



PATIENT EDUCATION HANDOUTS

Bronchiolitis

Description

- Your child is wheezing. This means that when your child breathes out he or she makes a highpitched whistling sound.
- Your child is breathing rapidly at a rate of over 40 breaths per minute.
- Your child has to push the air out (tight breathing).
- Your child has a cough and may cough up a very sticky mucus.
- Often a fever and a runny nose precede the breathing problems and cough.
- The symptoms are similar to asthma.

The average age of children who get bronchiolitis is 6 months. They are never older than 2 years.

Cause

The wheezing is caused by a narrowing of the smallest airways in the lung (bronchioles). This narrowing results from inflammation (swelling) caused by a virus, usually the respiratory syncytial virus (RSV). RSV occurs in epidemics almost every winter. While infants with RSV develop bronchiolitis, children over age 2 years and adults just develop cold symptoms. The virus is found in nasal secretions of infected people. It is spread by an infected person who sneezes or coughs less than 6 feet away from someone else or by his or her hands after touching the nose or eyes. People do not develop permanent immunity to the virus, which means that they can be infected by it many times.

Expected Course

Wheezing and tight breathing (difficulty breathing out) become worse for 2 or 3 days and then begin to improve. Overall, the wheezing lasts approximately 7 days and the cough about 14 days. The most common complication of bronchiolitis is an ear infection, occurring in some 20% of infants. Bacterial pneumonia is an uncommon complication. Only 1% or 2% of children with bronchiolitis are hospitalized because they need oxygen or intravenous fluids. In the long run, approximately 30% of the children who develop bronchiolitis later develop asthma. Recurrences of wheezing (asthma) occur mainly in children who have close relatives with asthma. Asthma is easily treated with medications.

HOME TREATMENT

1. Medicines

Some children with bronchiolitis respond to asthma-type medicines, but others do not. Your child needs the medicine prescribed by your physician. In addition, you can give your child acetaminophen every 4 to 6 hours or ibuprofen every 6 to 8 hours if the fever is over 102°F (39°C).

2. Warm fluids for coughing spasms

Coughing spasms are often caused by sticky secretions in the back of the throat. Warm liquids usually relax the airway and loosen the secretions. Offer warm lemonade or apple juice if your child is over 4 months old. In addition, breathing warm moist air helps to loosen up the sticky mucus that may be choking your child. You can fill a humidifier with warm water and have your child breathe in the warm mist it produces. Avoid steam vaporizers because they can cause burns.

3. Humidity

Dry air tends to make coughs worse. Use a humidifier in your child's bedroom. The new ultrasonic humidifiers are very quiet and they kill molds and most bacteria that might be in the water. If possible, use distilled water instead of tap water in the humidifier. The Environmental Protection Agency reported in 1988 that tap water may contain harmful minerals (such as lead and asbestos). If these minerals are in your tap water, they will also be in the mist produced by the humidifier. Frequent inhaling of these particles may cause chronic lung problems.

4. Suction of a blocked nose

If the nose is blocked up, your child will not be able to drink from a bottle or to breast-feed. Most stuffy noses are blocked by dry or sticky mucus. Suction alone cannot remove dry secretions. Warm tap-water or saline nosedrops are better than any medicine you can buy for loosening up mucus. Place three drops of warm water or saline in each nostril. After about one minute, use a soft rubber suction bulb to suck out the mucus. You can repeat this procedure several times until your child's breathing through the nose becomes quiet and easy.

5. Feedings

Encourage your child to drink enough fluids. Eating is often tiring, so offer your child formula, breast milk, or regular milk (if he is over 1 year old) in smaller amounts at more frequent intervals. If your child vomits during a coughing spasm, feed him or her again.

6. No smoking

Tobacco smoke aggravates coughing. Children who have an RSV infection are much more likely to wheeze if they are exposed to tobacco smoke. Don't let anyone smoke around your child. In fact, try not to let anybody smoke inside your home.

Call Your Child's Physician Immediately If:

- Breathing becomes labored or difficult.
- The wheezing becomes severe (tight).
- Breathing becomes faster than 60 breaths per minute (when your child is not crying).

Call Your Child's Physician Within 24 Hours If:

- Any fever lasts more than 3 days.
- The cough lasts more than 3 weeks.
- You have other questions or concerns.