Lung function in Saudi diabetic patients
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Objectives: Diabetes mellitus is a leading cause of illness and death across the world and is responsible for a growing proportion of global health care expenditures. The aim of this study was to determine the effects of diabetes mellitus on lung function in Saudi diabetic patients.

Methods: 47 apparently healthy volunteer male Saudi patients with diabetes mellitus were randomly selected. Their ages ranged from 20-70 years. The patients were matched with another group of 50 healthy male control subjects in terms of age, height, weight, ethnicity, and socioeconomic status. Spirometry was performed with an electronic spirometer.

Results: Subjects with diabetes showed a significant reduction in Forced Vital Capacity (FVC) and Forced Expiratory Volume in the First Second (FEV₁) relative to their matched controls. We observed a significantly negative correlation between duration of disease and pulmonary function, as measured by FEV₁ (r = 0.258, p = 0.04), FVC (r = 0.282, p = 0.28), and the middle half of the FVC (FEF(25-75%)) (r = 0.321, p = 0.014).

Conclusion: Lung functions in Saudi diabetic patients were impaired as evidenced by a decrease in FVC and FEV₁ compared to lung function in matched controls. Stratification of results by years of disease revealed a significant correlation between duration of disease and a decline in pulmonary function.