Why is Latent tuberculosis or TB? Treatment of Latent tuberculosis

Tuberculosis or TB is caused by the bacteria called *Mycobacterium tuberculosis*. It is not an uncommon infection in third world countries. The bacteria can enter the body which may get cleared by the immune system in immunocompromised patient. There is no evidence of infection, and the person remains completely asymptomatic. In small number of persons, when the bacteria enter the body, it cannot be cleared but become inactive or go to deep sleep. These patients do not develop any symptoms, and this is called latent tuberculosis.

When the bacteria grow in the body and cause symptoms, this is called a tuberculosis disease or TB disease and these patients are not asymptomatic anymore.

Why is important to know about latent tuberculosis?

Latent tuberculosis means a person has inactive mycobacterium tuberculosis bacteria in the body which does not cause any symptoms or spread/grow. These are not dead bacteria though and these can start dividing and spreading causing tuberculosis or TB disease. It can happen usually in initial two years after the infections or the person develops any immunosuppressive condition or start any medication which suppresses the immunity or have another infection like HIV.

In 5-10% patient, the latent tuberculosis converts into active tuberculosis disease when bacteria start growing and cause significant symptoms. To stop this happening, patient may require treatment to reduce reactivation of TB.

Symptoms of latent tuberculosis:

There are no symptoms of latent tuberculosis infection. Persons with latent TB are completely asymptomatic. If patient has symptoms, it is either active tuberculosis disease or another disease process.

Investigation for latent tuberculosis:

Latent tuberculosis is diagnosed by either skin testing or a blood test. The skin test is called tuberculin skin test or Mantoux's test in which protein from the mycobacterium cell is injected under the skin. The person who has had any exposure to tuberculosis bacterium (either active disease or latent disease), may develop skin inflammation/swelling within 72 hours of initial injection. The blood test is called QuantiFERON gold test (IGRA) and is performed in the laboratory.

TST test can be abnormal in persons who have had tuberculosis vaccination in the past.

Treatment of latent tuberculosis:

it is recommended for persons who have latent tuberculosis to have a treatment as it will reduce the chances of getting active tuberculosis disease significantly in later life. There are few regimes which you can discuss with your doctor, depending on any person's medical history and availability of the drugs.

Transmission of latent tuberculosis:

Latent tuberculosis cannot be transmitted from one person to another, even if there live together in closed places.

If a person develops active tuberculosis disease though (from latent TB), that person can spread the disease through the air in the form of micro air droplets and other persons can get infection.

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