

# KSN 2016 Abstract Submission

## *Dialysis*

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### **Risk of stroke and its related factors in elderly dialysis patients**

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**Background:** Despite the current knowledge about the risk of stroke and its related factors in general population, this issue in elderly patients receiving dialysis remains unresolved.

**Methods:** To compare the risk of stroke between hemodialysis (HD) and peritoneal dialysis (PD), data on 13,065 incident dialysis patients (aged  $\geq 65$  years: 10,675 in HD and 2,390 in PD) were retrieved from the Korean Health Insurance dataset. To identify the risk factors of stroke amongst various clinical and laboratory parameters, 980 elderly patients undergoing HD were retrospectively analyzed using an independent prospective cohort from 31 dialysis centers.

**Results:** For a mean duration of 1.8 years (maximum of 5 years), the risk of all cardiovascular diseases (ischemic heart disease and stroke) did not differ between HD and PD. However, when analyses were conducted separately by subtype, the risk of stroke, not ischemic heart disease, was significantly higher in HD patients than in PD patients. When the risk factors of stroke were probed regarding subsequent stroke events for a mean duration of 2.6 years (maximum of 7 years), the absolute dependence on social support, a previous history of cardiovascular disease, high levels of low-density lipoprotein cholesterol, and the use of a high number of anti-hypertensive drugs were identified as being significant.

**Conclusion:** Based on the discrepancy of stroke risk between modalities and the HD-tailored risk factors of stroke, the monitoring and management of these factors may be a key strategy to reduce the risk of stroke in elderly patients receiving dialysis.

**Keywords:** cardiovascular disease, elderly, end stage renal disease, hemodialysis, stroke