



Lecture Code : CGC01-S7

Session Name : 진료지침위원회(Clinical Guidelines Committee)

Session Topic : -

Date & Time, Place : June 19 (Thu) / 13:00-15:00 / Room 4 (Room 203)

신대체요법 환자의 혈압 관리(**Blood Pressure Management in Patients Undergoing Renal Replacement Therapy**)

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Hypertension is very common yet often difficult to control in patients receiving kidney replacement therapy (KRT), including hemodialysis, peritoneal dialysis, and kidney transplantation. In particular, despite the high prevalence of uncontrolled hypertension among hemodialysis patients, there remains a lack of robust, evidence-based guidelines tailored to this population. According to the KDOQI guidelines, hypertension in hemodialysis patients is defined as a pre-dialysis systolic blood pressure $\geq 140/90$ mmHg or a post-dialysis systolic blood pressure $\geq 130/80$ mmHg. However, these pre- and post-dialysis blood pressure measurements are frequently not obtained using standardized methods and are primarily used as hemodynamic indicators for intradialytic cardiovascular stability rather than for diagnosing hypertension or assessing target blood pressure achievement and cardiovascular risk. In contrast, hypertension confirmed by home blood pressure monitoring or ambulatory blood pressure monitoring is clearly associated with mortality and could therefore serve as a more reliable tool. The pathophysiology of hypertension in KRT patients differs from that in the general population, necessitating tailored diagnostic and therapeutic approaches. In dialysis patients, hypertension is primarily driven by sodium and volume overload. Additional contributing factors include arterial stiffness, activation of the renin–angiotensin–aldosterone system and sympathetic nervous system, endothelial dysfunction, sleep apnea, and the use of erythropoiesis-stimulating agents. The cornerstone of hypertension management in KRT patients is nonpharmacologic interventions aimed at correcting sodium and fluid excess. If blood pressure remains elevated despite these measures, antihypertensive medications should be initiated. Drug selection should take into account the dialyzability of each agent as well as the patient's comorbid conditions. This presentation aims to propose clinical practice recommendations regarding the diagnosis, target blood pressure, and treatment strategies for hypertension in patients receiving kidney replacement therapy. It

will also review the supporting evidence and suggest future directions for research in this field.

Keywords: hypertension, hemodialysis, guideline, kidney transplantation, peritoneal dialysis