



Service Priorities and Programmes Electronic Presentations

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Preventing Vesicant Chemotherapy Extravasation - A System Review

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Introduction

Consequences of extravasation caused by vesicant chemotherapy administration may result in serious outcome.

Proper documentation, enhancement on nursing skills, review on vesicant chemotherapy preparation by pharmacy; early intervention and enhancement on patient education was addressed in the unit.

Objectives

To review on the preparation of vesicant chemotherapy aiming at reducing risk of extravasation during administration.

Formal record for vesicant chemotherapy administration to be developed for documentation.

Methodology

Vesicant chemotherapy prescription was reviewed by Haematologist and pharmacist. Vesicant chemotherapy prepared in the form of dilution in 100ml normal saline infusion instead of bolus injection was agreed.

Supplementary patient information on the potential risk in extravasation provided to patient during consent. Standard statement on the risk of extravasation is written in the consent form and explained by Haematologist during consent process.

A "Peripheral Cannula Assessment Chart" was designed to document nursing observation during vesicant chemotherapy administration. Nurses observed every 5 minutes for signs and symptoms on pain, patency, tenderness, swelling, redness throughout vesicant infusion with documentation in the "Peripheral Cannula Assessment Chart".

Result

Enhance patient safety and reduce risk of extravasation during vesicant chemotherapy administration. Among the 255 vesicant chemotherapy infusion from May 2015 to October 2016, one patient developed delayed onset of extravasation, and the other case with redness and leakage from infusion needle site was stopped infusion immediately by nurses. Both cases received appropriate and immediate intervention.

Compared with extravasation estimated to occur in 0.1% - 6% (Polovich, White & Kelleher, 2005), incident at 0.08% appeared to be lower than international occurrence.

Furthermore, complain and legal impact was zero after the improvement project.