

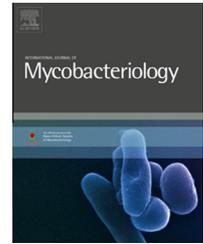
HOSTED BY



ELSEVIER

Available at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/IJMYCO

Rapid molecular detection of rifampin resistant tuberculosis in Basrah Governorate – South of Iraq



A.A. Al-Mussawi ^{a,*}, N.H. Ali ^a, A.H. Abd ^b

^a Nursing College, Basrah University, Iraq

^b Medicine College, Thi Qar University, Iraq

ARTICLE INFO

Article history:

Received 8 October 2014

Accepted 12 October 2014

Available online 1 November 2014

Keywords:

Molecular detection

Rifampicin

Tuberculosis

GeneXpert

ABSTRACT

Background: The problem of high incidence and prevalence rates of tuberculosis (TB) in Iraq is an issue of concern to the national health authorities and international parties, WHO and UNDP. Tremendous efforts have been made in Iraq to control the problem. However, progress is very slow in controlling it. One of the major obstacles that stand against the eradication of this disease is the multiple drug resistance in TB patients.

Aim: The current study was carried out to quantify this factor in tuberculous patients in Basrah Province, the capital of the south of Iraq.

Method: A total of 2246 presumptive TB patients were referred to and examined at the Respiratory and Chest Disease Centre, the only health center that deals with this health problem in the Province. Infected persons were investigated for Rifampicin resistance using the GeneXpert test.

Results: It has been found that about 26% of the examined presumptive patients were tuberculous. Out of those, about 2.9% were found to be Rifampicin resistant.

Conclusions: The present study emphasizes the high incidence and prevalence rates of TB in Iraq. The use of modern techniques in the identification of *Mycobacterium tuberculosis* resistance to antibiotics is a very important necessity, in particular molecular detection using the GeneXpert device given that it is faster and more sensitive compared with other methods.

© 2014 Asian-African Society for Mycobacteriology. Published by Elsevier Ltd. All rights reserved.

* Corresponding author.

<http://dx.doi.org/10.1016/j.ijmyco.2014.10.013>

2212-5531/© 2014 Asian-African Society for Mycobacteriology. Published by Elsevier Ltd. All rights reserved.