#1937 - Inflammatory markers and coenzyme Q10 Therapy in hemodialysis patients

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Background: Inflammatorymarkersareincreased in end stage renal disease (ESRD) especially diabetic patients andare positively correlated to cardiovascular mortality**.** Coenzyme Q10 (CO-Q10) a substance with antioxidant properties, may be effective in reducing cardiovascular complications in hemodialysis patients. The aim of this study was to investigate effects of CO-Q10 supplementation on plasma C-reactive protein, homocysteine and albumin in hemodialysis patients.

Methods: Forty diabetic ESRD patients with at least 6 months on hemodialysis were evaluated in a double blind randomized clinical trial. The patients were randomly assigned into one of the two groups receiving CO-Q10 100 mg daily and placebo. In all patients serum levels of homocysteine, albumin and CRP were measured before and

after 6 months.

Results: Meanage of the patients was 60.3 ± 9.1 years and 57.5 % were male. There was no statistically difference between two groups at baseline. Furthermore, no significant difference was observed in serum albumin (P=0.843), CRP (P=0.214) and homocysteine (P=0.21) at the end of intervention between groups.

Conclusions: This study showed that in patients with ESRD, using CO-Q10 supplementation has minimal beneficial effects on serum albumin, CRP and homocysteine levels.

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