Respiratory Syncytial Virus Bronchiolitis

Respiratory syncytial virus (RSV) usually causes cold-like symptoms but can also cause more severe diseases, such as pneumonia and bronchiolitis. Bronchiolitis, an inflammation of the small airways in the lung with increased mucus production and bronchospasms (contraction and relaxation of the small airways), most often occurs in children younger than 2 years. In children, RSV infections may start out with fever, mild cough, and congestion. This can lead to worsening cough and labored and rapid breathing that interfere with the ability to eat and drink. In the United States, RSV infections usually occur between November and May but may occur earlier in the year in some areas. The infection spreads by contact with an infected person’s saliva and mucus containing the virus.

WHEN TO SEE A DOCTOR
• If your child is working very hard to breathe
• If you note signs of dehydration (such as no tears when your child cries or dry diapers with little or no urine)
• If your child is 2 months old or younger and has a fever or cough
• If you notice any color changes in the skin around your child’s lips and fingertips

EVALUATION
The doctor will
• Assess the child’s respiratory status by counting the breathing rate and judging the child’s comfort.
• Assess the child for signs of dehydration.
• Sometimes swab deep inside the child’s nostrils to test for RSV infection. Testing can be done with a rapid detection test that gives immediate results or other tests that give results in 2 to 3 days.
• Evaluate the need for hospital admission, based on the child’s comfort and ability to stay hydrated and whether the child is getting enough oxygen.

TREATMENT
• Initial treatment is supportive (treating symptoms).
• If symptoms do not improve, doctors might use nebulized (aerosolized) treatments of epinephrine or albuterol.
• Concentrated oxygen may be given through plastic tubing if the child is found to have low levels of oxygen in the blood by pulse oximetry (a device on the finger).
• Antiviral medications or corticosteroids are not used to treat RSV infections.

PROGNOSIS
• Many children recover within 7 days, but the illness can persist for several weeks.
• Children can get RSV infections every year or several times in one season. However, as they grow older, the symptoms usually are not as severe.
• Children who have severe symptoms from RSV infections may be at a higher risk of developing reactive airway disease, with episodes of wheezing in response to future upper respiratory tract infections.

FOR MORE INFORMATION
• Centers for Disease Control and Prevention RSV overview www.cdc.gov/rsv/
• American Academy of Pediatrics Healthy Children www.healthychildren.org

INFORM YOURSELF
To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s Web site at www.jama.com. Many are available in English and Spanish.

Sources: American Academy of Pediatrics, Centers for Disease Control and Prevention

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