



CLINICAL DISEASE: TUBERCULOSIS



Pulmonary TB

The initial foci are most frequently in the lower and mid-lung zones, but infection in the upper lobe does occur. Clinical manifestations of the primary infection vary depending on the age of the individual. It is most often symptomatic in childhood because of an age-related tendency to extensive lymphadenitis which may compress central bronchi leading to a brassy cough or collapse of a lobe, or may rupture the bronchi seeding the infection distally and causing pneumonia. In the very young, there is a tendency to lymphohaematogenous dissemination resulting in miliary disease.

However in the majority of those infected in the relatively resistant period of childhood (age 3-15), the process is non-progressive over the short term. Healing, which takes place by involution, encapsulation, and frequently calcification, does not seem to be accelerated by chemotherapy.

Pulmonary TB can lead to extrapulmonary TB disease, two forms of which are life-threatening in infants and young children: disseminated/miliary TB and meningeal TB.

Extrapulmonary TB

1. Miliary/Disseminated TB

The term "miliary" describes the appearance on chest x-ray of very small nodules throughout the lungs that look like millet seeds. Early clinical manifestation depends on the load of the organisms and the site of infection. The onset is insidious and signs include malaise, anorexia, weight-loss and low grade fever. Within weeks hepatosplenomegaly and generalised lymphadenopathy develop in half the patients.

2. Meningeal TB

Meningeal TB disease is usually a complication of miliary disease developing several weeks into the disease and is uniformly fatal if effective treatment is not given. The onset is insidious, characterised by fever, malaise, headache, irritability and drowsiness. This is followed by lethargy, nuchal rigidity, seizures, vomiting, hypertonia and focal neurologic findings. The third stage is marked by coma, hemiplegia, deterioration in vital signs and eventually death.

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