

## 투석개시 환자에서 대동맥활 석회화 유병률 및 관련 요인 분석

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### Evaluation of Aortic Arch Calcification in New Dialysis Patients

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**Background:** Cardiovascular disease is common in patients with end-stage kidney disease and it is most important cause of death in these patients. Aortic calcification has been recognized as an important risk factor for cardiovascular disease in dialysis patients. The aim of this study was to evaluate the aortic arch calcification (AoAC) using chest radiography and to examine the association of clinical and biochemical parameters and aortic arch calcification in new dialysis patients.

**Methods:** A total of 29 patients were enrolled in this study and their medical records including chest radiography were reviewed retrospectively. AoAC was semiquantitatively estimated with an AoAC score on plain chest radiography.

**Results:** The mean age of studied patients was 53.9 years and 16 patients were men. Of these patients, 14 patients were received hemodialysis and 15 patients were received peritoneal dialysis. Initial AoAC was  $6.9 \pm 11.7$  and it was increased to  $11.2 \pm 11.7$ , two year after dialysis. Age and serum inorganic phosphorus concentration was significantly associated with AoAC, whereas dialysis modality and other biochemical parameters including fibroblast growth factor-23, had no association with AoAC.

**Conclusions:** An association between serum inorganic phosphorus level and AoAC exists in end-stage kidney disease patients. Control of hyperphosphatemia with dietary phosphorus restriction should be focused for prevention of aortic arch calcification in these patients.

**Key Words:** 혈관석회화, 만성콩팥병, 인산

Vascular calcification, Chronic kidney disease, Phosphorus