Emergency and Urgent Care for Children -A Survival Guide





**WEEK 2** Breathing Difficulties - Parent Information Leaflet

Children who have difficulties breathing are very worrying for parents, and many people want to know how to help their child, or what are the worrying signs to look out for. Breathing difficulties are very common, and account for a large number of children's attendances at the GP or the Emergency Department. Children can have up to 8-10 different episodes of illness in a year, and sometimes the difficulty is knowing where one illness ends and the next one starts, or whether this is something that has been going on for too long.

Most conditions causing breathing difficulties are caused by viruses, which make the tubes inside your child's lungs swell, or get blocked up due to the infection. The difficulty for both parents and health professionals is that there are limited treatment options, and antibiotics are of no use if a virus is causing the problem. Doctors use a strategy of "supportive" treatment and trying to help children feel better whilst they get over their illness themselves.

I am going to discuss a few important emergency conditions that you should be aware of and how you can start effective treatment at home.

**Choking** is when the upper airway gets blocked and the child can't breathe properly. When someone chokes, the airway can either be partly or fully blocked. Children who are crying and talking to you do not have a fully obstructed airway and should be able to clear it themselves through coughing. Do not put your fingers in their mouth as you may push the object in further, but do encourage them to spit out objects in their mouth.

Children are prone to putting many objects in their mouth, as a form of exploring, and it is especially important when they are weaning as big lumps of food can get stuck. It is important to cut food like grapes, or small tomatoes up to reduce the risk of choking because when whole these foods are a perfect size to get stuck in a child's airway Other very important objects to be aware of are BUTTON BATTERIES which if they get stuck in the food pipe (oesophagus), airway, nose or stomach must be removed as an emergency. They can react with the inside of the child's body and the chemicals in these batteries can rapidly create a hole in the tissue that they are stuck to. Children have died from the effects of a stuck button battery (if you have any doubt

about this, get a button battery and put it on a piece of raw meat. See how quickly it causes a burn.

So what do you do when a child is choking and not coughing effectively? The idea is that you need to get the object out as quickly as possible. The following is a simple instruction list made by the Resuscitation Council.

- 1) Lay the child face down over your lap this ensures that if the object is dislodged, it will fall out with gravity
- 2) Give up to five back blows hit them **firmly** on their back between the shoulder blades. If back blows do not dislodge the object, move on to step three.
- 3) Above the age of 1, give up to five abdominal thrusts -hold the child around the waist and pull inwards and upwards above their belly button.
- 4) If you are treating a baby then you should not given abdominal thrusts but chest thrusts – turn the baby to face upwards, and find the bottom of the chest bone, give 5 sharp pushes compressing about 1/3<sup>rd</sup> depth of the chest.
- 5) Call 999, if the object does not dislodge.

**Asthma** is a common condition caused by inflammation of the tubes in the lungs and causes children to wheeze. Children are affected by many different "triggers" and it is helpful as parents to know what makes your child's asthma worse. The main advice is the earlier you can start treatment the better it is for the child.

Medication to treat asthma most commonly comes in the form of an inhaler, and there are many different coloured inhalers. If your child is wheezy the BLUE (salbutamol/ventolin) inhaler is the one that is going to help. This is the RELIEVER inhaler. All the other inhalers are PREVENTER inhalers and should be taken daily to try and stop attacks happening. It is therefore very important that if your child gets wheezy, they should carry one with them.

Inhalers should always be given through something called a spacer, and should be given 1 puff and then 10 breaths in. Unfortunately often the spacer distresses the child, but it is proven to get a much higher percentage of the medication into the chest where it can start working.

If you child is unwell with an infection (particularly a viral infection), it is likely that they will need their inhaler more often. Parents can give up to 10 puffs of salbutamol, every 4 hours safely for 24hours and then be reviewed by the GP if not improving. If you child needs inhalers more often than this then you must be seen by a doctor (GP or Emergency Department) as they may need closer monitoring or different medications.

**Bronchiolitis** is a different condition which only affects the under 1's. It is caused by a viral infection, and has a predictable pattern which worsens over 5 days. Imaging the tubes inside the lungs as an upside down tree with ever decreasing diameter of 'branches'. In a baby, even the trunk of that tree, and

definitely the main branches are small and it only takes a bit of swelling caused by a viral infection (snot and mucous plus irritation of the lining of the tubes) to make them block. Partial blockage will cause wheeze (a whistling noise as the air is forced through the narrow tubes and increased effort to breathe. The wheeze in this situation is different to asthma wheeze (the latter is caused by spasm of the muscles in the tubes leading to narrowing) and almost always not respond to the asthma treatments. In a small number of babies with a history of eczema, allergies and a strong family history of asthma they may be effective but generally they are not.

"Red flags" (worrying signs) of a baby with bronchiolitis, include increased work of breathing (breathing very fast, sucking in of their throat, or being able to see all their ribs when they breath in) and reduced feeding which can cause dehydration. If you imagine holding your nose and putting a bottle/breast in your mouth then it is significantly more difficult for them to feed. If they have reduced wet nappies (<3 in 24 hours) or feeding (<50% of normal) then they need to be reviewed by a doctor. It is important to realise that feeding patterns will change, and a little but often approach, may help to ensure your baby remains well hydrated.

This section of the session is designed as advice for non-medical people, and aims to give you some helpful advice on treating very common conditions which we see in the Emergency Department, and is not aimed to be "rules" for how to treat your children. As always, if you are worried about your child then get them checked out.