KSN 2016 Abstract Submission

Dialysis

KSN2016ABS-1479

Evaluation of percutaneous transluminal angioplasty screening using color Doppler ultrasonography

Seong Cho*

Background: Well-functioning vascular access is important in hemodialysis patients. The aim of this study was to assess stenosis using color Doppler ultrasonography as well as to investigate a possible association between the need for percutaneous transluminal angioplasty (PTA) and hemodynamic parameters.
Methods: A retrospective study of the medical records of color Doppler ultrasonography examinations of 120 patients (69: PTA group, 51: normal) was conducted at Samsung Changwon hospital. Data were analyzed using logistic regression analysis and the receiver operating characteristic curve. The cutoff point for hemodynamic parameters was determined to explore the predictors of PTA.
Results: Logistic regression analysis showed that brachial artery flow volume, and brachial artery resistance index (RI) were independently associated with PTA. Brachial artery RI over 0.58, and brachial artery blood flow volume under 602 mL/min were predictive values of the need for PTA.
Conclusion: These parameters could be used as markers for assessing PTA risk in hemodialysis patients.

Keywords: Color Doppler ultrasonography, Percutaneous transluminal angioplasty, Vascular access