TREATMENT OF TUBERCULOSIS IN SPECIAL SITUATIONS

MOHAMMAD DELWAR HOSSAIN1, ASIF MUJTABA MAHMUD 2, MD. ALI HOSSAIN3, MOHAMMAD ABDUS SHAKUR KHAN4, KAZI SAIFUDDIN BENNOOR5, MD. FERDOUS WAHID6

1Professor, Respiratory Medicine and Clinical Director, BIRDEM General Hospital, Dhaka, Bangladesh. 2Senior consultant, Asgar Ali Hospital, Dhaka, Bangladesh. 3Senior consultant, Bangladesh specialized Hospital, Dhaka, Bangladesh. 4Assistant Professor, Department of Respiratory Medicine, National Institute of Diseases of the Chest and Hospital (NIDCH), Mohakhali, Dhaka, Bangladesh. 5Associate Professor, Department of Respiratory Medicine, National Institute of Diseases of the Chest and Hospital, Mohakhali, Dhaka, Bangladesh.

Treatment of Tuberculosis in special situations implies overcoming special challenges in patients with diabetes, pregnant women, people aged over 65 years, and those with chronic kidney or liver disease. Rifampicin is a potent hepatic enzyme inducer, may lower plasma levels of sulphonyl urea and can increase the hypoglycemic effect of metformin. Since insulin is not metabolized, no pharmacokinetic interactions with anti-TB drugs occur. Gastrointestinal upset and hepatitis are reported as the most frequent adverse events in older people. In patients >80 years, pyrazinamide may be omitted. In TB patients with chronic kidney disease (CKD), an inappropriate dosage of anti-TB drugs can result in unsuccessful treatment or side effects. Current guidelines for first-line anti-TB drugs therefore recommend that dosages of ethambutol (EMB) and pyrazinamide (PZA) be adjusted according to patient renal function and body weight, although no change in dosage is necessary for patients with mild renal insufficiency. However, it remains unknown how the renal function-based dosage adjustments recommended by the guidelines affect efficacy outcomes for TB patients with CKD. In chronic liver disease (CLD) patients, The Child–Turcotte–Pugh (CTP) score can be used as a guide for designing appropriate regimens. In stable CLD (CTP d=7), a treatment regimen including isoniazid, rifampicin, and ethambutol is recommended, a 2-month intensive phase with the three drugs, followed by isoniazid and rifampicin continuation phase for 7 months partially liver-sparing regimen consisting of Ethambutol, Rifampicin, and a quinolone for 9 months is advisable in case of more severe CLD (CTP 8–10). If CLD is very advanced (CTP £11), a total liver-sparing regimen consisting of Ethambutol and a quinolone (Levofloxacin or Moxifloxacin) for 12 months.

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