Affect treatment options. In this study, PCR-RFLP analysis (PRA) of the gene encoding 65-kD heat shock protein (hsp65) was used for identification of 70 clinical NTM isolates obtained from two mycobacteriology laboratories in Malaysia. Approximately one third of the isolates were identified as \textit{M. fortuitum}. A total of 24.3\% and 10\% of the isolates were identified as \textit{M. abscessus} and \textit{M. avium} complex respectively. Other isolates identified were \textit{M. kansasi}, \textit{M. marinum}, \textit{M. simiae}, \textit{M. parascrofulaceum}, \textit{M. szul-}
gai, and \textit{M. gordonae}. Six clinical isolates were untypable by this approach. Sequence analysis of the 439-bp region of the hsp65 gene and a 564-bp region of the 16S rRNA gene revealed high degrees (97\%–100\%) of sequence similarity of these isolates with \textquoteleft\textquoteleft \textit{M. insubricum}\textquoteright\textquoteright, \textit{M. terrae}, \textit{M. senegalense}/\textit{M. conceptionense} and \textit{M. houstonense} in the public sequence databases. This study reported the identification of mycobacteria species which are considered rare or new to this region. As NTM are found widely in the environment, the clinical significance of the isolates in this study is yet to be determined.

\textbf{Conclusion:} Our study denotes that QuantiFERON-TB Gold Test renders more accurate results for LTBI detection in HIV infected patients compared to TST.

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48.019

Evaluate the Performance of Resazurin Microtiter Assay (REMA) Method to Detect the Mycobacterium tuberculosis Drug Resistance

J.C. Uwayo\textsuperscript{1,*}, A. Umubyeyi\textsuperscript{2}

\textsuperscript{1} National University of Rwanda, Butare, Rwanda

\textsuperscript{2} National University of Rwanda, National Reference Laboratory, Kigali, Rwanda

\textbf{Keywords:} Tuberculosis; Drug susceptibility testing; Multidrug resistance tuberculosis; REMA

\textbf{Background:} Tuberculosis is one of the leading cause of mortality and morbidity in Rwanda. In 2006 the number of cases recorded more than doubled compared to year 1991. For carrying out well the control of tuberculosis particularly multidrug resistance tuberculosis (MDR-TB) successfully, the patients must be diagnosed and treated timely in effective way.

\textbf{Objective:} Compare the REMA method with the proportion method (Gold standard) method used to detect resistance and to reduce time necessary to detect \textit{M. tuberculosis} drug resistance.

\textbf{Method:} Sputum samples (44 stains) were collected from new case and retreatment case in health districts since January to June of the year 2007. Drug susceptibility testing (DST) of isolates against two first line drugs INH and RIF and one second line drug OFX was performed by proportion method and by REMA method respectively on Lowenstein Jensen (LJ) and 7H9-S medium.

\textbf{Conclusion:} For INH a discordance of 5 stains has been observed by REMA method the sensitivity was 100\% and specificity 0\%. The DST to RIF showed a sensitivity and specificity respectively of 100\% and 40\%. Although the DST to OFX showed the sensitivity and specificity each 100\%. REMA method is simple, less expensive and fast in obtaining results. The test showed a good sensitivity but specificity was not good. That why this research may continue next may before its validation and implementation in DST system in Rwanda.

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48.020

Comparison of QuantiFERON-TB Gold In-Tube to Tuberculin Skin Test for the Diagnosis of Active Tuberculosis (TB) in India - Preliminary Analysis

J.S. Michael\textsuperscript{1,*}, P. Daley\textsuperscript{1}, L. Armstrong\textsuperscript{1}, S. Kalaiselvan\textsuperscript{1}, P. Chordia\textsuperscript{1}, L.M. Asha\textsuperscript{1}, D. Mathai\textsuperscript{1}, K.R. John\textsuperscript{1}, M. Pai\textsuperscript{2}

\textsuperscript{1} Christian Medical College, Vellore, India

\textsuperscript{2} McGill University, Montreal, Canada

\textbf{Background:} Conventional diagnostic tests for TB have limitations. Tuberculin skin test is non-specific and may be influenced by the BCG vaccine. New immunologic assays like the QuantiFERON-TB Gold in-tube (QFT) assay (Cellestis,
Results: To date the results of QFT and culture for 51 patients are available. Four indeterminate results were not included. The sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of QFT for culture positive TB were 81% (54—95), 67% (47—82), 57% (35—76) and 87% (65—96) respectively. 52 patients had TST and culture results available. The sensitivity, specificity, PPV and NPV of TST for culture positive TB were 68% (45—85), 50% (32—68), 50% (32—68) and 68% (45—85) respectively.

Conclusion: QFT has adequate sensitivity but poor specificity to detect active TB in India. QFT shows a trend to better sensitivity than TST. As expected, latent TB infection causes false positives. QFT is a single visit test with good negative predictive value but should not be used alone to rule out active TB.

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Emerging Infections (Poster Presentation)

49.001

Trend of Crimean-Congo Hemorrhagic Fever (CCHF) in Iran in Recent Years

S. Chinchkar1,∗, S.M. Ghiasi1, R. Mirahmadi1, M.M. Goya2, M. Moradi1, N. Afzali1, M. Zeinali2, H. Feldmann3, M. Bouloy4

1 Arboviruses and Viral Hemorrhagic Fever (National Reference Lab), Pasteur Institute, Tehran, Iran (Islamic Republic of)
2 Center for Disease Control, Tehran, Iran (Islamic Republic of)
3 Canadian Science Centre for Human and Animal Health, National Microbiology Lab, Winnipeg, Canada
4 Unite Postulante de Genetique Moleculaire des Bunyavirides, Pasteur Institute, Paris, France

Background and aims: Crimean-Congo Hemorrhagic Fever is a zoonotic disease that can develop into a severe hemorrhagic fever in humans. The CCHF virus (CCHFV) is a member of the genus Nairovirus, family Bunyaviridae, and is transmitted to humans by bite of an infected tick, by direct contact with blood or tissues from infected humans or livestock.

Methods: From June 2000 to 17 November 200, sera were collected from 1029 CCHF probable human cases and analyzed by immunological (specific ELISA) and molecular (RT-PCR) assays.

Results: Between 1029 CCHF probable human cases, 410 were confirmed. Among CCHF confirmed cases, 358 were IgM positive and 52 cases only RT-PCR positive. 123 people between 358 IgM positive cases were also RT-PCR positive. The number of probable, confirmed, and death cases according to the year respectively include 2000(55, 20, 4), 2001 (167, 66,11), 2002 (247,111,14), 2003 (145, 57,12), 2004 (82, 26, 6), 2005 (84, 18, 7), 2006 (111, 50, 3), and 2007 (138, 62, 4). It was demonstrated that the most exposed professions respectively were farmer (19.5%), worker (16.8%), housewife (16.3%), butcher (12.4%) and slaughterer (5.9%). The most infected provinces were respectively Sistan-Balouchestan (66.6%), Isfahan (10%), and Fars (4.9%) and Tehran (3.4%).

Conclusions: As seen in the results, Sistan-Balouchestan, being near the countries such as Pakistan and Afghanistan which CCHF has been reported, is the most infected province in Iran, also our genetic analysis of CCHFV strains present in Iran proved this fact that the Iranian CCHFV strain is similar to Pakistan Matin strain. As the investigations demon-