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Abbreviations List

ESRD	End Stage Renal Disease
GFR	Glomerular Filtration Rate
HD	Hemodialysis
HDF	Hemodiafiltration
K	Clearance
OCM	Online Clearance Monitoring
T	Time
UF	Ultrafiltration
URR	Urea Reduction Ratio
V	Urea Distribution Volume

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Abstract:

Monitoring of efficiency of hemodialysis treatment is future work, today many companies of hemodialysis machine have been developed applications to calculate the efficiency of dialysis dose using single pool (sp kt/v).

In this thesis online clearance monitoring (OCM) were used to monitor the dialysis dose.

It used conductivity cell in input of dialysate and output of dialysate to monitor the concentration of dialysate.

Monitoring of dialysate conductivity in the spent dialysate stream has been considered as urea monitoring ionic dialysate has been found to be highly correlated to urea clearance.

In this study the (OCM) is implemented with ten patients have been treated by hemodialysis in the center of dialysis. Good results for efficiency of dialysis dose were achieved.

The study concludes that the online clearance monitoring (OCM) is helpful in many as documentation, decrease the cost of investigation, monitor the adequacy of analysis in every session and assisting the patient treatment management.

The study recommends for comparative studies between the online clearance monitoring (OCM) and Diascan for Gambro Company application.

مستخلص

مراقبة الكفاءة فى عمليات الغسيل الدموى من الاعمال التى تطورت

توجد اليوم عدد من الشركات المصنعة لماكينات الغسيل الدموى التى قامت بتطوير تطبيقات تقوم بحساب الكفاءة للغسيل الدموى باستخدام معادلة الوحدة المجسمة ($SP \cdot KT/V$)
تم استخدام برنامج مراقبة الغسيل المباشر (OCM) التى طورتها شركة فرزينيوس (Fresenius) فى ماكيناتها لمراقبة الغسيل الدموى.

كما تم استخدام محسيس كثافة (conductivity cell) عند مدخل ومخرج محلول الغسيل المحضر من قبل الماكينة لمراقبة تركيز فى هذه التقنية
مراقبة كثافة المحلول عند قناة محلول الغسيل تعامل كانها تراقب نسبة اليوريا فى الدم من حيث معدل التركيز ومن حيث انخفاضها وارتفاعها .

فى هذه الدراسة تم تطبيق برنامج مراقبة الغسيل المباشر (OCM) لعينة عشرة مرضى يتلقون علاج الغسيل الدموى فى مراكز الغسيل الدموى.

استنتج من البحث ان تطبيق برنامج مراقبة الغسيل المباشر (OCM) يعطى نتائج افضل. كما استنتج من البحث ان من فوائد برنامج مراقبة الغسيل المباشر (OCM) يمكن ان يساعد على الاتى : التوثيق بيانات المرضى وتقليل تكلفة الفحوصات ومراقبة كفاءة الغسيل والمساعدة فى ادارة علاج المرضى.

يوصى البحث باجراء دراسات مقارنة بين مراقبة الغسيل المباشر (OCM) وتطبيق ال (Diascan) التابعة لشركة ال (Gambaro).