

accompanied by serious complications.

Etiology and Pathophysiology

The herpes-like Epstein-Barr virus (EBV) is the principal cause of infectious mononucleosis. It appears in both sporadic and epidemic forms, but the sporadic cases are more common. The virus is believed to be transmitted in saliva by direct intimate contact, blood transfusion, or transplantation. The incubation period after exposure is approximately 30 to 50 days ([American Academy of Pediatrics Committee on Infectious Diseases and Pickering, 2012](#)).

Diagnostic Tests

The onset of symptoms may be acute or insidious and may appear anywhere from 10 days to 6 weeks after exposure. The presenting symptoms vary greatly in type, severity, and duration ([Box 21-7](#)). The clinical manifestations of infectious mononucleosis are usually less severe (often subclinical or unapparent), and the convalescent phase is shorter in younger children than in older children and young adults. Heterophil antibody tests (Paul-Bunnell or Monospot) determine the extent to which the patient's serum will agglutinate sheep red blood cells; the response in these tests is primarily to immunoglobulin M (IgM), which is present in the first 2 weeks of the illness and may last up to a year ([American Academy of Pediatrics Committee on Infectious Diseases and Pickering, 2012](#)). The **spot test (Monospot)** is a slide test of venous blood that has high specificity for the diagnosis of infectious mononucleosis. It is rapid, sensitive, inexpensive, and easy to perform, and it has the advantage over the Paul-Bunnell test that it can detect significant agglutinins at lower levels, thus allowing earlier diagnosis. Blood is usually obtained for the test by finger puncture or venous sampling and is placed on special paper. If the blood agglutinates, forming fragments or clumps, the test result is positive for the infection.

Box 21-7

Clinical Manifestations of Infectious Mononucleosis