KSN SEOUL, KOREA 2023
April 27(Thu) - 30(Sun), 2023
Coex, Seoul, Korea

Submission No.: KSJS-9028
Session Title: KSN-KSH Joint Symposium (Korean Society of Hypertension)
Date & Time, Place: April 29 (Sat), 15:30 - 17:30, Room 5

Which BP Metrics Should Be Used in Patients on Dialysis?

Ji Yong Jung
Gachon University Gil Medical Center, Korea, Republic of

Studies of hemodialysis patients have shown a U-shaped association between systolic blood pressure (SBP) and mortality, in contrast to the linear association in the general population. However, an optimal BP goal has not been suggested. Based on the previous reports, it was challenging to pool BP targets, because BP reduction achieved by patients varied widely among the trials, and also baseline BP level was heterogenous in each study. In one prospective observational cohort study performed in South Korea, a U-shape hazard ratio pattern of patient mortality was observed among 2,299 prevalent hemodialysis patients during 4.5 median follow-up years. The lowest risk was shown in 130–150 mmHg of systolic BP. When the continuous BP was categorized, the group of systolic BP under 110 mmHg and the group of systolic BP over 170 mmHg showed an increased hazard ratio of mortality. In a Western study based on 9,333 hemodialysis patients of the observational cohort with a median follow-up of 1.5 years, a similar U-shaped hazard ratio pattern of patient mortality was observed, however, the lowest risk was observed at around 165 mmHg, which was different from the Korean study.
A multi-faceted approach is needed because several factors can affect BP treatment as confounders, which include interdialytic BP variability, intradialytic anti-hypertensive drug removal through dialysis membrane, body fluid change, reduced vascular elasticity, post-dialysis BP increment which also can be manifested as intradialytic hypertension.
Therefore, some researchers suggest that out-of-dialysis BP (BP at a clinic visit or home BP after starting dialysis) may be more important than dialysis-unit BP. Nevertheless, the optimal target BP should be applied according to the individual condition of each patient.