##### Original article:

##### A study of pulmonary tuberculosis in diabetes mellitus and its clinicoradiological correlation

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**Abstract:**

**Introduction:** India being Diabetic Capital with largest number of tuberculosis patients. Several studies have highlighted that Diabetes as a risk factor for TB. TB in Diabetic patients tend to have more cavitatory, less sputum positive with paucity in symptoms and signs. Hence We would like to highlight the varied pulmonary manifestations through our study.

**Methodology:** Cross sectional study conducted in BH and CGH, Davangere with 50 patients. Pulmonary TB was diagnosed through history, examination, Sputum Microscopy and Chest X ray.

**Results and Discussion:** Out of 50,36(72%) males & 14(28%). Maximum incidence of TB was seen in >50 years with peak incidence in 51-60 & 61-70.Mean age for males was 52.8 and females was 55.6 years. Symptoms noted were cough(92%), Fever(80%), Anorexia(58%), Loss of weight(56%), Dyspnea(42%), Hemoptysis(20%), Chest pain(20%),night sweats(20%). Duration of Diabetes were <1y(22%),2-5y(42%),6-10y(32%),>10y(4%). Mean FBS was 241 mg/dl and PPBS was 316 mg/dl. Sputum positive cases <50y(16/20) and >50y(21/30) with P=0.182. Cavitatory lesions were noted in 38% followed by non homogenous opacities in 22% of patients.   
**Conclusions:** There was a linear relationship between duration of DM & TB incidence. Majority of our patients had poorly controlled sugars, suggesting that severe hyperglycemia is associated with development of pulmonary TB. Sputum positivity was more in patients aged > 50 yrs. Cavitation and non homogeneous opacity were more common in patients aged > 50 yrs. Lower lung field TB was more common in aged >50 yrs and females. Early diagnosis and properly monitored treatment regimen is the only time proven answer.