

## 이온치환투석제거율로 측정된 적절 혈액투석의 신뢰도

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### Reliability of Hemodialysis Adequacy Measured by Ionic Dialysance

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**Purpose:** Quantification of the dialysis dose is an essential element in the management of hemodialysis. The author investigates the reliability of hemodialysis adequacy measured by ionic dialysance (Online clearance monitoring<sup>®</sup>, OCM). Because OCM is non-invasive and instantly accessible method, it could be replaced Kt/V derived from single-pool variable volume urea kinetic model (UKM).

**Methods:** Kt/V using UKM and OCM were measured simultaneously in 51 patients who have been received hemodialysis therapy via arteriovenous fistula. And the analysis of the data collected from 186 hemodialysis sessions were performed.

**Results:** Kt/V of conventional hemodialysis, high efficiency hemodialysis and hemodiafiltration measured by UKM were  $1.39 \pm 0.24$ ,  $1.41 \pm 0.23$  and  $1.53 \pm 0.17$ , and by OCM were  $1.24 \pm 0.17$ ,  $1.26 \pm 0.19$  and  $1.39 \pm 0.19$  respectively. The data of UKM were higher than that of OCM significantly ( $p=0.00$ ). Also there were strong positive correlations between UKM and OCM in hemodialysis ( $r=0.80$ ,  $p=0.00$ ), high efficiency hemodialysis ( $r=0.65$ ,  $p=0.00$ ) and hemodiafiltration ( $r=0.67$ ,  $p=0.00$ ).

**Conclusion:** The Kt/V using OCM measured by ionic dialysance provided slight lower data than that of UKM derived from single-pool variable volume urea kinetic model, but it may be reliable test to evaluate dialysis adequacy in conventional and high efficiency hemodialysis and hemodiafiltration.

**Key Words:** 혈액투석, 효율, 요독

Hemodialysis, Efficiency, Urea

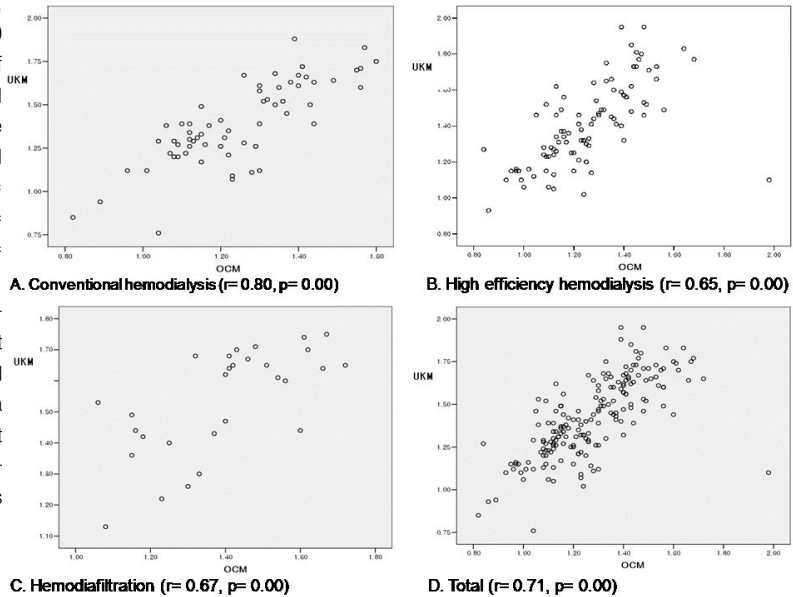


Fig. 1. Correlation analysis of estimated Kt/V between UKM and OCM.

Table 1. Estimated Kt/V by UKM and OCM

	Conventional hemodialysis	High efficiency hemodialysis	Hemodiafiltration	Total
UKM*	$1.39 \pm 0.24$	$1.41 \pm 0.23$	$1.53 \pm 0.17$	$1.42 \pm 0.23$
OCM	$1.24 \pm 0.17$	$1.26 \pm 0.19$	$1.39 \pm 0.19$	$1.28 \pm 0.19$
Adjusted OCM	$1.40 \pm 0.17$	$1.41 \pm 0.19$	$1.54 \pm 0.19$	$1.43 \pm 0.19$

\* $p=0.00$  UKM vs OCM