

**Abstract Type : Poster**

**Abstract Submission No. : 1790**

## **Correlation Analysis of the Types of Hemodialysis Access, Age, Comorbidities, and Vascular Access Obstruction of Patients on Hemodialysis**

**Li Hsiu Lan**<sup>1</sup>, Lang Cheng Lin<sup>2</sup>, Fang Ching Yu<sup>1</sup>, Cheng Wei Hui<sup>1</sup>, Su Ming Hui<sup>1</sup>

<sup>1</sup>Department of Department of Nursing, Yunghe Cardinal Tien Hospital, Taiwan

<sup>2</sup>Department of Department of Medicine, Yunghe Cardinal Tien Hospital, Taiwan

**Objectives:** The establishment and maintenance of suitable and clear vascular access is critical to ensuring health-care quality. For patients on hemodialysis, damage to hemodialysis access can be life threatening. In this study, we explored the types of hemodialysis access, age, comorbidities, and vascular access obstruction of patients on hemodialysis.

**Methods:** This study was approved by the Institutional Review Board of a teaching hospital in Taiwan (C109018). Recruitment was conducted after obtaining the participants' informed consent. We included 64 patients aged  $\geq 20$  years who had undergone hemodialysis from January to December 2022. Demographic data regarding sex, age, years of hemodialysis, types of hemodialysis access, comorbidities, and vascular access obstruction were analyzed.

**Results:** Fifty percent of the participants were men. The participants aged between 33 and 86 years (mean: 67 years). The mean number of years of hemodialysis was 6. Furthermore, 79.7% of the participants had arteriovenous fistulas for hemodialysis; 4.7% had arteriovenous grafts; 57.8% had diabetes, and 23.4% had hypertension. Older patients (aged  $\geq 65$  years, mean: 74 years) were the age group requiring the most attention (61.5%). Among the older patients, 43.6% were men; the mean number of years of hemodialysis was 5.8; 76.9% used arteriovenous fistulas for hemodialysis, and 7.7% used arteriovenous grafts; 53.8% had diabetes, and 33.3% had hypertension.

**Conclusions:** The results revealed that arteriovenous fistulas were preferable to arteriovenous grafts in terms of patency and durability. Satisfactory arteriovenous fistulas depend on the correct information of vascular access care, which helps maintain vascular access patency. Patients' life expectancy, access function, likelihood of survival, and dialysis time relative to access placement should be considered when selecting suitable vascular access for older patients. During decision-making, professional teams and patients should engage in effective and timely communication, and optimal hemodialysis access should be selected based on patients' interest.