Coexistence Of Cystic Fibrosis And Celiac Disease

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Objective: Objective of this study was to analyse the coexistence of cystic fibrosis, with positive sweat chloride test in children, with celiac disease.

Introduction: Cystic fibrosis is an inherited disorder that causes severe damage to the lungs and digestive system. Cystic fibrosis affects the cells that produce mucus, sweat and digestive juices. These secreted fluids are normally thin and slippery. But in people with cystic fibrosis, a defective gene causes the secretions to become thick and sticky. Instead of acting as a lubricant, the secretions plug up tubes, ducts and passageways, especially in the lungs and pancreas. Cystic fibrosis signs and symptoms vary, depending on the severity of the disease.

Inclusion Criteria: Paediatric patients of age ≤ 7 years regardless of gender presenting to paediatric department of tertiary care hospitals of Karachi with principal complain of chronic productive cough, recurrent wheezing and dyspnoea on exertion were included.

Methodology: This cross-sectional study was conducted from July 2014 - July 2016.

Pediatric patients under 7 years of age were recruited in this study. A history and examination form designed from an application “Forms”, particularly for the study. Children were tested for tissue transglutaminase (tTG) to confirm the disease and also for sweat chloride to access the relation between two diseases. For data analysis SPSS 16.0 software was used.

Results: During 2 years time, total 103 patients were inspected out of which 42.28% were male and 57.72% were females. The mean age was 2.7(+) 2.38 months. The incidence of cystic fibrosis were significantly more frequent with celiac disease than in the general population. Positive IgA tTG was documented in 64 (62.14 %) of CF patients.

Conclusion: Frequency of cystic fibrosis is higher among celiac disease patients. It suggests the need for targeted screening for cystic fibrosis in children with celiac disease. Many patients with celiac disease has a positive sweat chloride test. However, our results suggests that cystic fibrosis coexists with celiac disease in children.

Biography

Dr. Sonia Shahid is a final year M.B.B.S student of Karachi Medical and Dental College, Karachi Pakistan. She has been a part of several national and international researches and many are on-going. She has attended several national and international seminars and conferences. She has good knowledge of clinical practices and protocols in variety of settings. Sonia is an inquisitive student with a passion for education as a power for change and improvement in the healthcare field of her country and is very ambitious in pursuing her career.

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