Thai Tuberculosis Guideline for Adults 2018

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Thailand is one of the fourteen countries that had three high burdens of TB, TB/HIV, and MDR-TB. According to WHO and ATS/CDC/IDSA guidelines, Ministry of public health of Thailand developed new clinical practice guideline (CPG) for tuberculosis in the year 2018. The major changes in this guideline are as the following. The recommended screening for suspected TB case is chest radiograph follow by sputum AFB smear. The suspected TB cases are defined as 1) persons who have at least one of these symptoms: cough > 2 weeks, hemoptysis, no specific disease to explain cough or fever or weight loss or night sweat, and 2) persons who don’t have symptoms but high risk for TB infection such as closed contact with TB patients or HIV patients. In cases who have negative two sputum AFB smears but abnormal chest radiograph and suspected TB, sending sputum for Xpert MTB/RIF is considered to early diagnosis of TB. If RR is detected by Xpert MTB/RIF in the low risk group for MDR-/RR-TB, repeated molecular test by Xpert MTB/RIF or line probe assay (LPA) is suggested. In new cases with positive AFB by smear or positive MTB by Xpert MTB/RIF, send the sputum for culture and drug susceptibility test (DST) if available, and start the regimen with 2HRZE/4HR. If sputum AFB smears still positive at 2nd month of treatment, molecular test and culture and DST are recommended. The regimen can be change depended on clinical response and culture result. The high risk group for MDR-/RR-TB is defined as 1) previously treated cases including treatment after failure, treatment after loss to follow up, or relapsed cases, 2) on treatment but sputum still AFB smear positive at 2nd month, 3) close contact with MDR-TB patient. If the result from Xpert MTB/RIF reported MTB and detected RR in this high risk group, the recommendation is sending the sputum for culture and DST and start MDR-TB regimen. The shorter MDR-TB regimen (9-12 months) is preferred than longer MDR-TB regimen (20 months). The criteria for choosing shorter MDR-TB regimen are including all of the following 1) MDR-/RR-TB patients and second line LPA or culture result sensitive to fluoroquinolone and aminoglycoside, 2) no history exposure to > 1 second line drugs in the shorter MDR-TB regimen for > 1 month, 3) no history of adverse drug reaction to all of the drugs in the shorter MDR-TB regimen, 4) exclusion pregnant woman, 5) exclusion extrapulmonary TB patients, 6) tolerance to all drugs in the shorter MDR-TB regimen. The shorter MDR-TB regimen compose of intensive phase 4 months with kanamycin, moxifloxacin, clofazimine, prothionamide, ethambutol, high-dose isoniazid, and pyrazinamide, then maintenance phase 5 months with moxifloxacin, clofazimine, ethambutol, and pyrazinamide. However if 4th month sputum AFB smear still positive, the intensive phase will extend to 6 months, until negative sputum AFB smear. For MDR-/RR-TB patients who don’t fit to criteria for shorter MDR-TB regimen, the longer MDR-TB regimen is recommended. This regimen compose of at least four drugs including one drug from group A, one drug from group B, and two drugs from group C. The drugs from group D2 and D3 are added on drugs, if the regimens compose of less than four drugs. Pyrazinamide (PZA) is the drug in group D1, may be considered to add on the regimen if the organism sensitive to PZA, but don’t count to be one of the core drugs. The longer MDR-TB regimen compose of intensive phase 6 to 8 months with kanamycin, levofloxacin, ethionamide, cycloserine, and plus/minus para-aminosalicylic acid and PZA, then maintenance phase with levofloxacin, ethionamide, cycloserine, and plus/minus para-aminosalicylic acid and PZA. The total course of the longer MDR-TB regimen is 20 months.
References:


