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Abstracts

This study was carried out with the pertiupation of 60 patients with end stage renal disease (ESRD). 30 patients were seen at Khartoum Center of Dialysis and Transplantation in which were under haemodialysis therapy, and other 30 patients were seen at Military Hospital, Omdurman in which they were under peritoneal dialysis. The two groups of end – stage renal disease were nearly matched in age and sex.

Albumin concentration in each group was measured following either renal dialysis in order to assess the adverse effect and to asses impact of each dialysis method on the concentration of serum albumin.

Preliminary investiation revealed that the majority of ESRD patients in each group were presented with other disease namely hypertension, diabetes mellitus and also infestation of Hepatitis virus (HBV) were found in about 26% of ESRD patients under haemodialysis and about 7% of ESRD patients under peritoneal dialysis.

The findings of this study also showed that all patients of ESRD of each group maintaind low serum albumin concentration pre – dialysis (below albumin reference value) and the level markedly decreased postdialys with varying degree, the most serum albumin decreas was found in ESRD patients under peritoneal dialysis. Males exhibit more reduction in albumin concentration than fmds in peritoneal dialysis while in haemodialysis, nostatistieal differences of albumin concentration were found between males and

females. Similarly, peritoneal dialysis has shown sever and more reduction of albumin concentration in ESRD patients over 50 year of age than ESRD patients over 50 years of age, while under haemodialysis the age appeared to has not effect on the level of albumin concentration.

The explanation of reduced serum albumin under renal dialysis was reported to be due to malnutrition, inflammation and persistent fluid overload. And it is presumed that malnutrition with low serum albumin is powerful predictor of mortality in ESRD patients. It is also believed that fall in serum albumin level in ESRD patients during renal dialysis is assciated with the progression of development of cardiac failure and overall mortality and hyperalbuminaemia is considered a major adverse prognostic factor in dialysis patients, is ctrongly associated with cardiac disease.

Abbreviation

ESRD	:	End. Stage renal disease.
JGA	:	Juxaglamerular apparatns.
MD	:	Maintenance dialysis.
GFR	:	Gramelar filtration rate.
AFR	:	Acute renal failure.
BUN	:	Blood urea nitrogen.
ACE	:	Angiotenensin – converting enzyme.
NSAID	:	Nonsteroidel ante – inflammatory drugs.
ANCA	:	Antineutrophil cytoplasmic antibodies.
FENa	:	Fractional excretion of sodium.
CRF	:	Chronic renal failure.
PTH	:	Parathyroid harmone.
TTP	:	Thrombotic thrambocytopenic purpura.
HIV	:	Human immuno deficiency virus.
HUS	:	Hemolytic – uremic syndrome.
ANA	:	Antinuclear antibodies.
CAPD	:	Continuos ambulatory peritoneal dialysis.
IPD	:	Tntermittent peritoneal dialysis.
HD	:	Haemodialysis.
PD	:	Pritoneal dialysis.
ATN	:	Acute tubular necrosis.

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أجريت هذه الدراسة علي 60 مريضاً من مرضي الفشل الكلوي المتأخر والذين تحت العلاج بالغسيل الدموي (30 مريضاً) و تحت الغسيل البريتوني (30 مريضاً) حيث تمت مقابلة المرضي في مركز الخرطوم لغسيل وزراعة الكلي (حيث يجري الغسيل الدموي) والمستشفي العسكري بأمدرمان (حيث يجري الغسيل البريتوني).

تم قياس تركيز الالبيومين في سيرم كل المرضي من المجموعتين قبل وبعد إجراء الغسيل الكلوي بنوعيه وذلك لدراسة تأثير الغسيل الكلوي علي مستوي تركيز الالبيومين ومعرفة العوامل التي تسبب أو تأثر علي هذا المستوي.

أوضحت الفحوصات الأولية للمرضي في كلتا المجموعتين أن غالبية المرضي يعانون من أمراض أخري مصاحبه لمرض الكلي لديهم مثل ارتفاع ضغط الدم ومرض السكري وأيضاً وجود إصابات بالتهاب الكبد الفيروسي (HBV) في حوالي 20% من المرضي الذين يتعالجون بالغسيل الدموي و حوالي 7% من المرضي الذين تحت الغسيل البريتوني.

أوضحت نتائج الدراسة أن مستوي تركيز الالبيومين لدي المرضي الذين تحت الغسيل البريتوني أو الغسيل الدموي كان أقل من مستوي تركيز الالبيومين في الحالات السوية حتى قبل إجراء الغسيل الكلوي ، وأن هنالك انخفاضاً معنويا في تركيز الالبيومين بعد الغسيل البريتوني أكثر منه في حالة الغسيل الدموي.

كما أوضحت الدراسة أن مستوي انخفاض الالبيومين كان أكثر لدي الذكور مقارنة بالإناث وذلك في حالة الغسيل البريتوني ، أما في حالة الغسيل الدموي فلا يوجد فرقاً معنوياً في مستوي تركيز الالبيومين بين الذكور والإناث.

أما عند دراسة تأثير العمر علي مستوي تركيز الالبيومين في حالة الغسيل الكلوي بنوعيه ، أتضح أن المرضي الذين تزيد أعمارهم من 50 سنه أكثر عرضه لانخفاض مستوي تركيز الالبيومين مقارنه بالمرضي الذين تقل أعمارهم عن 50 عاماً وذلك في حالة الغسيل البريتوني ، أما في حالة الغسيل الدموي فلا يوجد فرقاً معنوياً في تركيز الالبيومين في المرضي من كل الأعمار.

ناقشة الدراسة أيضاً أسباب انخفاض الالبيومين لدي مرضي الفشل الكلوي حيث تشير التفسيرات من قبل الباحثين إلي دور سوء التغذية ونقص الغذاء والحالات الالتهابية من الأسباب الرئيسية لانخفاض تركيز الالبيومين هذا إلي جانب زيادة تركيز سوائل الجسم الأخرى . وأن الالبيومين يمكن اعتباره من المؤشرات القوية لحدوث حالات إصابات الأوعية الدموية والوفاة لكثير من مرضي الفشل الكلوي.