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TRIAL SHOWS SUCCESS IN TREATING DRUG-RESISTANT TB

Relevant for: Developmental Issues | Topic: Health & Sanitation and related issues

Combating resistance: The 90% treatment success in the case of hard-to-treat patients is at par with the success rate seen while treating drug-sensitive TB. | Photo Credit: pittawut

A small trial (Nix-TB) undertaken at three sites in South Africa to test the safety and efficacy of three oral drugs — bedaquiline, pretomanid and linezolid — in 109 patients (57 males and 56 females were HIV positive) with extensively drug-resistant TB (XDR-TB) and multidrug-resistant TB (MDR-TB) showed encouraging results — treatment success rate was 90%. The favourable results held true regardless of the HIV status of the patients.

The treatment using the three oral drugs lasted for 26 weeks and was followed-up for six months after the end of the treatment. Patients received the treatment daily for 26 weeks. The trial of 109 patients included 71 who had XDR-TB and 38 with MDR-TB.

The 90% treatment success in the case of hard-to-treat patients is at par with the success rate seen while treating drug-sensitive TB. Of the 109 patients treated, 11 had unfavourable outcomes while 98 had favourable outcomes. Of the 11 patients who had unfavourable outcomes, there were seven deaths and two had a relapse during the six-month follow-up period. Of the 98 patients who were successfully treated using the three drugs, 63 patients had XDR-TB and 35 had MDR-TB. The treatment success rate was 89% (63 of 71) for XDR-TB and 92% (35 of 38). The MDR-TB patients included in the trial were either not responsive to standard treatment or had discontinued treatment due to side effects.

“This study shows that XDR tuberculosis and complicated MDR tuberculosis can be treated with a regimen consisting of three oral agents for 26 weeks,” the authors write. The results of the study were published in *The New England Journal of Medicine.*

Of the three drugs used in the trial, a “high-percentage” of patients experienced adverse effects related to linezolid drug. Of the 109 patients treated, 88 patients (81%) had peripheral neuropathy (weakness, numbing and pain usually of hands and feet due to nerve damage), though the symptoms were mild to moderate in the majority of cases.

Two patients developed optic neuritis, where the optic nerve becomes inflamed, which was resolved when linezolid drug was withdrawn. Also, 40 had anaemia, while eight patients had adverse event of the liver and the regime had to be interrupted (but they eventually resumed and completed the 26-week treatment).

The WHO had to come up the name in line with the 2015 guidelines between the global agency, the World Organisation for Animal Health and the Food and Agriculture Organization.