gradually gets worse. By the time it is fully developed, the cough may be characteristic and is described as “barking”. The child may make a crowing noise when he while breathing – this is called *Stridor*. The child may also have a low-grade fever. The symptoms are caused by swelling of the lining of the upper airway, which makes the air passage narrower than usual. Because of this, there is breathing difficulty. In mild cases, the illness does not progress any further and the child gets better. However, in more severe cases, the breathing difficulty continues to progress and can lead to very serious airway obstruction.

WHAT CAN I DO AT HOME

Many children with croup can be managed at home. If your child has croup, make him as comfortable as possible. Do not force him to eat, but ensure that he takes plenty of fluids to prevent dehydration. If available, take the child into a steam filled bathroom (turn on the hot water or shower and let the room fill with steam). The moisture and steam will usually help and decrease breathing difficulty. Paracetamol (Crocin) syrup can be given for fever. Cough syrups are generally not of much help and any medicine that sedates the child (including some cough syrups) should not be used.

HOW IS CROUP TREATED

The immediate problem is to relieve airway obstruction. Depending on the severity, the doctor may admit the child to hospital. He may be given nebulized treatments with a medicine called *Adrenaline* – this helps to shrink the swelling and thus reduce airway obstruction. He may also receive nebulized steroids, which also help the swelling. Very often, the nebulized treatments will have to be repeated frequently. If the child has a lot of difficulty breathing, the doctor may ask that he not be given anything to eat or drink by mouth – in this case, intravenous fluids will be provided instead.

Because viruses cause croup, antibiotics are ineffective.

In extremely severe cases, where there is imminent danger of the airway becoming completely obstructed, the child may be shifted to the Intensive Care Unit and may require placement of a breathing tube (Endotracheal Tube) and mechanical ventilation.

WHAT ARE THE COMPLICATIONS OF CROUP

Generally, croup resolves spontaneously without any after effects. Sometimes, the child can get a secondary bacterial infection, leading to ear infection or pneumonia.

The main problem with croup is airway obstruction and if this is not treated appropriately, it can prevent the child from breathing. However, with timely treatment, the child should recover completely.

WHEN SHOULD I CALL THE DOCTOR

If your child is drooling or has difficulty swallowing

If the child turns blue

If the child is very irritable and cannot be comforted

If the breathing difficulty worsens