

## 투석방법에 따른 관상동맥질환의 예측인자로서 단순방사선 소견상 혈관석회화 점수의 비교

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### Comparison of Vascular Calcification Scores on Plain Radiographs as Predictors of Coronary Artery Disease According to Dialysis Modality

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**Purpose :** Vascular calcification (VC) scores on simple plain radiographic films are known to be associated with coronary artery disease (CAD) in hemodialysis (HD) patients. However there is few reports about VC scores on simple plain radiographic films in peritoneal dialysis (PD) patients. The present study was designed to demonstrate a correlation between VC scores on plain radiographs and CAD in PD patients. In addition, we investigated to know any different meaning of VC scores on plain radiographs according to dialysis modality.

**Methods :** We recruited 61 hemodialysis (HD) patients and 78 peritoneal dialysis (PD) patients from Dong-A University Dialysis Center. We checked the plain radiographic films of the feet, hands, pelvis, and lateral lumbar spine and evaluated VC scores with previously reported methods. We defined CAD based on myocardial scans, echocardiography, or coronary angiography. We defined significant VC as any one finding among the abdominal aortic calcifications (AACs) scores >5, VC scores of the pelvis and hands >3 or arterial media calcifications of the feet on plain radiographs.

**Results :** The prevalence of CAD and significant VC were not different according to dialysis modality. Positive associations were found between VC scores of the feet, VC scores of the hands and pelvis, scores of abdominal aortic calcifications (AACs), significant VC ( $r=0.393$ ,  $p<0.001$ ) and CAD in all dialysis patients. Associations were not found between VC scores of the feet and CAD in PD patients. Patients who showed significant VC on plain radiographs had a high sensitivity (HD:96.3% vs. PD:85.7%) for the presence of CAD. High density lipoprotein cholesterol levels were significantly lower in patients who showed significant VC compared with those who did not in PD patients.

**Conclusion :** Significant VC on plain radiographs was not different according to dialysis modality. Significant VC is useful screening method for the presence of CAD in HD and PD patients.

**Key Words :** 혈관석회화, 투석, 관상동맥질환

Vascular calcification, Dialysis, Coronary artery disease