

TITLE: Is there a correlation between low lipid profiles and pancreatic sufficiency, BMI, and lung function in Cystic Fibrosis patients?

AUTHORS: K.S. Seymour, P. Flume MD, C. Bannister, RD, CNSD; Medical University of South Carolina, *Dietetic Internship, Charleston, SC

LEARNING OUTCOMES: To assess the correlation between low HDL and high LDL cholesterol levels in those patients diagnosed with Cystic Fibrosis.

TEXT: It has been observed through routine lipid panels on patients with Cystic Fibrosis that these patients have a regular pattern of decreased low density lipoproteins and high density lipoproteins. This observation has been found in the pediatric population more frequently than adults, but it was of interest to include both pediatrics and adults in a retrospective study looking at many different factors. It was the intention of this research project to investigate if lipid profiles were affected by variables such as pancreatic insufficiency, BMI, and lung function tests. 128 patients were analyzed. Patients consisted of 65 males and 63 females. Ages ranged from one year of age to 70 years of age. A retrospective chart analysis was performed on all patients at the MUSC Cystic Fibrosis center. Data analyzed included demographics, severity of the disease state, and laboratory values including lipid profiles. Results of the chart review indicated that 91 patients were pancreatic insufficient and taking digestive enzymes, 26 were pancreatic sufficient and 4 were unknown. 111 patients had had a lung transplant, 9 had not, and the remaining were unknown. Median values were found for HDL, LDL, Cholesterol and BMI and are as follows (respectively): 35, 64, 125, 18.8. It was concluded that, as a group, cystic fibrosis patients have low lipid profiles with no correlation to pancreatic sufficiency, BMI, or lung function. No significant statistics were found. These conclusions warrant further investigation on the cause of low lipid profiles within the population of cystic fibrosis patients.

FUNDING DISCLOSURE: None