PLASMA INTERLEUKIN 1 AND B2-MICROGLOBULIN DURING HAEMODIALYSIS IN CHRONIC RENAL FAILURE PATIENTS :THE INFLUENCE OF DIFFERENT DIALYSIS MEMBRONES

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During regular hemodialysis treatment circulating boold monocytes adhering to the dialysis membrane would be activated and thus lead to repeated induction of acute phase response. Supporlive evidence from in vitro experminents that IL-1 production occurs during hemodialysis (HD) now exists. Lower incidence of AB2M associated with high flux hemodialysis resulted not only from enhanced removal. But may be related also to the more biocompatible characteristies of the synthetic membrane. The aim of this work is to study palma level of interleulkin-1 and B2-Microglobulin in patients with CRF under regular hemodialysis and also to shed light on their role as a marker of biocompatability of different dialyzermembranes. The present study was conducted on 30 uremic patients under regular hemodialysis as well as 10 normal subjects as a control group. The patients were divided into 3 groups according to membrane used in dialysis. The first group using AN69, the second group using polysulphone membrane and the last group using cuprophane membrane. All subjects were subjected to full history taking & clinical examination in addition the following investigations were done : Complete blood picture, before & within the dialysis serum urea, creatinine, B2-M level and 1L-1 level determination. Plasma EL-1, B2-M was estimated before and immediately after hemodialysis trying to find the effect of dialysis membrane on their level.1-The present results showed that the IL-1 level and B2-M level were increased significantly in all groups when compared with the control group, and this increase was more marked in patients using cuprophane membrane.2-Reduction of WBCs as neutrophils & lymphocytes, monocytes occur throughdialysis while, the most reduction occur in the first hour within the dialysis. Also hemodialysis causes a significant reduction of platelet count, and the most significant reduction occur in patients using cuprophane membrane. So the most significant increase in IL-1 level, and thr greatest B2-M level, reduction in WBCs count as well as the common recurrence of dialysis reactions shown in patients under hemodialysis using cuprophane membrane, would suggest that the most bioincompatibility was present with this membrane.