



Service Priorities and Programmes
Electronic Presentations

Convention ID: 1245

Submitting author: Ms Suet Lai TAM

Post title: Nurse Consultant, KWH, KWC

Establishment of USG-assisted nursing service program to improve arteriovenous (AV) access outcome in hemodialysis (HD) in a renal center

Tam SL (1)(2), Lo MW (1), Chan SF (1), Wong YY (1), Kwok CP (1), Wong PN (1), Fung YP (1), Tam YS (1), Chan YWE (1), Ho TW (3), Chung LH (2), Mak SK (1)(3)
(1) Renal Unit, Department of Medicine and Geriatrics, Kwong Wah Hospital
(2) Central Nursing Division, Kwong Wah Hospital
(3) Department of Medicine and Geriatrics, Kwong Wah Hospital

Keywords:

HD: Haemodialysis

AVF: Arteriovenous Fistula

USG : Ultrasonography

RNC : Renal Nurse Clinic

Introduction

Dialysis nurses play an important role in the care of hemodialysis (HD) AV access. Traditionally, access monitoring and determination of cannulation strategy in HD largely rely on direct inspection and feeling of pulsation based on individual dialysis nurses' experience and judgement. Nowadays, USG gives instant anatomical and functional information to help the assessment of new AV access regarding the readiness to for HD, site and degree of stenosis, and the optimum location for needling

Objectives

To improve vascular access care by the utilization of USG, and to strengthen the dialysis nurses' knowledge, skills and confidence in dialysis access care.

Methodology

It is a retrospective study based on our registry data and clinical records. The program targeted all HD patients with newly created AV access, and it was conducted via continuous educational and monitoring, which included renal nurse clinic (RNC) follow-up scheduled at hospital discharge and week 2, 4, and 8 after access creation. Individualized access care plan including arm strengthen exercise, fluid status management and daily self-monitoring and care were organized for the patients. Comprehensive USG examination of the AVF will be performed by the nephrologist where the maturity and problems of the AVF are identified. If the AVF is deemed ready for HD, the optimum puncture site will be marked. The number of patients recruited to this program, number of visits, successful cannulation rate and the number of problematic AVF will be recorded. Dialysis nurses' satisfaction about the new training pathway was also studied.

Result

There were 59 AVF created between 1 January 2015 and 31 December 2017. There were 140 visits in the structured patients' educational program. During the study period, we detected 6 problematic AVF cases and referred for intervention.

There are 2 nurses trained by nephrologist for assessment AVF. We conducted an USG training workshop as core skill to dialysis nurses in July 2017 and there were 20 dialysis nurses participated. USG assisted real time cannulation has been used in 3 cases due to difficult anatomy subsequently. The average rating was 5.53 out of 6 in staff satisfaction survey in terms of their satisfaction towards the training workshop and usefulness in nursing practice.