

# KSN 2016 Abstract Submission

## *Dialysis*

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### **Arteriovenous Fistula Dysfunction and Associated Factors in Maintenance Hemodialysis Patients: A Cross-sectional Study in A Chinese Medicine Hospital**

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**Background:** Chinese herbal medicine both orally administered and for external use are applied to protect arteriovenous fistula (AVF) from stenosis and clotting in China. However, concerning to whether herbal medicine plays a role for AVF patency, few data is available from literature. The present study retrospectively collected clinical cases of AVF dysfunction caused by thrombosis and searched for potential associated factors.

**Methods:** Patients on chronic hemodialysis using native AVF as dialysis access for more than one month were screened at November 2012. Clinical information and outcome of AVFs were documented.

**Results:** 183 patients were included for analysis. The median patency durations of AVF were markedly different between the two groups: AVF dysfunction group versus AVF functioning group: 20 months versus 56 months ( $P < 0.05$ ). Multivariate analysis revealed that smoking history could be positively (RR, 3.208; 95% CI, 1.194-8.621;  $P = 0.021$ ), whereas the use of ACEI/ARB was negatively (RR, 0.328; 95% CI, 0.168-0.640;  $P = 0.001$ ) correlated to thrombosis-related AVF dysfunction.

**Conclusion:** Smoking could be one of the factors that increase the risk of AVF dysfunction caused by thrombosis. ACEI/ARB drugs might play a protective role for AVF dysfunction. Chinese herbals failed to show significant relation with AVF outcomes.

**Keywords:** Arteriovenous fistula, Chinese medicine, hemodialysis, patency