OXALATE REMOVAL BY DIALYSIS AND HAEMOPERFUSION

Q Maggiore, A Poggi, S Parlongo, T Cerrai

Centro Fisiologia Clinica CNR, Reggio Calabria, Italy

We studied the effects of haemodialysis (HD) and charcoal haemoperfusion (CHP) on plasma oxalate levels, determined by the method of Hodgkinson and Williams [1] on plasma ultrafiltrate, in three symptomatic oxalotic patients on RDT for 4–8 years (1 female and 2 males, aged 20–38).

Results

The predialytic mean levels in 3 oxalotic (average of 6 determinations for each patient ± 1 SD) and 9 non oxalotic patients on thrice weekly dialysis and the

Figure 1. Effect of HD and CHP on plasma oxalate levels
effects of a single HD and CHP are shown in Figure 1. The slight reduction in predialytic plasma oxalate levels obtained with daily dialysis (Figure 2) suggests that the oxalate removed from the blood was quickly replaced from tissue deposits.

Conclusions

1. In oxalotic patients the usual HD schedule does not ensure an adequate oxalate removal such as to prevent the signs and symptoms of thesaurismosis.
2. Two hour CHP appears less effective than five hour HD in reducing the plasma oxalate levels, and it is much more expensive.
3. To cope with the greatly enhanced oxalate production, a daily schedule should perhaps be attempted from the very start of the RDT programme.

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Reference