

ICCN Poster Presentations

Clinical nutrition: diagnosis and management

Altered amino acid profiles in patients with CVA (cerebrovascular accident) undergoing enteral nutrition enriched with taurine

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Background: Low levels of plasma taurine in patients undergoing enteral nutrition have been reported. However very little is known for the role of taurine on the plasma amino acid levels in patients undergoing enteral nutrition (EN).

Objective: This study aims to assess the effects of taurine supplementation on the levels of amino acid in patients undergoing enteral nutrition.

Design: Eighteen patients with CVA were selected, then they were randomly assigned to either taurine supplemented group or control group. Taurine supplemented group composed of ten patients, was fed enteral nutrition formula with 1g/day of taurine for four weeks. The estimation of anthropometric and biochemical data, plasma and urinary amino acid concentrations, atherogenic index, and dietary intake was performed.

Results: Taurine supplementation significantly decreased plasma amino acid concentration of methionine, tyrosine, phenylalanine, γ -aminobutyric acid, while increased plasma hydroxyproline in patients with CVA. Free urinary amino acids excretion of 3-methylhistidine, phenylalanine, isoleucine, alanine, γ -aminobutyric acid, valine were decreased in patients with CVA after taurine supplementation.

Conclusions: These data suggest that taurine supplementation has important effects in catabolic patients with CVA, and more research is required to explain the apparent benefits of dietary taurine.

Calcium, magnesium and total protein level in the serum of healthy individuals in the Western Province of Saudi Arabia.

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The level of calcium, magnesium and total protein were estimated in the serum of randomly selected healthy Saudi individuals living in the Western province of Saudi Arabia of different ages and sexes as part of total project to evaluate the standard biochemical parameters to serve as a national standard. A total of 276 healthy individuals were used in this study. Measurements of calcium, magnesium and total protein were carried out using Kodak Ektachem 500 Analyzer. The mean concentration of calcium was found to be 9.82 mg/dl which is higher than the international established standard 4.4 mg/dl, magnesium was 2.04 mg/dl compared to 2.4 mg/dl, whereas total protein concentration was 7.78 g/dl compared to 6.9 g/dl. It seems that there are some deviation in the parameters studied compared to the International value.