

# **Epstein Barr Virus Mononucleosis**

Epstein Barr mononucleosis is a viral illness characterized by fever, lymphadenopathy and pharyngitis. The disease is commonly referred to as the kissing disease owing to its common demographic of adolescents as well as its ability to be spread in saliva. Unique findings of the infection include atypical lymphocytes as well as splenomegaly, which is at an increased risk for rupture. The disease can be diagnosed with a heterophile antibody tests called a mono-spot test. Unlike CMV mononucleosis, EBV mononucleosis is heterophile positive, so it will have a positive mono-spot test. It is usually a self limiting disease.



**PLAY PICMONIC** 

### Mononucleosis

### Monkey-nuclear

Mononucleosis is commonly caused by Epstein Barr virus but can also be caused by other organisms like cytomegalovirus. It's classically known as the kissing disease due to its demographic of adolescent patients and its ability to be easily spread by saliva. Symptoms include characteristic weakness, malaise and a variety of potential complications including splenomegaly and lymphadenopathy.

#### Fever

Fever-beaver

Fever is a typical non-specific presentation of the illness.

## Hepatomegaly

Liver-balloon

The liver is commonly enlarged to some degree although hepatomegaly is often moderate compared to splenomegaly.

### **Splenomegaly**

Spleen-balloon

The spleen is enlarged in most cases and can be vulnerable to rupture although quite rare. Therefore, patients should be kept from heavy physical activity and contact sports for at least one month following initial infection or until splenomegaly has resolved.

# Pharyngitis

Pharaoh

Pharyngitis is a non-specific presentation of the viral illness and is often confused with strep throat.

### **Posterior Cervical Lymphadenopathy**

Post-terrier with Cervical Lymph-lime-add (+)

Posterior cervical lymphadenopathy is the classic lymph node involvement pattern which can help differentiate this illness from others.

### **Atypical Lymphocytes**

A-tipi with Atypical Lime-lymphocyte

Atypical lymphocytes are lymphocytes that become large as a result of antigen stimulation. Atypical lymphocytes are common in infectious mononucleosis and can help identify disease.

# **Heterophile Antibodies**

Hat-of-files

Heterophile antibodies are positive in this disease which is the foundation of the Mono-spot test. It can take time to become positive because it takes time to create the antibodies. Therefore a negative test does not exclude the disease. The mono-spot test is classically positive in Epstein barr mononucleosis and negative in CMV mononucleosis.



# Rash Develops if treated with Ampicillin

Rash on Fever-beaver sitting on Amp-pencil being examined by Dermatologist

Ampicillin is often given as treatment due to the similarity of clinical symptoms with strep pharyngitis. If a patient presents with a rash after taking ampicillin, suspect Epstein-barr mononucleosis.

# Hodgkin's Lymphoma

Hog-king with Lime-foam

Hodgkin's lymphoma is associated with 1 in 1,000 cases of mononucleosis.