Defining Current year’s Tuberculosis program of the congress

- Non Tuberculosis Mycobacteria (NTM) importance
  - BCG vaccine
  - Different & high antibiotic resistance
  - Biochemical tests are not accurate

- NTM are widely distributed in the environment, particularly in wet soil, tap water, natural waters
- unlike tuberculosis and leprosy, there has been no evidence of animal-to-human or human-to-human transmission of NTM
- NTM diseases have been seen in most industrialized countries, where incidence rates vary from 1.0 to 1.8 cases per 100,000 persons

- Pulmonary NTM is estimated by some experts in the field to be at least ten times more common than TB in the U.S., with at least 150,000 cases per year.
- The most common clinical manifestation of NTM disease is lung infection, but lymphatic, skin/soft tissue, and disseminated disease are also important

- Pulmonary NTM can also be found in individuals with AIDS and malignant disease.

- Soft tissue disease due to NTM infection include post-traumatic abscesses (caused by rapid growers), swimming pool granuloma (caused by *M. marinum*) and Buruli ulcer (caused by *M. ulcerans* or *M. shinshuense*). Post-traumatic abscesses most commonly occur after injection

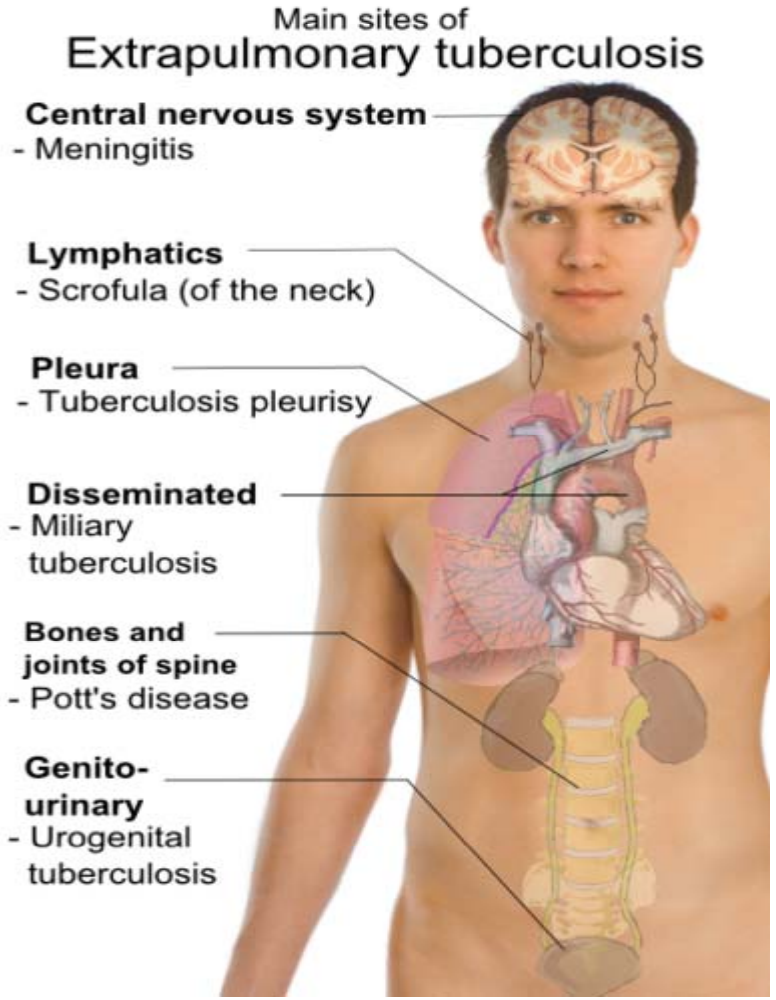
- Diagnosis of opportunistic mycobacteria is made by repeated isolation and identification of the pathogen with compatible clinical and radiological features.
- Similar to *M. tuberculosis*, most nontuberculous mycobacteria can be detected microscopically and grow on Löwenstein-Jensen medium.
- Many reference centers now use a nucleic acid-based method such as sequence differences detection in the gene coding for 16S ribosomal RNA to identify the species.[6]

- Treatment of atypical mycobacterial infections depends upon the infecting organism and the severity of the infection
- These include rifampicin, ethambutol, isoniazid, minocycline, ciprofloxacin, clarithromycin, azithromycin and cotrimoxazole.
- Usually treatment consists of a combination of drugs.

- *Mycobacterium marinum* species are often resistant to isoniazid. Treatment with other antibiotics should be for at least two months.
- *Mycobacterium kansasii* should be treated for at least 18 months.
- *Mycobacterium chelonae* is best treated by clarithromycin in combination with another agent
- Surgical removal of infected lymph nodes and skin lesions is sometimes necessary.

Extrapulmonary tuberculosis (EPTB)

- Diagnosis of EPTB is often difficult.
- Low human-to-human transmission



- The recent human immunodeficiency virus (HIV) incidence.
- acquired immunodeficiency syndrome (AIDS) pandemic
- EPTB constitutes about 15 to 20 per cent of all cases of tuberculosis in immunocompetent patients and accounts for more than 50% of the cases in HIV-positive individuals.

- Lymph nodes are the most common site of involvement followed by pleural effusion and virtually every site of the body can be affected.

- Since the clinical presentation of EPTB is atypical, tissue samples for the confirmation of diagnostic can sometimes be difficult to procure, and the conventional diagnostic methods have a poor yield, the diagnosis is often delayed.

- Antituberculous therapy can minimize morbidity and mortality but may need to be initiated empirically

- Treatment duration may need to be extended for central nervous system and skeletal tuberculosis, depending on drug resistance, and in patients who have a delayed or incomplete response

کسی که به زندگی دیگران نور هدیه میدهد

بی شک روزی صاحب خورشید خواهد شد