



A Brief Note on Tuberculosis

Pinheiro Ryan*

Department of Tropical Medicine, University of Kolkata, Kolkata, India

DESCRIPTION

Tuberculosis (TB) is an infectious disease usually caused by *Mycobacterium Tuberculosis* (MTB) bacteria. Tuberculosis generally affects the lungs, but it can also affect other parts of the body. Most infections are asymptomatic and in this case we talk about latent tuberculosis. This is a potentially serious infection that primarily affects the lungs. The bacteria that cause tuberculosis are transmitted from person to person through small droplets that are released into the air by coughing and sneezing.

Symptoms

Tuberculosis can infect any part of the body, but most commonly it occurs in the lungs (known as pulmonary tuberculosis). Extra pulmonary tuberculosis occurs when pulmonary tuberculosis occurs outside the lungs, but extra pulmonary tuberculosis can coexist with pulmonary tuberculosis.

Pulmonary

If a tuberculosis infection does become active, it most commonly involves the lungs (in approximately 90% of cases). Symptoms can also additionally consist of chest ache and a prolonged cough generating sputum. About 25% of humans won't have any symptoms (i.e. they continue to be asymptomatic). Occasionally, humans can also additionally cough up blood in small amounts, and in very uncommon cases, the contamination can also additionally erode into the pulmonary artery or a Rasmussen's aneurysm, ensuing in huge bleeding. Tuberculosis can also additionally end up a continual contamination and motive great scarring withinside the top lobes of the lungs. The top lung lobes are greater often stricken by tuberculosis than the decrease ones.

Extra pulmonary

In 15-20% of active cases, the infection spreads out of the lungs and causes other types of tuberculosis. These are collectively called extra pulmonary tuberculosis. Extra pulmonary tuberculosis is common in people with weakened immunity and in young children. In people infected with HIV, this occurs in more than 50% of cases. Notable sites of extra pulmonary infection include the pleura (tuberculous pleural inflammation), the central nervous system of "tuberculous meningitis", the lymphatic system of the "neck penis", the genitourinary system of "genitourinary tuberculosis", and the bones.

CAUSES

Mycobacteria

The main cause of tuberculosis is *Mycobacterium Tuberculosis* (MTB), a small aerobic bacillus. The high lipid content of this pathogen is responsible for many of its unique clinical properties. It splits every 16 to 20 hours. This is a very slow rate compared to other bacteria that normally divide within an hour. Mycobacteria have a lipid bilayer on the outer membrane. With Gram stain, MTB stains very weakly and "Gram-positive" or does not retain the stain due to the high content of lipids and mycolic acid in the cell wall. MTB withstands weak disinfectants and survives for several weeks when dry. In nature, bacteria can only grow inside the cells of the host organism, while *M. tuberculosis* can be cultivated in the laboratory.

Transmission

People with active pulmonary tuberculosis release infectious aerosol droplets 0.5 to 5.0 μm in diameter when coughing, sneezing, talking, singing, or spitting. A single sneeze can release up to 40,000 drops.

Risk of transmission

People with long-term, frequent or close contact with tuberculosis patients are at particularly high risk of infection, with an estimated infection rate of 22%. People with active but untreated tuberculosis can infect 10 to 15 (or more) others annually. Infection should only occur in people with active tuberculosis-people with latent infections are not considered contagious. Some potential transmissions from one person to another include the number of infectious droplets ejected by the carrier, the effectiveness of ventilation, the duration of exposure, the toxicity of tuberculosis strains, the level of immunity, etc.

Prevention

If you have a latent infection, take all your medicine so it doesn't turn become active and contagious. If you have active TB, limit your contact with other people. Cover your mouth when you laugh, sneeze, or cough. Wear a surgical mask when you're around other people during the first weeks of treatment. If you're traveling to a place where TB is common, avoid spending a lot of time in crowded places with sick people

Correspondence to: Pinheiro Ryan, Department of Tropical Medicine, University of Kolkata, Kolkata, India, E-mail: pinheiro.ryan@gmail.com

Received: 04-Jan-2022, Manuscript No. TPMS-22-258; **Editor assigned:** 06-Jan-2022, Pre QC No. TPMS-22-258 (PQ); **Reviewed:** 20-Jan-2022, QC No TPMS-22-258; **Revised:** 24-Jan-2022, Manuscript No. TPMS-22-258 (R); **Published:** 31-Jan-2022, DOI: 10.35248/2329-9088.22.10.258

Citation: Ryan P (2022) A Brief Note on Tuberculosis. Trop Med Surg. 10:258.

Copyright: © 2022 Ryan P. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.