

**NEUROLOGICAL COMPLICATIONS IN CHILDREN WITH
END STAGE RENAL DISEASE ON
REGULAR HEMODIALYSIS**

Thesis

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Abstract

Background: Patients with end stage renal disease on regular hemodialysis (HD) have increased incidence of neurological complications.

The aim of study was to assess the occurrence of neurological complications in patients with ESRD under regular hemodialysis program.

Subjects and Methods: A descriptive cross section study was conducted to 50 Egyptian children who are on regular hemodialysis. Patients were subjected to full history taking, medical examination and routine investigations including complete blood picture, serum electrolytes, alkaline phosphatase, serum albumin, serum glucose, coagulation profile and blood gases. All patients were subjected to E.E.G. while C.T brain and MRI brain were done when indicated.

Results: Thirty two percent of our patients suffered from neurological problems. The most common neurological complication was seizures (26%) followed by encephalopathy (4%) and hemiplegia (2%). E.E.G. was abnormal in 5 children, CT brain was abnormal in 2 patients and MRI Brain was abnormal in one patient. No association was found between neurological complications and duration of hemodialysis, serum level of urea and creatinine.

Conclusions: Neurological complications are commonly occurring in patients with end-stage renal diseases especially those on hemodialysis. Proper control of those patients reduces the risk of occurrence of neurological problems.

Keywords: *Chronic renal failure, Dialysis, Neurological problems, seizures, encephalopathy, E.E.G.*