What is viral induced wheeze?

Wheeze is a whistling sound from the chest which is mainly heard on breathing out.
In viral induced wheeze the chest becomes wheezy and tight when the child has a viral infection (a cough, cold or chest infection). The wheeze may return each time your child has a cold.
Usually children are well between the viral infections but the wheeze can continue for some weeks after the infection.
Pre-school children are most likely to get viral induced wheeze.

Does this mean my child has asthma?

Viral wheeze is a similar but different condition from asthma, but some children will go onto develop asthma as they get older.
Most children who start wheezing before the age of two, who do not have a family history of asthma or allergies and who are fine between viral infections will not go on to develop asthma.
Children with asthma can get wheezy even when they do not have a cough or cold. Those children with viral induced wheeze are usually fine when they don’t have a cold/infection.
Children with asthma are often wheezy when they do lots of exercise. Children with viral wheeze don’t usually have any wheeze with exercise.
Children with asthma usually have a family history of asthma and allergy.
If a child develops asthma symptoms these can usually be controlled with regular inhalers (usually a ‘brown’ steroid inhaler).

What treatment will my child need?

- Usually a reliever inhaler such as salbutamol (a blue-coloured inhaler) is prescribed to be given using a ‘spacer’. The medicine in the inhaler relaxes the airways in the chest and makes it easier to breath.
- If children are very breathless a nebuliser is sometimes used to give the medicine as a mist breathed in from a mask or mouth-piece.
- Sometimes two to three days of steroid tablets (prednisolone) are used to settle down the inflammation in the chest. Some children will also have other treatments such as montelukast tablets and ipratropium inhalers.
- Most children with viral wheeze will not need a regular ‘preventer’ inhaler. A few who get very frequent episodes of wheeze will have a trial of these inhalers.
- Antibiotics are ineffective against viruses so they are no use in viral wheeze. The illness will get better by itself once it has run its course.

The charity Asthma UK has lots more information about wheeze
www.asthma.org.uk 0800 121 62 44
Smoking

Children with wheeze are sensitive to tobacco smoke. Exposure to this makes it much more likely they will have a further wheezing attack or develop asthma. Help to give up smoking can be obtained from your GP or the NHS Smokefree webpage and free helpline gosmokefree.nhs.uk 0800 0224 332

How to use an inhaler and spacer

Your nurse, doctor or pharmacist will explain how to use the inhaler. Also look at the instruction leaflet which comes in the box. Do ask if you are not sure what to do.

Using an inhaler with a large volume spacer with mouth-piece (for children over 4-5 years)

1. Shake the inhaler well and attach onto the end of the spacer
2. The child should seal their lips around the mouthpiece
3. Squirt ONE puff of the inhaler into the spacer
4. Get the child to take a big suck in (as if sucking on a straw) and then ‘blow’ out. Repeat 5 times without taking their lips from around the mouthpiece.
5. Rest for 30 seconds then repeat all steps if further puffs are needed.
   A whistling sound means you are breathing in too fast

Using an inhaler with a large volume spacer with a mask (For children under 4 years old, or older children who find the mouthpiece difficult)

1. Shake the inhaler well and attach onto end of spacer.
2. Apply mask gently to the face ensuring a good seal is formed over the nose and mouth.
3. Squirt one puff of the inhaler into the spacer.
4. Hold spacer in this position for 5-6 breaths or 30 seconds.
5. Rest for 30 seconds then repeat all steps if further puffs are needed.

Wash out mouth or clean teeth if a steroid (preventer) inhaler has been used

What will happen if my child is admitted to hospital?

Children are often observed on the children’s assessment unit to see how quickly their wheeze is improving, many will be able to go home after a few hours. They may need to stay in hospital if they are very wheezy or if they need oxygen.

• The nurses will make regular observations of your child’s temperature, pulse, breathing and oxygen levels (‘saturations’).
• Your child will be given extra oxygen using a mask or fine tubes into the nose if their oxygen saturations are low.
• Your child will be given inhalers or a nebuliser to help their breathing and sometimes other medicines by mouth or into a drip.
Management plan for wheeze (viral induced wheeze):

No Symptoms

Continue with any regular medications if prescribed (most will not need any)

Mild Symptoms

Reliever (Blue) Salbutamol
Give 2-10 puffs as needed to maximum 4 hourly via spacer
(Some young children have Ipratropium eg Atrovent® instead – check dosage with your doctor)
If you have a Preventer it should continue every day as prescribed

Getting a cold or waking/coughing at night

Take Regular Reliever (Blue/salbutamol)
Give 5-10 puffs every four hours via spacer. As long as this dose is effective, your child can stay at home.
Continue Preventer if prescribed.
Discuss with your GP/asthma nurse if this is happening frequently.

Increasing breathlessness

Give 10 puffs of reliever via spacer
A large dose of the blue inhaler should last for 4 hours.
If needed more frequently: Seek Medical Advice

Emergency: 999
If your child has any of the symptoms below you must call an ambulance:

- Too breathless to speak a full sentence
- Floppy or unresponsive
- Severe tugging in at the neck or between the ribs.
- Pale and grey or blue
- Very rapid breathing rate

*It is safe to administer 10 more puffs whilst waiting for the ambulance*
Management Plan for Wheeze (Viral-induced / intermittent wheeze)

Ask your doctor or nurse to complete this. Also see ‘traffic light’ on page 3

Childs Name: ……………………………………………………………………….

Reliever medication (name, strength, dose):

Preventer medication (name, strength, dose):

Treatment if a cold/ viral chest infection is starting:

Other Instructions eg known triggers

Dose of Reliever following a severe episode (Blue Salbutamol inhaler):

If your child has had a severe episode of wheeze needing admission to hospital or steroid tablets, they will require reliever inhalers for a while as they recover. How often you give the reliever inhaler should be gradually reduced using the following guideline (these doses are for salbutamol)

Always use a spacer
FIRST DAY Give 8-10 puffs every 4 hours (6 times a day) for 1 day
DAY 2: Give 4-6 puffs every 6 hours (4 times a day) for 1 day
DAY 3: Give 4-6 puffs every 8 hours (3 times a day) for 1 day
DAY 4: Give 2-4 puffs every 12 hours (2 times a day) for 1 day

Follow up appointments:
If your child has needed admission to hospital, or an observation period on the ward or emergency department, we would suggest you see your GP or asthma nurse if your child’s symptoms are not improved within 48 hours. It is also sensible that when recovered from this episode they have a review in the next few weeks, particularly if they are often getting wheezy.
As a guide - a regular night-time cough or regularly needing to use the reliever inhaler more than three times a week could suggest that further medication is needed so make an appointment with your GP or asthma nurse for a review.

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