

Evidence Discussion (CH 14.1)

PPD or TB (*Mycobacterium tuberculosis*) and Nontuberculous Mycobacterial Pulmonary Disease (NTM-PD) evidence summary

Chest radiography (CR) should be the initial for suspected active *M. tuberculosis* (MTB) infection based on clinical symptoms and demographics. a newly positive tuberculin skin test, (TST) or interferon-gamma release assay (IGRA). CT is appropriate if CR is equivocal and there is clinical suspicion of active MTB, especially in those with impaired cell-mediated immunity.(3) CT may be performed to evaluate suspected complications and monitor response to therapy.(2,4)

CR is usually appropriate to distinguish latent from active MTB in people with evidence of new exposure (a newly positive TST/IGRA or a positive TST/IGRA with unknown prior status) but no clinical symptoms.(1) The yield of CR for active MTB in the absence of clinical symptoms is low. CT is more sensitive than CR for the detection of latent TB.(5). CT is recommended when CR is equivocal for active MTB or when a diagnosis of latent MTB may affect future care.(1,6)

When a TST is not available for people who are going to live in a group home, correctional institution or nursing facility, CR is usually appropriate as a surrogate screening measure.

Imaging (CR and CT) is an important component in the diagnosis and follow up of nontuberculous mycobacterial pulmonary disease (NTM-PD).(8) The diagnosis and determination of response to therapy are based upon radiologic, clinical, and microbiologic criteria.(9, 10) Serial CT imaging is important for monitoring disease progression and response to therapy. Radiologic findings provide prognostic information and may affect treatment recommendations.(10)

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