THE KOREAN SOCIETY OF NEPHROLOGY
APCN & KSN 2024
June 13(Thu) - 16(Sun), 2024 Coex, Seoul, Korea
Promoting Sustainable Kidney Health: The Asia-Pacific and Beyond

Submission No. : DSP2-0001
Session Title : Dialysis Specialist Physician Course 2
Session Topic : Vascular Access and Ultrasound in Nephrology
Date & Time, Place : June 16 (Sun) / 10:30-12:00 / Room 1 (GBR 101 - 102)

Vascular Access and Ultrasound in Nephrology

Sangeon Gwoo
Lifeline Clinic, Republic of Korea

Ultrasound has become an indispensable tool in the management of arteriovenous (AV) access in hemodialysis patients. I would like to highlight the important role of ultrasound in providing optimal care and discuss the unique benefits of ultrasound compared to other methods. The 2019 KDOQI guidelines reported that surveillance, including ultrasound, did not show a clear benefit over monitoring. While the evidence review team stated that the evidence is still lacking, the working group believes that ultrasound has distinct advantages over other surveillance tools in the assessment of AV access. Ultrasound has clear advantages in assessing AV access in hemodialysis patients as an adjunct to physical examination. Ultrasound offers several benefits compared to angiography equipment, including cost-effectiveness, absence of contrast agents, and elimination of radiation exposure. It maintains high reliability while enabling both structural and functional assessments of AV access. Ultrasound is vital in evaluating the readiness of newly created AV access for cannulation and determining the adequacy of engraftment in arteriovenous grafts (AVGs). Moreover, ultrasound is valuable for detecting various types of AV access dysfunction, including flow-related problems such as stenosis and thrombosis, and non-flow-related issues like high-flow fistulas, steal syndrome, aneurysms, pseudoaneurysms, perigraft seromas, and infections. Recognizing AV access as the "Lifeline" for hemodialysis patients, nephrologists have a responsibility to thoroughly understand its management. Ultrasound serves as a powerful tool to aid in this endeavor, enabling informed decision-making and optimal patient care. In conclusion, ultrasound evaluation has emerged as a key tool in managing AV access. Its unique advantages make it invaluable for nephrologists. Applying ultrasound surveillance can improve the understanding of AV access, facilitate early detection and treatment of dysfunction, and ultimately enhance the quality of life for hemodialysis patients.

Keywords: AV access, arteriovenous access, Ultrasound, Monitor, Surveillance