

## *Infectious Mononucleosis*

When people think of "mono" they think of tiredness as the main symptom. And for many with mono, fatigue can be a major complaint. Other "classic" features of infectious mononucleosis are fever, sore throat, enlargement of lymph nodes (usually in the neck, the arm pit, and throat), and an enlarged spleen (the organ that functions as a blood "filter" and antibody producer). Loss of appetite, weakness, and sore muscles also may be present, especially in adolescents. Nausea, hepatitis (inflammation of the liver), jaundice, headache, stiffness, chest pain and difficulty breathing also may be reported.

A widespread pink rash is common, particularly in those who have been treated with amoxicillin. Younger children may have no symptoms or nonspecific symptoms like fever, malaise, and loss of appetite. Adolescents are more likely to exhibit the classic symptoms described above. Some may experience extreme fatigue, staying in bed for days, saying they are too weak even to walk around the house.

The term "infectious mononucleosis" refers to the illness caused by the Epstein-Barr virus (EBV). EBV is a herpes virus, and humans are its only source. The term "mononucleosis" refers to the fact that during the infection, a certain population of the blood's white cells (the mononuclear cells) dramatically increases. Other infectious mononucleosis-like syndromes are sometimes caused by organisms such as cytomegalovirus, also a herpes virus.

Transmission of EBV is through close contact of mucous membranes or through the saliva. Young children are infected from the saliva of playmates or family members. Adolescents can get it through kissing (hence its popular name, "the kissing disease"). Epidemic outbreaks in institutions have occurred.

The most common tests for EBV are blood tests. An examination of the blood under a microscope may reveal an increased number of white blood cells known as lymphocytes. Other blood tests may show an increase in antibody levels (antibodies react to infectious organisms in the blood and create immunity). There are a number of different antibody tests for EBV that can reveal useful information to doctors.

**Prevention:** There is no vaccine, but infection with EBV usually provides long-lasting immunity. Avoiding contact with the saliva of those known to have the virus is advisable.

**Incubation:** The incubation period is 10 to 60 days; seven to 14 days is usual for children and adolescents.

**Duration:** The fever and sore throat usually subside after two weeks, but the enlarged lymph nodes and spleen can persist for a few more weeks. In some, fatigue and weakness may last for months.

*Infectious Mononucleosis (continued)*

**Contagiousness:** This is a contagious disease, transmitted through the saliva of the infected person by coughing, sneezing, and kissing. Susceptible people should avoid contact with those known to have active mononucleosis; the virus can continue to be excreted for months. In general, strict isolation procedures or special precautions are not needed. Patients with recent EBV infection should not donate blood.

**Home Treatment:** There is no antiviral treatment for mononucleosis. For most children, treatment is supportive. Bed rest is helpful and may be necessary for severe cases. Gargling with salt water several times daily, plus taking an analgesic, should help relieve sore throat pain. Antipyretics (medications that control fever) can provide relief. Loss of appetite may be accompanied by a mild inflammation of the liver; therefore, during an acute infection some recommend a diet high in carbohydrates and low in fat, while still maintaining adequate caloric intake.

After recovery, adolescents frequently are advised not to take part in athletic events for three to four months (one semester of school). The use of alcohol is contra-indicated during recovery from mono. Patients with enlarged spleens should avoid contact sports. Sometimes fatigue may persist for a few months; in this case, vigorous exercise should be avoided.

**When to Call Us:** If there is a combination of fever, sore throat, enlargement of lymph nodes plus fatigue, please call our office.

*Source:* The Nemours Foundation.