Pulmonary Functions in Punjabi Type 2 Diabetics: Based on Chronicity of Disease

Navkaran Shergill and Ashok Kumar

Abstract

Aim: To observe pulmonary functions in two groups of Punjabi population, group 1 having type-2 diabetes between 5 to 10 years and group 2 having type-2 diabetes for more than 10 years.**Method:** Fifty type-2 diabetics (between 5 to 10 years) and fifty type-2 diabetics (more than 10 years) in the age range of 40-60 years participated in the study. The spirometery was performed to observe forced vital capacity (FVC), Forced Expiratory volume in 1 second (FEV1), (FEV1/FVC), peak expiratory flow rate (PEFR) and Forced expiration time (FET).**Results:** The mean age, height, weight and BMI of type-2 diabetics (between 5 to 10 years) and type-2 diabetics (more than 10 years) was 49.60±5.08years & 52.58±4.69years, 172.16±5.72 cm& 172.08±6.30cm, 73.18±9.44kg & 70.36±9.16kg and 24.72±3.33kg/m^2 & 23.74±2.68 kg/m^2. The mean FVC, FEV1, FEV1/FVC, PEF and FET of type-2 diabetics (between 5 to 10 years) and type-2 diabetics (more than 10 years) was 3.84±.57liters & 3.95±.59 liters, 3.35±.44 liters & 3.43±.50 liters, 87.68±6.28 % & 87.12±5.12 %, 8.52±1.14 liters/sec & 8.73±1.22 liters/sec, 2.82±.78 sec & 3.09±.71 sec respectively. **Conclusion:** It was concluded that with chroncitiy of type 2 diabetes, the various pulmonary function variables were reduced in Punjabi type-2 diabetics. The reduced pulmonary functions in diabetics may be due to microangipathy of the alveolar capillary network in the lungs.

Navkaran Shergill
Ph.D. student
Department of Sports Science
Punjabi University Patiala (Punjab) India
E-mail:navkaran9999@gmail.com
Ashok Kumar
Associate Professor
Department of Sports Science
Punjabi University Patiala (Punjab) India

Key Words: : FVC, FEV1, PEF, FET, Spirometery

DOI: 10.18376/jesp/2017/v13/i2/111279