To evaluate the systematic training program on nurse-initiated Urokinase injection for Hickman catheter occlusion

Wong Y S(1), Lei W S A(1), Ng Y B(1)
(1)Department of Medicine and Geriatrics, United Christian Hospital

Keywords:
Nurse empowerment

Introduction
Trained nurses have initiated Urokinase for thrombotic occlusion of Hickman catheter in our Haematology unit since 2007. However, there were only three trained nurses able to perform the procedure, it was hard to manipulate all events of blocked Hickman catheter. The risk of Hickman catheter leakage or broken may be increase due to malpractice of blockage management by untrained personnel. We implemented a new training program to empower the designated nurses to perform the Hickman catheter blockage management with standardized protocol in Haematology unit.

Objectives
The aim of this project was to evaluate the systematic training on nurse-initiated Urokinase injection for blocked Hickman catheter in Haematological unit.

Methodology
The inclusion criteria of nurse: The nurses completed the training of Hickman catheter care programme in our unit and have studied the Post Registered Certificate Course in Haematology and BMT nursing. Voluntary and self-competence were other important elements to precede the procedure. Target group of patients: The selected group of patients must be inserted Hickman catheter and cared in Haematological unit. Training for Nurses: Set up the clinical guidelines and clinical training log book to record the practice experience. Three trained nurses provided training sessions about the management of Hickman catheter blockage and performed clinical demonstration of Urokinase injection blocked Hickman catheter to the trainees. The trainees were required re-demonstration of Urokinase injection under supervision and completed the clinical training log book to ensure adequate clinical practices and experience.

Result
3 APN and 2 RN were selected for the training program since September 2012. Most of Urokinase injections for Hickman blockage were performed within an hour by nurses. Early appropriate intervention can prevent permanent blockage of catheter and unnecessary insertion of intravenous cannula on patients implanted Hickman catheter. There was no incident reported due to inappropriate blockage management of Hickman catheter broken or leakage relating to injection of Urokinase during
training. This training programme provided an opportunity for nurses to build up confidence and more safety practice in handling blockage of Hickman catheter. Hence, no doubt that nurses are the most appropriate profession to handle the blockage of Hickman catheter.