KSN 2019
Seoul, Korea · May 23 - 26

Abstract Submission No. : IL-9024

Glycemic control in diabetes patients on dialysis in Japan ~ Is there a 'burnt-out diabetes' phenomenon in patients on hemodialysis? ~

Masanori Abe
Nihon University School of Medicine, Japan

In patients with diabetes on dialysis, glycemic control improves spontaneously, leading to normal glycated hemoglobin (HbA1c) levels that necessitate the cessation of antidiabetic medications; this phenomenon is known as "burnt-out diabetes." Anemia, which results from a short erythrocyte lifespan, theoretically suppresses HbA1c levels. By increasing the proportion of young erythrocytes in the blood, both anemia and erythropoiesis-stimulating agent (ESA) can falsely lower the HbA1c level, leading to a false negative diagnosis of hyperglycemia. In contrast, the glycated albumin (GA) level is not significantly associated with the life span of red blood cells, hemoglobin level, or ESA dose in patients with diabetes undergoing hemodialysis. Therefore, GA might be a better indicator of glycemic control than HbA1c in diabetic hemodialysis patients. In 2013, Japanese Society for Dialysis Therapy (JSDT) published "Best Practice for diabetic Patients on Hemodialysis 2012". Pre-dialysis casual blood glucose and GA levels are recommended as indicators for glycemic control. Based on the previous studies, pre-dialysis casual plasma glucose levels of <180–200 mg/dL are recommended as targets for glycemic control. GA levels <20.0% are suggested as tentative targets for glycemic control in patients without a history of cardiovascular events. For patients with a history of cardiovascular events or with tendency to hypoglycemic episodes, however, GA levels <24.0% as a tentative target level, are recommended. Here, to identify how many patients with diabetes undergoing dialysis experience "burnt-out diabetes", we conducted a cohort study of a nationwide registry of the JSDT in 2013. Furthermore, I will talk about glycemic control and their targets of diabetes patients on hemodialysis in Japan.