

ABSTRACT

BACKGROUND

The link between tuberculosis (TB) and diabetes mellitus (DM) has occupied the centre stage of discussion. Experts have raised concern about the merging epidemics of tuberculosis and diabetes particularly in the low to medium income countries like India and China that have the highest burden of TB in the world, and are experiencing the fastest increase in the prevalence of DM. The huge prevalence of DM in India, may be contributing to the increasing prevalence of TB. We discuss the epidemiology, clinical features, microbiology and radiology, and management and treatment outcomes of patients with tuberculosis and diabetes mellitus.

METHOD

Data were collected from 100 patients with sputum positive tuberculosis and were screened for presence of diabetes. Detailed history, chestX-ray and sputum analysis were done and patients were followed up until treatment

RESULTS

There was male preponderance and the mean age group among diabetics patients were 51.5 ± 9 years compared to 34.2 ± 7.26 years. Diabetic patients had more of chest pain, hemoptysis and dyspnoea compared to non-diabetics. Diabetic patients had more sputum positivity rates compared to non-diabetics. 38 % of the diabetic patients had cavities in chest x-ray compared to 20 % amount non diabetics. 48 % of the diabetic patients had lower zone infiltrates compared to 20 % in non-diabetics. Sputum conversion rates were 84% in non-diabetic TB patients when compared to 70% in diabetic TB patients. Failure rates were high as 4% in diabetic patients but not statistically significant

CONCLUSION

All patients with pulmonary tuberculosis should be screened for diabetes mellitus and should be effectively treated for the same. Pulmonary Tuberculosis patients who have diabetes tend to have higher sputum positivity rates and delayed sputum conversion if glycemic levels are poorly controlled.. Chest radiographs of such patients show multiple cavitations with predominant lower lobe involvement. The rates of treatment failures and treatment outcomes are adversely affected by the presence of diabetes.