

## 동정맥루수술의 투석시작지연에 미치는 영향

울산대학교 의과대학 서울아산병원 신장내과<sup>1</sup>, 혈관외과교실<sup>2</sup>

정진욱<sup>1</sup> · 박정식<sup>1</sup> · 김순배<sup>1</sup> · 김윤지<sup>1</sup> · 이현기<sup>1</sup> · 권태원<sup>2</sup>

### Arteriovenous Fistula (AVF) Creation Delayed Time to Initiate Chronic Hemodialysis (CHD)

Jin UK Jeong<sup>1</sup>, Jung Sik Park<sup>1</sup>, Soon Bae Kim<sup>1</sup>, Yoon Ji Kim<sup>1</sup>, Hyun Kee Lee<sup>1</sup>, Tae Won Kwon<sup>2</sup>

Department of Internal Medicine, Division of Nephrology<sup>1</sup>, Department of Vascular Surgery<sup>2</sup>  
Collage of Medicine, University Of Ulsan, Asan Medical Center, Seoul, Korea

**Propose** : This study was performed to evaluate whether AVF creation is effective in delaying time to initiate CHD.

**Method** : This is a retrospective, case-control study comparing 23 patients who made AVF more than 2 months before initiation of CHD (AVF group) with 23 age, sex, underlying disease, type of access and estimated GFR (eGFR) matched control patients who initiated CHD through temporary catheter (Catheter group). The eGFR was obtained with MDRD equation. If there were more than one potential match, the case control was randomly selected. Zero point was defined as the date of AVF creation in the AVF group and the date of same eGFR on the plot with that of matched AVF patient in the catheter group. Time-to-dialysis was defined as the time from zero point to the date of initiation of dialysis. Comparison of time-to-dialysis curves of both groups was made with the log rank test and expressed as Kaplan-Meier plots. A Cox proportional hazards model was used to identify independent predictors.

**Results** : There was no significant difference in baseline characteristics between two groups. The eGFR at operation in the AVF group was 11.47 ml/min/1.73m<sup>2</sup>. The eGFR at time of dialysis were 5.95ml/min/1.73m<sup>2</sup> in the AVF group and 6.39 ml/min/1.73m<sup>2</sup> in the catheter group. Log rank test analysis showed that dialysis-free survival was significantly greater in the AVF group than that in the catheter group at 6 month (hazard ratio 0.13; 95% confidence interval 0.04-0.45, p<0.001), 12 month (HR 0.27; 95% CI 0.13-0.57, p<0.001) and 18 month (HR 0.30; 95% CI 0.15-0.59, p<0.001). Multivariate proportional Cox hazard modeling adjusting baseline eGFR, SBP, cholesterol, age, sex, smoking status, use of statin or ARB, education before dialysis, history of cardiovascular disease, educational status, type of vascular access, proteinuria, BMI and hemoglobin showed that AVF creation as well as baseline eGFR, cholesterol, age, sex, smoking status and educational status remained as significant predictors.

**Conclusion** : These results showed that AVF creation might delay time to initiate chronic hemodialysis (CHD).

**Key Words** : 동정맥루수술, 투석지연

Arteriovenous access, Dialysis