Relation Between Fatty Liver And Lipid Profile In Infants With Protein Energy Malnutrition

Thesis
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List of abbreviations

%..... Percent
+ve..... Positive
ALP..... Alkaline phosphatase
ALT ..... Alanine aminotransferase
Apo..... Apolipoprotein
AST..... Aspartate aminotransferase
ATP..... Adenosine Tri-phosphate
C..... Cholesterol
CBC ..... Complete blood count
CE ..... Cholesterol esterase
CHD..... Coronary heart disease
Cm ..... Centimeter
CO..... Cholesterol oxidase
CT ..... Computerized tomography
dl ..... Deciliter
FFA..... Free fatty acids
G-1-PDH ..... Glycerol-1-phosphate dehydrogenase
GGT..... Gamma glutamyl transferase
GH ..... Growth hormone
GHBP ..... Growth hormone binding proteins
GK ..... Glycerol kinase
gm ..... Gram
GSH ..... Glutathione
HB..... Hemoglobin
HDL ..... High density lipoproteins
HU..... Housfield unit
IDL..... Intermediate density lipoprotein

IGF-1 ..... Insulin like growth factor-1
IU ..... International unit
Kg..... Kilogram
KWO ..... Kwashiorkor
L ..... Liter
L/S..... Liver to spleen
LCAT..... Lecithin cholesterol acyl transferase
LDL ..... Low density lipoproteins
Lp..... Lipoprotein
M..... Marasmus
M. KWO..... Marasmic kwashiorkor
Mg..... Milligram
ml ..... Milliliter
NAFLD..... Non-alcoholic fatty liver disease
NASH..... Non-alcoholic steatohepatitis
nm ..... Nanometer
P ..... Significance
PEM..... Protein energy malnutrition.
r ..... Coefficiency of correlation
ROI ..... Regions of interest
SD..... Standard deviation
TG..... Triglycerides
TLC ..... Total leucocytic count
TP..... Total protein
-ve..... Negative
VLDL..... Very low density lipoproteins

Introduction and Aim of the Work

Introduction

Protein energy malnutrition is a pathological state resulting from insufficient intake of energy and other nutrients ***(Ge and Chang, 2001).*** Malnutrition remains one of the most common causes of morbidity and mortality among infants and children throughout the world ***(WHO, 1999).***

The lipid composition of plasma including total HDL, LDL cholesterol, triglycerides, apo A, and apo B. Severely malnourished children showed a significant reduction of serum levels of VLDL, IDL, LDL and HDL before treatment than during and after treatment ***(Dhansay et al., 1991).***

Fatty infiltration of the liver is one of the cardinal features of severe childhood malnutrition. It found to be enormously increased, approaching 50% of total liver weight in the most severe cases ***(Doherty et al., 1991).*** It is associated with increased morbidity and mortality in children with severe PEM, but its pathogenesis remains unclear ***(Badaloo et al., 2005).***

Aim of the work

The aim of this study is to estimate the degree of fatty infiltration of the liver in PEM patients by liver to spleen attenuation ratio in abdominal CT and to correlate this ratio to their lipid profile and some clinical findings.

Review of Literature