

투석환자에서 평소 혈압과 투석시 혈압과의 관계

명지병원 내과

한현정, 이재혁, 임채완, 김준형, 김명성, 이영배, 원종숙, 최혜민, 오동진

Home Blood Pressure Monitoring in Hemodialysis Patients

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Background: Hypertension is common in hemodialysis (HD) patients and contributes to this population's high risk for cardiovascular morbidity and mortality. Most hypertension treatment decisions use blood pressures (BP) obtained in the clinic, while peri-dialytic BP recordings in the clinic are highly variable and poorly reproducible, making treatment decisions difficult. Recently, it is shown that home BP are better predictors of mortality than individual pre- or post-HD BP measurements in US. We purposed to examine the relationship between inter-dialytic home BP and pre-HD, intra-dialytic, and post-HD BP in stable HD patients.

Methods: This was a single center cross sectional study from December 2013 to February 2014. HD patients who had been on treatment for longer than 3 months, were included for the study. Hospitalized patients and those with an acute illness were excluded. Patients who had a change in dry weight or antihypertensive drugs within 2 weeks were also excluded. Home BP monitoring was performed over 1 week using the same automatic oscillometric device (HEM 7203, Omron Healthcare, Japan). Patients were asked to record their BP three times daily - on waking up, between noon and 6pm and at bedtime.

Results: Twenty patients (14 male and 6 female) took part in the study. Mean home BP was 140.4±12.1 and 74.7±12.8 mmHg (systolic and diastolic, respectively). Mean pre-HD BP was 151.4±18.6 and 73.8±10.8 mmHg, and post-HD BP was 126.1±17.3 and 68.9±13.8 mmHg, respectively. In the correlation analysis, Home BP was associated with intra-dialytic BP ($r=0.479$, p -value 0.033 and $r=0.568$, p -value 0.009, systolic and diastolic respectively). In contrast, pre-HD BP was associated with home BP only for systolic BP ($r=0.449$, p -value 0.047), and post-HD BP was associated with home BP only for diastolic BP ($r=0.563$, p -value 0.019).

Conclusions: Home BP was associated with intra-dialytic BP better than pre-HD or post-HD BP. We might have to consider intra-dialytic BP with more attention when managing hypertension in HD patients.

Key Words: 투석시 고혈압, 평소혈압, 투석 중 혈압

HTN in hemodialysis, Home BP, Intra-dialytic BP