Title: Diabetes mellitus and pulmonary tuberculosis, Association or co-incidence?

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Abstract: Background:
Diabetes mellitus (DM) patients are in high risk for some infectious diseases like tuberculosis (TB) due to the insufficient host defense. This could affect the trend of treatment in all coexisting conditions.

Objectives:
This study was designed to evaluate the effect of DM on clinical and diagnostic methods and radiological features of pulmonary TB, in comparison to non diabetic pulmonary TB patients, in Golestan province, in Northeast of Iran.

Methods:
In this retrospective cross-sectional study during 2004-2008, medical records of patients with definite diagnosis of pulmonary TB were reviewed. Demographic data, clinical & diagnostic method and radiological findings were studied. Radiological data and lung High Resolution computerized topographic scanning (lung HRCT) were done by two different radiologists. After data entry into SPSS-16, Fischer's exact test and chi-square test were used to compare the two groups (TB with DM and without it). P-value < 0.05 was considered significant.

Results:
Among 200 patients with pulmonary TB, 80 (40%) had TB and concurrent DM (PTDM group). The mean age of two groups were not significantly different. Coincident TB and DM were seen significantly more in female (P-value < 0.01). There was a significant difference between the two groups regards to fever, dyspnea, weight loss and hemoptysis. Positive sputum smear was the most frequent diagnostic method in both groups (PU, PTDM), no significant difference was shown (P-value > 0.05).
Multiplobar cavities were more reported in diabetics, significantly (p-value = 0.014). No statistical differences were seen between two groups regards to radiologic reports.

Discussion:
Tuberculosis could be more invasive in diabetic patients especially females and more attention should be paid to these group.

Diabetes mellitus, tuberculosis, radiologic findings

Presentation: Poster