

INCREASED ISOLATION OF MYCOBACTERIA OTHER THAN TUBERCULOSIS AT NATIONAL REFERENCE LABORATORY FOR TUBERCULOSIS IN ZAMBIA. SHOULD WE GET CONCERNED?

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Reports indicate that Mycobacteria Other Than Tuberculosis (MOTT) can cause pulmonary infections resembling TB, but they differ from *MTB* complex by being opportunistic pathogens and are acquired mainly from the environment such as soil or water (person to person transmission rarely occurs). Recent reports show that certain MOTT are becoming an increasing cause of pulmonary infection and they may account for a substantial portion of cases of TB especially in the immune-compromised.

The objective of this analysis was to establish the increased isolation of MOTT at the National Reference Laboratory (NRL) in Zambia, a country with a high TB incidence and HIV prevalence.

An analysis was made at the NRL for the frequency of MOTT isolation for the period 1998 to 2006. Macroscopic appearance of the colony, Ziehl-Neelsen stain microscopy, niacin detection and nitrate utilisation formed a basis for identification as MOTT but they were not speciate.

Data show that a gradual increase in the isolation of MOTT in the past nine years, rising from 0.2 % in 1998 to 2.6% in 2006.

There has been a definite increase in the frequency of MOTT in suspected TB patients. Full identification of these MOTT and knowledge of what environmental Mycobacteria are present in Zambia and their attribute to pulmonary infections will equip the decision makers with effective information for targeting control and preventive measures.

Background

Mycobacteria Other Than Tuberculosis (MOTT) are frequent causes of pulmonary infections resembling TB, but differ from *MTB* complex by being opportunistic pathogens and are acquired mainly from the environment such as soil or water (person to person transmission rarely occurs). They are usually the cause of opportunistic infections in patients with HIV disease and other conditions associated with immune-suppression. Recent reports show that certain MOTT are becoming an increasing cause of pulmonary infection and they may account for a substantial portion of cases of TB and Zambia maybe no exception.

Objective

To establish the increased isolation of MOTT at the TB reference Laboratory in Zambia.

Methods An examination was made at the National Reference laboratory for TB for the frequency of MOTT isolation for the period 1998 to 2006. Macroscopic appearance of the colony, Ziehl-Neelsen stain microscopy, niacin detection and nitrate utilisation formed a basis for identification.

Results Data shows that there has been a gradual increase in the isolation in the past seven years. It rose from 0.2 % in 1998 to 2.6% in 2006

Conclusion: There has been a definite increase in the frequency of MOTT in suspected TB patients. Full identification of these MOTT and knowledge of what environmental Mycobacteria are present in Zambia and their attribute to disease especially Pulmonary infections is not only useful in the management of Mycobacteriosis but will also equip the decision makers with effective information for targeting control and preventive measures.