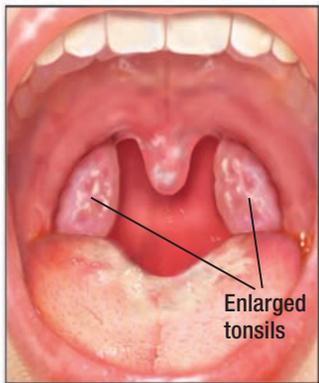


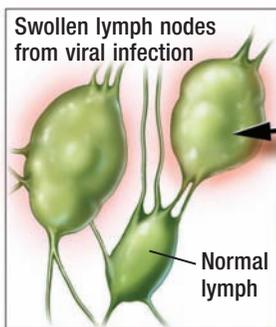
Mononucleosis

Red, inflamed, swollen throat and pharynx



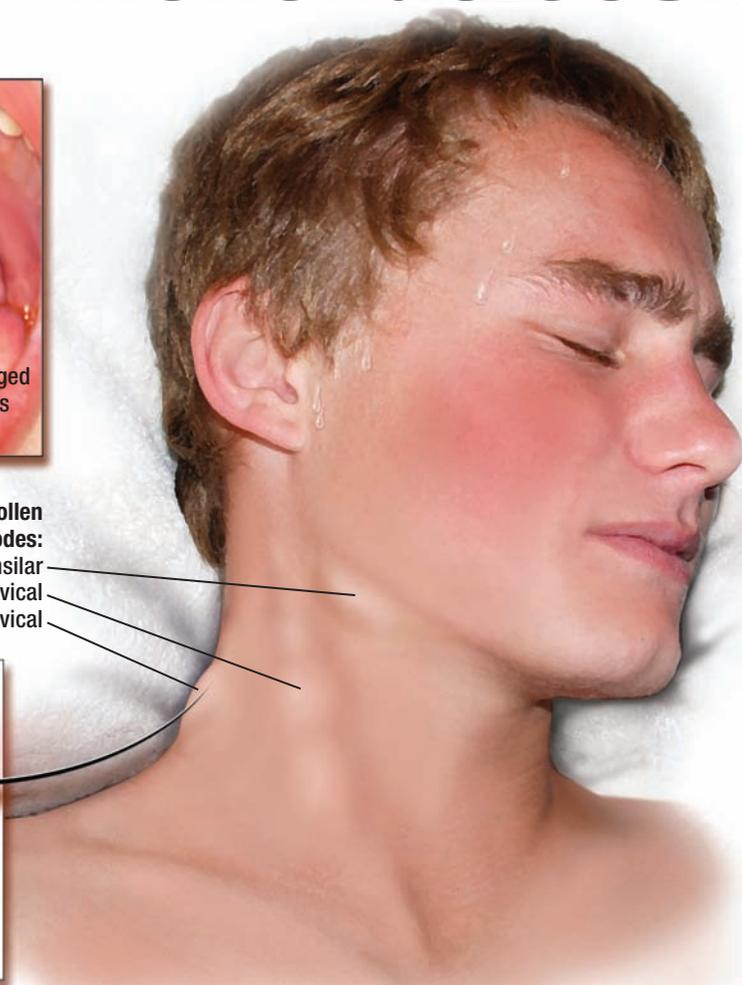
Enlarged tonsils

Swollen lymph nodes:
Tonsillar
Anterior cervical
Posterior cervical



Swollen lymph nodes from viral infection

Normal lymph



The “Kissing Disease”

Mononucleosis is a viral infection most often caused by the Epstein-Barr virus (EBV), one of the most common viruses that infect humans. By the age of 40 years, almost all adults in the United States have been infected by EBV at some time during their lives. Most people are unaware of this because the virus either caused very mild symptoms or no symptoms at all during their early childhood years. However, if a person is first infected as a teen or young adult, EBV is more likely to cause the classic symptoms of infectious mononucleosis.

Mononucleosis (sometimes called mono, the kissing disease, or glandular fever) is a viral infection transmitted through saliva. The common symptoms of mononucleosis include fever, sore throat, swollen lymph nodes, and fatigue. In some cases, an enlarged spleen may result. The diagnosis is made after a thorough history of symptoms along with a physical examination and laboratory testing.

There is no specific treatment for mononucleosis. Supportive measures such as bed rest, fluids, and pain relievers are all useful to relieve symptoms. Antiviral and antibacterial drugs are not effective in the treatment of mononucleosis. In some cases, oral steroids are used to reduce glandular swelling. Activity is usually limited during the period of recovery, which may last for several weeks depending on the patient's level of fatigue. Several months of extra rest may be required to completely recover from mononucleosis. Participation in vigorous sports or exercise is typically restricted for a month or more after symptoms subside to encourage quick recovery and avoid rupturing a potentially enlarged spleen.

Exposure to the Epstein-Barr Virus Through Infected Saliva

At some point in their lives, up to 95% of people in the U.S. have been infected with the Epstein-Barr virus (EBV). This common virus usually does not cause significant illness if exposure occurs during childhood. However, if an EBV infection first occurs during the teenage years or early adulthood, it can cause infectious mononucleosis in one-third to one-half of those exposed. Infectious mononucleosis is typically not a serious condition, and it resolves without specific treatment over a period of several weeks.



Common symptoms of mononucleosis include fever, sore throat, swollen lymph nodes, and fatigue.

Risk Factors and Diagnosis

There are no specific risk factors in the development of infectious mononucleosis other than exposure to the virus through infected saliva. Since most people have already been exposed to EBV at some time before age 40 years and developed immunity, there is no reason to avoid contact with healthy individuals. Mononucleosis is not an extremely contagious disease because it is normally not transmitted through the air, but patients should avoid kissing others or sharing objects that could harbor the virus from their saliva such as glasses, utensils, straws, or other dishware.

Diagnosis of mononucleosis is made after a careful history of symptoms and a physical examination. Laboratory tests performed to help confirm the diagnosis include the monospot (heterophile) test, a white blood cell analysis, and the presence of antibodies to EBV. Test results are combined with the symptoms of fatigue, fever, sore throat, and swollen lymph nodes to make a positive diagnosis.

Symptom Relief

The symptoms of mononucleosis can be relieved with medication, but they eventually disappear without specific treatment. Antiviral or antibacterial drugs are not effective in the treatment of infectious mononucleosis. Symptoms of fever and pain can be treated with nonprescription pain relievers, and oral steroids have been used to reduce swelling and inflammation of the throat and tonsils. Bed rest and fluids are very important in speeding recovery. Symptoms of fever and sore throat usually improve over a period of weeks, but swollen lymph nodes and an enlarged spleen may take up to a month or longer to disappear. If the spleen is swollen, there is a small risk of rupture. Patients with enlarged spleens are required to avoid vigorous activity as instructed by their physicians. If symptoms of infectious mononucleosis last longer than 6 months, it is considered a chronic infection and other causes must be considered.

Once EBV causes infection, it remains dormant (not active) in the body for a lifetime. Occasionally, the virus can reactivate and appear in the saliva of a person previously infected, but this reactivation usually does not cause symptoms.

Possible Complications

Although in most cases mononucleosis is not a serious or life-threatening condition, it can lead to certain complications. These include inflammation of the liver, heart, and nervous system. Patients with poor immune system function, such as individuals with HIV/AIDS or those taking immunosuppressive drugs, are more likely to become more seriously ill if they develop mononucleosis. Unfortunately, at present there is no vaccine to prevent mononucleosis.

If you have questions about the symptomatic treatment of mononucleosis or any viral infection, be sure to ask your pharmacist.