Information and advice for parents and carers

Paediatrics

What is croup?

Croup is an infection of the breathing tube connecting the mouth and the lungs.

The upper part is called the larynx (voice box) and the lower part is called the trachea (windpipe). Croup is usually a mild illness, and quite common; 3-6 out of 100 children will get croup.

What causes croup?

Croup is usually caused by a virus, but can also be caused by bacteria. 8 out of 10 cases of croup are caused by parainfluenza viruses. Influenza A and B (the 'flu viruses), adenovirus and rhinovirus (the 'common cold' virus) have also been found to cause croup.

Croup can be passed to other people in the same way as coughs and colds (by infected saliva droplets) but no particular precautions need to be taken to reduce the spread to others.

Croup most commonly occurs between the ages of 1 and 3 years but can occur up to the age of 6 years. It is most common in the autumn and winter months.

What are the symptoms of croup?

Croup may often follow a cold. It will often develop suddenly, or at night. Common symptoms of croup include:

- A harsh barking cough this is due to swelling of the vocal cords in the larynx.
- **Breathing problems** this is caused by swelling of the breathing tube and production of thick mucus. You may hear your child's doctor refer to this as 'stridor'.
- Other symptoms such as a sore throat, runny nose or a high temperature.

Children with croup often seem worse at night or if they get upset. The symptoms seem to peak after 1-3 days and then start to get better.

How is croup diagnosed?

A doctor can diagnose croup by asking questions about your child's symptoms and their medical history and by physically examining your child. Blood tests and X-rays are rarely needed.

How is croup treated?

Most cases of croup are mild enough for a child to be treated at home. Because croup is a viral illness, antibiotics are not needed to treat it. Things that you can do at home include:

• Give your child paracetamol if they feel hot. Make sure you read the manufacturer's instructions before giving the medicine and do not give more than the recommended dose.

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- Give frequent drinks.
- Try to calm and reassure your child, because the more distressed they get the worse their symptoms will be.

Cough syrups and other over the counter medication have not been shown to help in croup, so it is best to avoid giving these to your child.

Are there any alternatives?

Steroid medicines

Your child's GP or the hospital may prescribe steroid medication for your child to take if their symptoms are more severe.

What are the benefits of steroid medicines?

Steroid medicines can help to reduce the swelling inside your child's throat and improve their symptoms.

What are the risks of steroid medicines?

Some children may experience stomach upsets and problems sleeping after taking a steroid, but this is quite rare. Please read the manufacturers leaflet that comes with the medicine for a full list of possible side effects and risks.

Treatment in hospital

5 out of 100 children with croup will need treatment in hospital. This is because their symptoms are too bad for them to be treated at home. While in hospital, as well as steroid treatment they may also be given adrenaline nebulisers and oxygen. It may also be necessary for a small tube (a cannula) to be placed in the child's arm.

In less than 1 in 100 cases of croup, the condition may be so severe that a child needs to be put to sleep using a general anaesthetic and have a breathing tube put into their windpipe through their mouth to help them breathe (intubation) while the swelling in their airway settles down.

What are the benefits of these treatments?

The adrenaline nebulisers and oxygen can improve your child's breathing. The cannula can be used to give your child the fluids they need.

If your child needs intubation, this can help them to breathe when their condition is too severe for other treatments to be effective. Your child will be asleep for this so will not feel any pain or distress.

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What are the risks of these treatments?

There are no risks to using oxygen. The risk of adrenaline is that it can cause the heart to beat faster, but this does not last for long and your child will be monitored for any problems. The risk of intubation is that it can cause chest infections which need treatment with antibiotics, but this tends to be in those who are intubated for longer periods.

What are the risks of not having treatment?

If your child has more severe symptoms and they do not get treatment their condition may not improve. If the symptoms are very severe and your child has breathing difficulties they may find it hard to continue breathing if they do not have treatment.

When to seek medical help

If your child is making extra effort to breathe, or begins breathing rapidly, you should take them to hospital.

If your child looks pale or blue, becomes very agitated, or is unable to swallow, you should call 999 for an ambulance.

If your child continues to spike fevers of over 38 degrees for more than five days, seek a review from your GP.

Ward Contact Numbers

Priory Ground 0121 507 3927

Lyndon Ground

0121 507 3717

Lyndon 1

0121 507 3800

Children's Emergency Care Unit

0121 507 4019



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Further information

For more information about Croup:

National Health Service (2020) *Croup*. Available at:

https://www.nhs.uk/conditions/croup/ (Accessed 24 February 2021).

For more information about our hospitals and services please see our website:

Sandwell and West Birmingham Hospitals NHS Trust www.swbh.nhs.uk

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