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***MYCOBACTERIUM TUBERCULOSIS* AND *gyrA* V ZAMBIA**

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Abstract: *M. tuberculosis* strains were isolated from clinically and confirmed patients to evaluate the susceptibility of clinical *M. tuberculosis* to fluoroquinolone and to obtain molecular epidemiological information. The pathogens were subjected to susceptibility testing with isoniazid, rifampin, and streptomycin. The minimum inhibitory concentrations to ciprofloxacin were

levofloxacin were also evaluated. The *gyrA*, fluoroquinolone resistance (QRDR), was sequenced and analysed. As a result, three of the 16 strains were resistant to isoniazid, rifampicin and/or streptomycin. All of the strains were susceptible to ciprofloxacin, levofloxacin and sparfloxacin. However, a unique *gyrA* mutation was identified in the isolates. One strain had a mutation at codon 458 of the *gyrA* gene. Additionally, 81.25% (13/16) of the strains tested had Thr at codon 458 of the *gyrA* gene. This mutation has been reported in relation to drug resistance. The results may be useful as epidemiological information. It may be important to monitor drug susceptibility even in developing countries for use against resistant *M. tuberculosis* even though no fluoroquinolone resistance was observed in this study.

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