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# ***Mycobacterium chelonae* isolates among new and previously treated pulmonary tuberculosis patients in Basra Government, South of Iraq, and anti-tuberculosis drugs resistance**

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## ABSTRACT

**Objective:** The purpose of this study is to estimate the frequency of *Mycobacterium chelonae* among tuberculosis suspected patients in Basra Governorate and to evaluate the antimicrobial susceptibility.

**Methods:** After isolation of *M. chelonae* from 100 samples from patients admitted to the RPDC, smears were stained with the Ziehl Neelsen technique. Specimens were inoculated on Lowenstein Jensen medium. Identification to species level was achieved on the basis of the growth characteristics. Drug susceptibility was tested with antibiotics (Rifampicin, Isoniazid, Ethambutol, Pyrazinamide and Streptomycin) using proportional method.

**Results:** From the 100 sputum samples among tuberculosis suspected patients, 16 samples (16%) were Non-tuberculosis mycobacterium (NTM), 4 (4%) were *M. chelonae*. Drug susceptibility results showed all isolates resistant to rifampicin, while one isolate showed intermediate resistance to ethambutol. Also, all isolates of *M. chelonae* were sensitive to pyrazinamide, isoniazid and streptomycin.

**Conclusion:** The results of this study emphasize that *M. chelonae* presents with high frequency, especially among tuberculosis suspected patients, which requires confirmation on a follow-up visit, along with the examination of patterns of sensitivity, and it is an absolute necessity in addition to the approximate hour patients typically spend in health centers in Iraq.

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