

Aluminium toxicity in dialysis patients

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Aluminium toxicity is a problem for patients on haemodialysis. The dialysis process does not efficiently remove excess aluminium from the body, so it may build up over time. Aluminium is a potentially toxic metal, and aluminium poisoning may lead to mainly three disorders: aluminium-induced bone disease, microcytic anemia and neurological dysfunction (encephalopathy). Such conditions are more prominently observed in patients with chronic renal failure and especially in patients on haemodialysis.

About 5–10 mg of aluminium enters our body daily through different sources like water, food, occupational exposure to aluminium in industries etc.^[1] In patients with normal renal function Serum aluminium is normally lower than 6 microgram/L.^[2] Baseline levels of serum aluminium should be <20 microgram/L.^[3] According to AAMI standards aluminum levels in the dialysis fluid should be less than 0.01milligram/L.^[4]

References

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