

투석 후 저혈압과 혈관 경직도와의 관계

가톨릭 대학교 의과대학 내과학교실, 성바오로 병원

김 병 수 · 신 미 정

Arterial Stiffness Contributes Post-Hemodialysis Hypotension which May be Associated with Vascular Calcification

Byung Soo Kim, Mi Jung Shin

The Catholic University of Medical College, Department of Internal Medicine, St. Paul

The cardiovascular disease is one of the leading causes of mortality and morbidity in hemodialysis patients. Arterial stiffness is known to be associated with vascular calcification in HD patients. Post-HD hypotension is the risk factor for cardiovascular mortality. We evaluated the relation between arterial stiffness and post-HD hypotension in maintained HD patients.

72 HD patients without acute coronary syndrome, acute infection, and acute inflammation were enrolled. They are maintaining HD more than 3 months. We checked biochemical data including troponin T, CRP, OPG (osteoprotegerin) before dialysis session and baPWV(brachio-ankle pulse wave velocity) after session. We defined post-HD hypotension is BP drops more than 5 % in MAP more than 3 times for 2 weeks (6 sessions).

The patients with and without post-HD hypotension were 34 and 38, respectively. The hypotension group has higher CRP, troponin T, and OPG level ($p < 0.05$, 0.01 , 0.01 , respectively). PWV was higher in hypotension group ($p < 0.001$). CRP and troponin T level were positively correlated with PWV ($r = 0.26$, $p < 0.05$; $r = 0.31$, $p < 0.01$, respectively). OPG level was positively correlated with PWV ($r = 0.44$, $p < 0.001$). Drops in MAP in patients was correlated with PWV ($r = 0.30$, $p < 0.05$). In multivariate analysis, PWV was the independent factor for drops in MAP in patients ($r = 0.311$, $p = 0.021$).

In conclusion, arterial stiffness contributes post-hemodialysis hypotension which may be associated with vascular calcification

Key Words: 투석, 저혈압, 혈관 경직도

Dialysis. Hypotension, Arterial stiffness