

The Use of SD Bioline TB AgMPT64® Detection Assay for Rapid Characterization of Mycobacteria in Nigeria

Authors : S. Ibrahim, U. B. Abubakar, S. Danbirni, A. Usman, F. M. Ballah, C. A. Kudi, L. Lawson, G. H. Abdulrazak, I. A. Abdulkadir

Abstract : Performing culture and characterization of mycobacteria in low resource settings like Nigeria is a very difficult task to undertake because of the very few and limited laboratories carrying out such an experiment; this is a largely due to stringent and laborious nature of the tests. Hence, a rapid, simple and accurate test for characterization is needed. The "SD BIOLINE TB Ag MPT 64 Rapid ®” is a simple and rapid immunochromatographic test used in differentiating Mycobacteria into *Mycobacterium tuberculosis* (NTM). The 100 sputa were obtained from patients suspected to be infected with tuberculosis and presented themselves to hospitals for check-up and treatment were involved in the study. The samples were cultured in a class III Biosafety cabinet and level III biosafety practices were followed. Forty isolates were obtained from the cultured sputa, and there were identified as Acid-fast bacilli (AFB) using Zeihl-Neelsen acid-fast stain. All the isolates (AFB positive) were then subjected to the SD BIOLINE Analyses. A total of 31 (77.5%) were characterized as MTBC, while nine (22.5%) were NTM. The total turnaround time for the rapid assay was just 30 minutes as compared to a few days of phenotypic and genotypic method. It was simple, rapid and reliable test to differentiate MTBC from NTM.

Keywords : culture, mycobacteria, non tuberculous mycobacterium, SD Bioline

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