

ABSTRACT

“BIOARTIFICIAL LIVER”: EFFICIENCY AND SAFETY OF ALBUMIN DIALYSIS IN RECIRCULATION THROUGH CARBONOUS HAEMOSORBENT

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Efficiency of albumin as dialyzing media was investigated on “Bioartificial liver” device. Combined exogenous and endogenous intoxication was modelled by addition of salicylate, aniline, ammonia, 2,4-dinitrophenol and middle mass peptides to donors plasm. During dialysis against 10 % albumin significant decrease in levels of all the toxicants were found. After dialysis, albumin was filtered through carbonic haemosorbent. We have found that almost all toxicants captured by albumine from plasm can be bound by haemosorbent thus making possible long-term recirculation of albumin in dialysis circuit. Safety of this method was proven in experiments on animals.

Keywords: albumin dialysis, binding capacity, bioartificial liver, endogenous and exogenous toxins, detoxication, recirculation

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