

## **Original Research Paper**

**General Medicine** 

## STUDY OF PULMONARY FUNCTION TEST IN PATIENTS OF TYPE 2 DIABETES MELLITUS AND ITS CORRELATION WITH DURATION OF DIABETES

Dr Khwaja M Mohsin\*

Associate Professor in Medicine SDM medical College, sattur, Dharwad, Karnataka, India \*Corresponding Author

**Dr Prasannakumar** 

Post graduate in Medicine SDM medical college, sattur, Dharwad, Karnataka, India

Aim-Pulmonary complications of diabetes mellitus (DM) have been poorly characterized. The study was undertaken to analyze the pulmonary function parameters in type 2 diabetic patients. We correlated forced vital capacity (FVC) and FEV1/FVC in diabetic patients with duration of the disease and Glycosylated hemoglobin (HbA1c) and fundoscopic changes.

**Subjects and methods**-Pulmonary function tests (PFTs) were recorded in 70 type 2 diabetic patients, who were divided into two groups, depending upon duration of diabetes. Group I 5 to 10 years and group II11 to 15 years. Using easy one flow spirometer, PFT parameters were recorded. The PFTs recorded were – FVC, FEV1, FEV1/FVC, and peak expiratory flow rate (PEFR). In addition HbA1c, FBS and PPBS and fundoscopic changes of all the patients was estimated.

**Results** - In our study Restrictive lung function defect was more commonly found among patients of type 2 diabetes mellitus. Poor lung functions are in correlation with longer duration of T2DM.

**Conclusion** -DM being a systemic disease, which also affects lungs causing restrictive type of ventilator changes probably because of glycosylation of connective tissues, reduced pulmonary elastic recoil and inflammatory changes in lungs.

 $Lung function\ parameters\ are\ negatively\ correlated\ to\ glycemic\ status\ and\ duration\ of\ diabetes.\ Hence\ strict\ glycemic\ control\ may\ improve\ pulmonary\ functions$