

## 혈액투석 환자에서 동맥혈관 석회화와 동정맥루 기능이상에 미치는 영향

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## Vascular Calcification and Vascular Access Dysfunction in Hemodialysis Patients

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**Introduction And Aims :** Cardiovascular calcification is very common in chronic kidney disease. In ESRD patients, arterial calcification occur in both intimal lesions medial layer of all sizes of arteries. Therefore, we designed this study to evaluate the feature and location of vascular calcification (VC) and determine the relationship between VC and early failure of vascular access in hemodialysis patients.

**Methods :** Arterial specimens from hemodialysis patients were obtained during arteriovenous fistula (AVF) operations. VC was measured with Von Kossa staining and graded according to the presence of % segment of calcification area of biopsy specimen. AVF patency was prospectively followed up for 12 months after the operation.

**Results :** Of the 84 patients, 41 patients had evidence of VC in their arterial specimens (49%). The form of VC is arterial medial calcification. AVF failure was observed in patient with VC and non-VC group. VC group had higher incidence of early AVF failure compared to non-VC group ( $p=0.010$ ).

**Conclusion :** This study suggests that the early AVF failure in hemodialysis patients is closely associated with arterial medial calcification.

**Key Words :** 혈액투석, 혈관석회화, 동정맥루기능이상

Dialysis, Vascular Calcification, Vascular Access Dysfunction