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Mononucleosis

Mononucleosis (Mono) is a viral infection caused by the Epstein Barr Virus-EBV. Mono causes fever, sore throat, and swollen lymph glands, especially in the neck. The EBV that causes mono is found throughout the world. By the time most people reach adulthood, an antibody against EBV can be detected in their blood. In the U.S., up to 95% of adults 35-40 years of age have developed EBV antibodies. This means that most people have been infected with EBV, but never became very ill.

When infection occurs in childhood, the virus often produces no symptoms. Only about 10% of children who become infected with EBV develop the illness. The illness is less severe in young children and may mimic the symptoms of other common childhood illnesses, which may explain why it is less commonly diagnosed or recognized in younger children. Most cases of infectious mononucleosis occur in adolescents ages 15-24.

Once you have had mono, you develop specific antibodies that prevent you from getting Mono again.

The incubation period for Mono, meaning the time from the initial viral infection exposure until the appearance of symptoms, is between four and eight weeks. During an infection, a person is able to transmit the virus to others for at least a few weeks and possibly longer, even after symptoms have disappeared.

How is Mono Spread?

Mono is spread by person-to-person contact. Saliva is the primary method of transmitting mono, which leads to the infection in the mouth and throat. Infectious mononucleosis developed its common name of "**kissing disease**" from this prevalent form of transmission among teenagers.

A person with Mono can also pass the disease by coughing or sneezing, causing small droplets of infected saliva and/or mucus to be suspended in the air which can be inhaled by others. Sharing food or beverages from the same container or utensil can also transfer the virus from one person to another since contact with infected saliva may result.

What are the Symptoms of Mono?

The symptoms of Mono include **fever up to 104 F, extreme fatigue, sore throat, appetite loss and swollen lymph nodes.**

The tonsils have a **whitish-yellow coating** in at least one-third of the cases.

The spleen (sometimes referred to as the body's biggest lymph node) is an organ found in the left upper abdomen underneath the rib cage. 50% of patients



with Mono will develop an enlarged spleen.

An enlarged liver and abnormalities in liver function tests (blood tests) may be present.

About 5% of patients have a splotchy red rash over the body, which has a similar appearance to the rash of measles. Early in the course of disease (over the first few days of illness), a temporary swelling of both upper eyelids may appear.



How is Mono Diagnosed?

Mono is confirmed by blood tests, called Epstein Barr Antibody tests. These tests rely on the body's immune system to make antibodies against the EBV. Specific antibodies are produced which determines if the infection is current or was from a past infection. These antibodies may not become detectable until the second or third weeks of the illness.

Since sore throat is the main presenting complaint, Strep tests are usually checked first. 20% of children with Mono present with a positive strep culture. However, children with only a Strep throat infection will feel much better in 48 hours. Children with Mono are not better in 48 hours and are often sicker. Early in the course of the mono, blood tests may show an increase in white blood cells (lymphocyte). Some of these increased lymphocytes have an unusual or "atypical" appearance when viewed under a microscope, which is very specific to mono.

A blood test may also show abnormalities in liver function and/or low platelets. These abnormal labs will return to normal once the infection is resolved. We recommend repeating any abnormal lab test in 6-8 weeks to confirm they have returned to normal.

Course and Treatment of Mono

In most cases of Mono, no specific treatment is necessary. The illness is usually self-limited and improves like many other common viral illnesses. Treatment is directed toward the relief of symptoms.

Acetaminophen can be used to treat fever, headache or body aches. The sore throat is worst during the first five to seven days of illness and then subsides over the next seven to 10 days. Prednisone is sometimes used to treat severe sore throats in Mono. The swollen, tender lymph nodes generally subside by the third week.

Fatigue or tiredness may persist for weeks following the beginning of the illness.

All children with Mono will have an enlarged spleen. An enlarged spleen is more susceptible to rupture during contact sports. This can be life threatening. Once the Mono infection is resolved, the spleen size will return to normal (4-6 weeks). Therefore, **it is recommended that patients with mono avoid participation in any contact sports for one month after the onset of symptoms to prevent trauma to the enlarged spleen.**

If Strep throat occurs in conjunction with mono, it is treated with antibiotics. Some children treated with Amoxicillin may develop a rash that looks like Measles, but many times is thought to be an allergic rash to Amoxicillin. The difference is that an allergic rash to Amoxicillin will itch, while the Mono rash does not itch.

Complications of Mono

A common, but usually not serious, complication of mono is a mild inflammation of the liver, called hepatitis. This form of hepatitis is rarely serious or requires treatment.

The enlargement of the spleen that occurs with mono makes traumatic rupture of the spleen a possible complication.

Swelling of the throat and tonsils can also lead to airway obstruction when severe. Infection in the area of the tonsil can rarely cause an abscess. Another rare complication is swelling of the throat that may affect your child's breathing. This is not life threatening, but can be very uncomfortable.

Although some children with Mono become sicker than others, all children will recover and be able to return to their normal activities. Once their fever (can last up to 7 days) has resolved and they are feeling better, they may return to school.

This information should not be used as substitute for the medical care and advice of your child's physician. Health related topics found on the Andorra Pediatrics web site should not be used for diagnosing purposes or be substituted for medical advice. As with any new or ongoing treatment, always consult your professional healthcare provider before making any changes in treatment or beginning any new treatment. If you have any questions or concerns, please call our office.