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Title	Pulmonary Dysfunction In Diabetes Mellitus
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Category	Diabetes (Pediatric Adult or Gestational)
Abstract	<p>Pulmonary dysfunction in diabetes</p> <p>Aim and background: To assess pulmonary functions in Type- II diabetic patients. Incidence of diabetes in Asian race is increasing tremendously with multiple etiologies contributing to it. Hypoxemia resulting from pulmonary dysfunction causes pancreatic β cell insults, hyperglycemia, increase insulin resistance and decreased insulin secretion. Pulmonary function assessment could provide an insight of all other diabetic complication like diabetic retinopathy, nephropathy and neuropathy. Management of hypoxemia may reduce hyperglycemia and increase insulin output.</p> <p>Objective: To assess pulmonary functions in Type- II diabetic patients with spirometry.</p> <p>Materials and methods Diabetic patients from medicine OPD of CHRI were studied. Smokers and patient with other complications were excluded from the study. About 30 diabetic patients after getting their consent were subjected to spirometry. Values like FVC, FEV1, FEV6, MMEF, PEF, PEF25, PEF50, PEF75, FEF25-75, FEF200-1200, PEF time, FET, %FEV1, FEV1/FVC were recorded. Other values like FBS, PPBS, HbA1c, height, weight, chest measurement, waist measurement were taken. About 30 age and sex matched controls of non-diabetic subjects were also subjected to spirometry and the values were compared with diabetic subjects. Student unpaired t test was used to compare PFT (Pulmonary function test) values of diabetic and non-diabetic subjects using SPSS software version 21. Pearson's correlation was used to compare duration of diabetes and PFT values.</p> <p>Results Statistically significant reduction in FVC, FEV1, FEV6, MMEF, PEF, FEF25, FEF50, FEF200- 1200, PEF time, FET values were identified. The mean of diabetic patients' FEV1/FVC ratio is 93% compared with normal subjects which is 84% showing a restrictive pattern of lung disease. Decrease in FVC indicates that lung mechanics are affected and decrease in FEF25-75 is indicator of early airway obstruction. Duration of diabetes has a positive correlation with FVC1, FVC6. This study could suggest that duration of diabetes may cause a decline in pulmonary function.</p>
Conflicts	None
Email	drlathu@gmail.com
Decision of Scientific committee	
State if accepted for oral	