

1432 Tuberculosis and silicosis diagnostic crisis – a Zimbabwe case series report

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Abstract

Introduction Zimbabwe has a long history of extensive hard rock mining and it is likely that the occupational lung disease (OLD) burden, for conditions such as silicosis and silico-tuberculosis, is huge. Poor access by miners to occupational health and safety services and lack of occupational health (OH) diagnostic skills against a background of a high tuberculosis burden in developing countries such as Zimbabwe presents a significant challenge in the diagnosis of pulmonary tuberculosis (PTB) and or silicosis amongst miners and ex miners.

Methods This is a case series study of five ex- gold and quarry miners who worked in different mines in Zimbabwe. This study reviewed the diagnosis and management of tuberculosis and silicosis among the five ex-miners.

Results Despite a typical clinical presentation and radiological findings of silicosis, all the cases were misdiagnosed and treated for PTB. They had all been treated for PTB with two of them having been treated twice. In all the five cases, sputum for alcohol and acid fast bacilli (AAFBs) was negative with two of the cases having tested AAFBs negative on two different occasions. All the cases had had chest x rays that revealed a reticulonodular pattern. The mean occupational exposure period to silica containing dust was 9.4 years with a range of 3 months to 15 years. The mean period from clinical presentation to diagnosis of silicosis was 18 months.

Conclusions Silicosis and tuberculosis have similar presentation and lack of OH diagnostic skills can lead to unnecessary PTB treatment and delayed diagnosis of silicosis and an increased risk of tuberculosis disease. Poor OH diagnostic skills among clinicians in developing countries such as Zimbabwe can lead to delayed diagnosis of OLDs. Clinicians should be equipped with fundamental OH training and diagnostic skills in order to be able to diagnose OLDs and PTB.