## **MONONUCLEOSIS**

Infectious mononucleosis, or "mono" for short, is a viral illness that is common in teens and young adults. Although several viruses can cause mono, 95% of cases are caused by the Epstein-Barr virus (EBV). By middle adulthood, 90% of Americans have antibodies against EBV and thus have been infected at some point. When the primary EBV infection occurs in childhood, often it is without symptoms. However, when teens and young adults get infected, because of their aggressive immune systems, they get the set of symptoms we call "mono."

The EBV virus develops its symptoms slowly. A patient has had the virus for as many as 30-50 days before the first mild symptoms develop: fatigue, mild headaches and loss of appetite are common. While sometimes these are the only symptoms, commonly the patient follows in about a week with fever, sore throat (often severe, with exudates or "white spots" on the tonsils), swollen glands in the neck, increasing fatigue, muscle aches and occasionally a skin rash. In most cases, the spleen can enlarge and the liver can become inflamed. In any given patient with mono, any or all of the above symptoms may occur, and the illness can range from very mild to quite severe.

Mononucleosis is usually diagnosed by blood tests. At Student Health Services, results are usually available within 24 hours or less. Up to 15% of mono patients will initially have negative blood tests, so it may be necessary to repeat the test in one to two weeks.

Mono is spread by saliva, and the virus is usually present in a patient's saliva for about 30-45 days after onset of symptoms.

Although mono is often called the "kissing disease" (and certainly kissing is an effective way to spread it!), very few patients have any idea how they got the infection. Only one-third of those infected with EBV get "classic" mono, so there are many people out there with no symptoms who can spread the disease! Fortunately, mono is not highly contagious. Studies have shown, for example,

that roommates have little worry about from casual contact, and

there is no need to guarantine mono patients.

Because mono is caused by a virus, antibiotics do not help the illness and in fact may make symptoms worse. However, if you are diagnosed with mono, there are several things you can (and must) do:

**Increase your rest:** Many mono patients are quite fatigued during the early 2 to 3 weeks of the illness and need increased rest. Milder cases may have little or no fatigue. However, increased rest is a good idea regardless - often, being too active early in the illness can increase the severity and duration of symptoms.

**Increase your fluids:** Mono can lead to mild (or even severe) dehydration due to fluid losses from fever and cough. In addition, a painful throat and neck often discourages food and fluid intake. Mono patients must increase their fluids, even 2 to 3 times above normal, in the early stages of the illness to help their body fight the virus.

Avoid contact sports and vigorous exercise: The spleen, which is a large organ in the left upper abdomen that filters and stores blood, often enlarges in mono. Rarely in mono (1 to 2 cases per1000) the spleen can rupture, a life threatening condition. Splenic rupture most commonly occurs in the second to third week of the illness, and in one-half of cases is associated with trauma to chest or abdomen.

**Abstain from alcohol:** Mono often inflames the liver, and alcohol makes this inflammation worse. Mono patients should not use alcohol for two months after the onset of symptoms.

Delay return to exercise and sports: Mono patients, especially college students, frequently have only one question when they are told they have mono: "When can I go back to school and sports?!" While the length of illness varies greatly from person to person, many patients note only one to two weeks of moderate to severe illness followed by up to two to three months of fatigue. However, while this fatigue requires increased rest, rarely does it need long-term bed rest. It is not usually necessary for students to withdraw from school due to mono. Light exercise, like casual, short walking, is fine if you feel up to it and don't have a fever or dizziness. Typically, a mono patient should not return to strenuous exercise or contact sports for a minimum of one, and sometimes two, months. Regardless, sports should not be resumed until cleared by the medical provider.

There has been much talk in the press about possible connection between EBV and "chronic fatigue syndrome." At this time, the connection is not entirely clear. Since 90% of adults have had EBV, nearly everyone with chronic fatigue will have a positive EBV test. For now, the issue remains in doubt. Suffice to say, the overwhelming majority of mono patients will not develop chronic fatigue and will fully return to normal activities and energy.

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## **Helpful Link:**

American Academy of Family Physicians patient information web site (familydoctor.org), at <a href="http://www.familydoctor.org/x1695.xml">http://www.familydoctor.org/x1695.xml</a>.

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