

항혈소판제를 복용 중인 요독증 환자에서 침습적 응급시술이 필요한 경우 데스모프레신의 혈소판 기능 호전 효과

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Desmopressin Improves Platelet Function in Uremic Patients Taking Antiplatelet Agents who Require Emergent Invasive Procedures

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Background: Uremia is associated with platelet dysfunction and can cause a bleeding tendency resulting in a major bleeding event after an invasive procedure or surgery that may be aggravated by antiplatelet agents.

Methods: We prospectively investigated the potential of desmopressin to improve platelet dysfunction and to lower bleeding risk after emergent invasive procedures in uremic patients taking antiplatelet drugs from May 1, 2011 to April 31, 2014.

Results: Twenty three patients were enrolled with a mean age of 60.2 ± 11.7 years. Baseline blood urea nitrogen and creatinine were 70.5 ± 29.4 mg/dL and 10.02 ± 4.52 mg/dL, respectively. Twenty two patients took aspirin. All patients were infused with desmopressin before their invasive procedures, which were a central catheter insertion for emergent hemodialysis in 13 patients, percutaneous nephrostomy in 7 patients, and angiography through arm or leg vessels in 3 patients. After desmopressin infusion both the hematocrit and platelet count were slightly decreased without changes in prothrombin time, activated partial thrombin time, and serum sodium level. Collagen/epinephrine-closure time (CEPI-CT) was significantly shortened from 252.7 ± 40.7 seconds to 144.6 ± 51.0 seconds ($p < 0.001$). There were minimal bleeding in 20 patients and mild bleeding in 3 patients. There were no severe bleeding events and none required additional intervention for bleeding control.

Conclusion: Desmopressin administration can improve platelet dysfunction and should be considered in uremic patients taking antiplatelet drugs with prolonged CEPI-CT before invasive procedures.

Key Words: 요독증, 항혈소판제, 데스모프레신
Uremia, Antiplatelet agent, Desmopressin