

INTRODUCTION AND AIM OF THE WORK

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Copper is an essential trace element of known nutritional importance (Prasad, 1978). Abnormality in metabolism of copper in the course of renal diseases has been reported by Evans, (1973). He found a marked increase in the urinary excretion of copper with concomitant reduction in the plasma level in patients with nephrotic syndrome. He also studied the plasma level in patients with severely impaired renal function and uremia without massive proteinuria and found a normal level of plasma copper.

Zinc is an essential trace element for normal growth, protein metabolism, lipid metabolism, nucleic acid synthesis and hormonal function. Also, it is an important constituent of a number of metalcoenzymes (Underwood, 1977).

In patients with chronic renal failure magnesium level is elevated which may lead to renal osteodystrophy (Norman, 1987). Also hypermagnesemia may lead to drowsiness and even coma, bradycardia, heart block, rapid fatigability with muscle relaxation and death may occur (Wacker and Parisi, 1968).

The aim of the work is to clarify the possible changes that may occur in the levels of copper, zinc and magnesium in serum in nephrotic Syndrome, acute glomerulonephritis and chronic renal failure.