



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Cwm Taf
University Health Board

Children's Respiratory and Allergy service

SPACERS



WHAT IS A SPACER?

A Spacer is a specially designed large or small plastic container. It has a mouthpiece or mask at one end and a hole for the inhaler at the other. Spacers only work with aerosol inhalers.

There are several different brands of spacer that fit different inhalers and are available on prescription including the Volumatic, and Aero Chamber and Able Spacer.

WHY ARE SPACERS IMPORTANT?

- . Spacers help to deliver medication to the lungs.
- . They reduce the risks of unwanted side effects by reducing the amount of medication that is swallowed and absorbed.
- . They work as well as nebulisers in treating most asthma attacks in children.

HANDY HINTS FOR USING A SPACER

- . Wash the spacer in warm soapy water once a month and let it drip dry. This helps to prevent the medication sticking to the sides.
- . Ensure your Doctor, Nurse or pharmacist shows you how to use the spacer correctly.

- . Always administer doses as prescribed or advised by your doctor, nurse or pharmacist.
- . Make sure the spacer you have been given fits your inhaler.
- . Spacers should be replaced every 6- 12 months or if broken.
- . Always try to gain your child's co-operation when using a spacer so they do not become frightened of it.
- . Stickers can be applied to the spacer to make it more child friendly.
- . The use of play in young babies and children such as singing songs or giving some to teddy first will often help when giving the medication to your child.
- . Always wipe their face (if using a facemask), swill their mouth/brush teeth or give them a drink afterwards, if taking inhaled corticosteroids. (brown, orange or purple inhaler.) This will prevent the risk of oral thrush or hoarseness of the voice.

USING A SPACER WITH FACEMASK (UNDER 3YEARS)

Shake the aerosol inhaler before each puff, place the inhaler in to the spacer.

Place mask over child's nose and mouth, ensure the spacer is tilted so that the valve is open. Encourage child to breathe normally (tidal breathing). Press the inhaler and ensure the child takes 7-10 breaths in and out for every puff given. Child can have small breaks in between puffs if needed.

USING A SPACER WITHOUT THE MASK (OVER 3 YEARS)

Ensure your child's mouth has a good seal around the mouthpiece. Spacer can be used horizontally (sitting up or standing). Follow steps as above. When using a volumatic you will hear the valve clicking back and fore, with the other spacers you will not.

For any further information please contact the Children's Specialist Allergy/Respiratory Nurses.

Leaflet No: 5171

Leaflet approved: 21/08/17

Review Date: 01/08/19

Pre Discharge Checklist for Asthma/Viral Wheeze

Name _____ DOB _____ Hospital No _____

- ❖ Provide information on treatments provided ie Relievers/Preventers.
- ❖ Provide step by step instruction of how to use spacer and mask (under 3 years), without mask (over 3 years).
- ❖ Explain importance of gaining child's co-operation. Encourage use of stickers, play and diversional therapy and lots of praise if child takes it well.
- ❖ Involve play specialist if needed.
- ❖ Explain importance of washing spacer monthly to reduce static charge.
- ❖ On discharge, advise 4-6 puffs of Salbutamol via the spacer 4 hourly for a few days then as needed.
- ❖ Advise early use of 4 hourly Salbutamol during subsequent coughs/colds with a wheeze.
- ❖ Provide advice on deteriorating symptoms ie effects of Salbutamol not lasting, increased work in breathing, unable to feed or talk or lips going blue.
- ❖ In the event of the above emergency, to administer 10-15puffs of Salbutamol via spacer and seek medical help immediately.
- ❖ Observe correct inhaler technique.
- ❖ Provide peak flow meter for children over 6 years.
- ❖ Discuss dangers of smoking/passive smoking.
- ❖ Offer referral to smoking cessation (if accepted provide card and give child's details to Kelly or Jo).
- ❖ Ensure Management Card provided.
- ❖ Information leaflets provided: Viral wheeze Spacers
- ❖ Refer to Respiratory Nurse if at step 2 or above of the asthma management guidelines ie If started on preventative therapy.
- ❖ Advise first admissions with wheeze to see GP in 1 week if remain symptomatic.
- ❖ Please comment if child has had multiple admissions or there are any other concerns to ensure appropriate follow up _____

- ❖ Ensure this documentation is clearly filed in patients notes .

Staff Signature _____ Band _____ Date _____

Date: September 2015

Due for revision: September 2016

Date: September 2015
Due for revision: September 2016

**Proforma Checklist for In-Patient Respiratory
Nurse Assessment**

Name Address DOB	
------------------------	--

Patient history/assessment taken

Explanation of asthma/viral induced wheeze

Explanation of medication

Reliever

Preventer

Long acting therapy

Symptom recognition discussed

Emergency advice given

Peak flow rate checked

Peak flow meter provided on discharge

Already has a peak flow monitor at home

Inhaler technique taught and correct technique observed

The importance of compliance discussed

Education leaflets provided

Asthma		Viral wheeze		Spacers	
--------	--	--------------	--	---------	--

Written information/management plan given

Dangers of smoking/passive smoking discussed

Nurse follow up appointment made

RGH		YCR	
-----	--	-----	--

No follow up needed, so advised to see GP in one week if remains asymptomatic

NB: Patients will be referred back to own GP following discharge from respiratory nurse clinic.

Further Comments:

.....

.....

.....

Date Signature Designation

Contact numbers.

If you have any questions or concerns please feel free to contact the children's Specialist Respiratory nurses.

Children's Outpatients Department
Royal Glamorgan Hospital
Lynfa Day, Kelly Davies and Katie Harris
TEL: 01443 443217

Prince Charles Hospital
Merthyr Tydfil
TEL: 01685728636
Nicola Riddiford 07771996139
Tania Jones 07990797598
Kathryn Lewis 07881498161



Episodic/Viral Induced Wheeze

What is Episodic/viral induced wheeze?

Viral induced wheeze is very common in preschool children. The wheezing occurs due to narrowing of the small airways and increased mucous production in the lungs usually caused by the cold virus. The wheeze is heard as a whistling sound from the chest mainly when your child breaths out. Symptoms usually last between 2- 7 days, but can be longer. Symptoms may reoccur each time your child gets a cold.

Symptoms

The symptoms that your child may experience are:

- A whistling sound when your child breathes, called a wheeze
- Fast breathing
- Coughing which may be worse at night
- Shortness of breath
- Tummy sucking in when breathing
- Agitation & distress
- Difficulty in feeding/talking
- Decreased intake of fluids and diet

During your stay in hospital

Your Child will be assessed frequently throughout their stay in hospital by doctors and nursing staff. Observations will be taken which include monitoring of oxygen saturations, heart rate, respirations and temperature. Your child's feeding regime will be monitored by the nurses to ensure they are taking enough. Some children will not require any treatment, although most will need medication to improve their condition. When your child is well enough, they will be discharged home with the relevant medication if needed and appropriate advice.

Treatment for Episodic/viral induced wheeze

Medication to open up the airways may be prescribed for your child, these are known as Bronchodilators or relievers. Bronchodilator medication will help relax the muscles around the narrowed airways, allowing the airways to open wider making it easier for your child to breathe. Salbutamol is the commonest drug used and is safe and effective with very few side effects. It may temporarily increase your child's heart rate or cause mild muscle shakes. These effects are more common when using high doses and generally wear off after a short period of time. The most effective method of administering this medication to your child is inhaled.

Inhalers and spacers. There are different spacer devices available depending on the age of the child (see spacer leaflet). Spacers are the preferred method of delivering inhaled medication. Your child may go home with medication to be given via a spacer device.

Nebulisers: - These are occasionally used if children are very breathless. The medication is delivered through a face mask in the form of mist and is driven by oxygen. As your child's condition improves, the medication is given via inhaler and spacer device.

Oral steroids (Prednisolone):- Some children are prescribed this medication which will help to reduce the inflammation in the airways. This is usually a short course of treatment for 3-5 days and will not cause any long term side effects.

Oxygen:- Your child's oxygen saturation levels will be monitored and may be lower than normal limits due to the illness. If this happens your child will be given oxygen to help their breathing and maintain the oxygen levels in their body. Oxygen will be given through a nasal cannula into the nostrils or via a face mask over the nose and mouth.

Discharge from Hospital

Your child will be discharged from hospital when they are drinking enough, their Oxygen levels are normal and they do not need inhalers more frequently than every four hours. After discharge you will need to continue with 4-6 puffs of salbutamol (reliever) every 4-6 hours for a few days until your child's cold symptoms have improved. You will also need to complete the course of oral steroids

as prescribed. If the symptoms do not improve within 48 hours you should visit the gp for review.

In the future it is wise to start giving the salbutamol as above if your child has symptoms of cold, cough, wheeze or runny nose. If your child gets worse and reliever medication is not helping you can give 10-15 puffs of the salbutamol (emergency treatment) through the spacer and seek medical attention

Does this mean my child has asthma?

No, more than half the children with viral induced wheeze will grow out of it by school age when the airways in the lungs have grown and developed. Some children with recurrent episodes may go on to develop asthma but these are usually children who have a family history of eczema, asthma and allergy. Children with asthma can have symptoms of wheeze and breathlessness in between episodes of cough/colds and may require additional regular treatments.

Smoking

Exposure to smoke can worsen a child's condition, therefore it is very important that nobody smokes around your child, even when the condition improves. Passive smoking can be detrimental to children's lung development and health. Be aware that even if you smoke outside you will still be breathing out the

chemicals from the tobacco and they will be present on clothes for 20-30 minutes after.

Help is always available to stop smoking:-

www.stopsmokingwales.com. 08000852219

Or your local GP or pharmacist.

DANGER SIGNS

- Reliever lasts less than 3 hours
- Peak flow falls below 50% of expected
- Very distressed by wheezing or breathlessness
- Use of accessory muscles
- Too breathless to feed or talk
- Lips going blue

If any of these happen to your child, seek medical help immediately ie Ambulance

USEFUL TELEPHONE NUMBERS

Lynfa Day / Kelly Davies/ Katie George
Paediatric Respiratory Nurse Specialists
01443 443217 (Monday - Friday 9am - 5pm)

Asthma UK: Tel: 0800 121 6244
Email: info@asthma.org.uk
Download the My Asthma App at www.myasthma.com

Child's Name: _____

D.O.B. _____

Address: _____

Telephone No: _____

Family Doctor: _____

Telephone No: _____

Hospital Consultant:: _____

Hospital No: _____

Date issued: _____



**Please keep this card with you.
Show it every time you visit your
doctor or the hospital**

YOUR CHILD'S USUAL TREATMENT

Preventer : give regularly morning and evening even if your child is well. *Brush teeth or swill mouth after taking preventer.

Name and strength	How to give
_____	_____
_____	_____
_____	_____
_____	_____

Reliever (usually blue): give as needed for relief of chest symptoms.

Name and strength	How to give
_____	_____
_____	_____
_____	_____
_____	_____

Additional asthma medication

Name and strength	How to give
_____	_____
_____	_____
_____	_____

Expected PFR: _____ 75% _____ 50% _____

*** If reliever medication is needed more than every 4 hours for more than a few days or your peak flow falls below 75% CONTACT YOUR DOCTOR**

EMERGENCY TREATMENT

- Administer 10 -15 puffs of reliever via a spacer, with or without a mask, depending on age. If no spacer is available give reliever inhaler as often as needed while waiting for medical help.
- Continue the inhaled preventer as usual.
- Give steroid tablets if directed.