Bronchiolitis

Signs and Symptoms:

Bronchiolitis involves inflammation of the lower airway, with the result that a child has difficulty breathing in and out. The first symptoms are the same as those of a common cold: stuffiness, runny nose, mild cough. These symptoms last a day or two and are followed by gradually increasing breathing difficulty characterized by wheezing; rapid, shallow breathing (60 to 80 times a minute); rapid heartbeat; retractions (the drawing in of neck and chest with each breath); and cough.

The child may have a fever. There usually is no vomiting or diarrhea. In mild cases, symptoms last one to three days. In severe cases, symptoms may progress more rapidly. A child with severe bronchiolitis may tire out from the work of breathing and, due to the clogging and collapse of the small airways, have poor air movement in and out of the lungs - despite the effort. In addition, the infant can become dehydrated due to the increased work of breathing and decreased fluid intake.

Description:

Bronchiolitis is a common infection of the lower respiratory tract. It's usually caused by a viral infection, the most common (over 50% of cases) being respiratory syncytial virus (RSV). This virus is most common in the winter and early spring. Other infectious agents that are associated with bronchiolitis include parainfluenza virus, influenza virus, mycoplasma, and some adenoviruses. Bronchiolitis occurs during the first two years of life, peaking at about six months of age. The very tiny airways in the lung, called bronchioles, become inflamed and swell - and mucous collects in the airways. These small airways become blocked, making it difficult for the child to breathe in and out.

Prevention:

Currently there are no specific preventive measures for bronchiolitis. Bronchiolitis occurs more commonly in males between three and six months of age who have not been breast-fed and who live in crowded conditions. Infants who are exposed to cigarette smoke are more likely to develop bronchiolitis and other respiratory illnesses. Try to avoid contact with others who are in the early stages of respiratory infections.

Incubation:

The incubation period is several days to one week, depending on the underlying infection.

Duration:

Most cases of bronchiolitis last about seven days, but children with severe cases can cough for weeks. Children who have two or more episodes of wheezy breathing may be more likely to develop asthma.

Contagiousness:

Bronchiolitis (or more accurately, the viral infection which triggers bronchiolitis) is contagious, and winter epidemics tend to occur every two or three years. The viruses responsible may be transmitted by airborne droplets. Infants in day care centers are at greater risk.

Home Treatment:

Infants with breathing difficulties should always be evaluated by a physician. The illness peaks at about the second to third day after the onset of cough and difficulty breathing. Fortunately, most infants have relatively mild cases that do not require hospitalization. For these relatively mild cases, the only treatment is "time" and oral fluids.

With mild bronchiolitis, many parents use a cool-mist vaporizer during the dry winter months to keep the humidity in the child's room at a reasonable level. The intention is to keep dry winter air from drying out the child's airway and making the mucous stickier. Hot-water or steam humidifiers can be hazardous and cause scalding. If a cool-mist humidifier is used, be sure to clean it out with household bleach on a daily basis - otherwise mold may grow.

Sometimes, tilting the baby's mattress up slightly may help decrease the work of breathing.

As a practical matter this may be difficult since you don't want the baby rolling sideways.

Make sure the infant drinks enough fluids. The child should drink clear fluids frequently: water, juice or milk. This can be a difficult task for parents, since infants with bronchiolitis may not feel like drinking.

Professional Treatment:

Bronchiolitis usually is a mild, limited illness that requires no specific professional treatment. Infants who are severely ill may need hospital admission for fluids, humidified oxygen, and close observation.

Antibiotics have no value unless there is an additional (secondary) bacterial infection - a circumstance which is not common. Other drugs may be used to reduce inflammation and open the airways.

When to Call Your Pediatrician:

If an infant (or anybody, for that matter) has respiratory distress or appears significantly ill, you need to see your doctor as soon as possible. If you have any questions or doubt as to whether that is necessary, you need to call. If your child is excessively drowsy, has rapid breathing, or is wheezing, seek medical attention immediately.