INTRODUCTION & AIM OF THE WORK

Introduction

The interaction of blood with dialysis membranes induces modifications in several blood componentes, due to a lack of biocompatibility of the dialysis membrane (Kaplow., and Goffinent., 1968).

Dialysis membranes are classified into biocompatible and bioincompatible membranes according to the exent of complement activation (Chenoweth et al., 1983).

Supportive evidence from in vitro experiments that IL-1 production occur during haemodialysis now exists. It has been demonstrated that endotoxins or its fragments are able to pass the intact dialysis membrane and activate human blood mononuclear cells to release IL-1 (Bingel et al., 1986).

In addition sodium acetate stimulate MNC IL-1 production (Bingel et al., 1987). complement activation via the alternative pathway occurs during hemodialysis and C5a has been shown to stimulate IL-1 production in vitro (Goodman et al., 1982). Furthermore, even in abscence of endotoxin or complement, MNC release IL-1 on contact with dialysis membrane (Lonnemenn et al., 1987).

The principal constituent of dialysis - related amyloidosis is B2-Microglobulin (B2-M), but the pathogenesis of amyloidosis B2-M is poorly understood (Petersen et al., 1991).

Cellular B2-M synthesis can be enhanced by endotoxin and may thereby offset the enhanced removal rate (Knvdsen et al., 1990).

Falkenhagen et al., 1989 stated that B2-M generation rate has relation to complement activation & IL-1 release.

Morwka., and Schiffl., 1993 stated that although a successful program for B2-M has not yet been proven, dialysis with biocompatible membranes with high B2-M clearance in association with ultapure dialysate may postpone the development of amyloidosis B2-M. (AB2M)

Aim of the work

The aim of this work is to study palsma level of interleukin-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 dialyzer membranes.