

Rapid detection of multidrug resistant tuberculosis with a nitrate reductase assay using a liquid medium.

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Aim: for rapid and low detection of multidrug resistant (MDR) *Mycobacterium tuberculosis*, we applied the nitrate reductase assay (NRA) using a liquid medium directly to sputum samples.

Methods: a total of 179 sputum samples were analysed by the NRA and results were compared to those obtained by the indirect proportion method (PM) as standard reference.

Results: out of 144 specimens for which comparable results were available, onlu one discrepant results was obtained: MDR by NRA but susceptible by the PM. In total 56% of the results were obtained in 10 days by the NRA whereas PM results were available after 2 months.

Conclusion: NRA performed in liquid medium is rapid and inexpensive and can be easily implemented in lo-income countries.