

Trace elements in hair and blood of chronic renal failure

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Abstract

Disturbances of mineral status in patients with chronic renal failure is one of many complications of this disease. Trace elements analysis in hair rarely used for the diagnosis of the trace elements status. Plasma and iron, copper, zinc and selenium concentrations were measured by PIXE method in 40 control subjects and 69 patients treated with regular hemodialysis patients. Hair iron, copper, zinc and selenium concentrations were measured by PIXE method in 6 control subjects and 6 patients treated with regular hemodialysis patients.

Plasma iron, zinc and selenium levels were low in hemodialysis patients. Hair iron levels were high in hemodialysis patients. No significant differences were observed for copper, zinc and selenium.

A different results for a while were obtained about the metal concentrations in blood and hair of hemodialysis patients. It will require additional study for the further elucidation.