

## **ABSTRACT**

### **COMPARISON OF RESPIRATORY FUNCTION OF TREATED TUBERCULOSIS PATIENTS AMONG SMOKERS AND NON SMOKERS**

#### **BACKGROUND:**

Tuberculosis remains as the most common cause of mortality worldwide. Even after adequate anti tuberculosis treatment many patients have radiological sequelae and respiratory symptoms.

#### **AIM:**

The aim of this study is to compare the pulmonary function by spirometry and six minute walk test in treated pulmonary tuberculosis patients among smokers and non-smokers.

#### **MATERIALS AND METHOD:**

Detailed history including previous anti tubercular treatment and smoking was taken. Chest X ray was taken for all the patients. Spirometry and six minute walk test were conducted in the same day.

#### **RESULTS:**

100 patients were included in the study of which 45 were smokers &55 were non smokers. The common radiological lesions were combined lesions in 43%, bronchiectasis in 27% and fibrosis in 25% of patients. In smokers group the common spirometric pattern was mixed pattern(58%),obstruction (29 %) restriction (9%) and normal in 4 % of patients. In non smokers group normal pattern was seen in 34%, obstruction in 33%, restriction in 20% and mixed pattern in 13%.

In six minute walk test, the mean distance walked by smokers group was 368.16 + 30.19 and by non smokers group was 313.73+40.73. There was a significant difference between 2 groups in regard to spirometry and 6 minute walk test distance ( $p < 0.0001$ ).

#### **CONCLUSION:**

The functional status of the patients among smokers was significantly less when compared to non smokers in treated tuberculosis patients presenting with sequelae.

#### **KEYWORDS:**

Tuberculosis, Smoking, Spirometry, Six minute walk test.