



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 564

**Submitting author:** Ms W M WONG

**Post title:** Registered Nurse, United Christian Hospital

**Good Practice to eliminate extravasation during peripheral line chemotherapy infusion at Clinical Oncology Chemotherapy Day Centre in United Christian Hospital (UCH)**

*Wong WM(1), Kwan CK(1), Lam YK(2), Lau YM(2), Lee CY(1), Ngan PL(2), Ng YB(2), Tang SK(2)*

*(1)Department of Clinical Oncology, United Christian Hospital*

*(2)Department of Medicine & Geriatrics, United Christian Hospital*

**Keywords:**

Extravasation

Peripheral line infusion

Cytotoxic drugs

Chemotherapy Day Centre

**Introduction**

Extravasation of intravenous chemotherapeutic agents causes severe disability and morbidity, leading to surgical intervention like debridement or skin grafting, prolonged hospital stay and potential medico-legal consequences. In fact, chemotherapy extravasation still has a prevalence ranging from 0.1% to 6% when administered through a peripheral intravenous access (Kreidieh, et al., 2016)

UCH Clinical Oncology Chemotherapy Day Centre was established in September 2009, now providing 1.5-day service per week. 13980 attendances were recorded between September 2009 and December 2016, consisting of peripheral (99.41%) and Hickman (0.59%) line infusion.

**Objectives**

To review the practice to eliminate extravasation during peripheral line chemotherapy infusion at Chemotherapy Day Centre

**Methodology**

Retrospective study to identify the good practice:

1 Education

1.1 Patients

1.2 Nurses

2 Observation

3 Guidelines for chemotherapy infusion

4 Handling suspected extravasation

5 Reporting and recording system

1. Education

- 1.1 All patients in the Centre are educated to report any pain, swelling or erythema around the infusion site before starting chemotherapy. Pharmacists also help on this aspect during drug counseling session.
- 1.2 All nurses have regular oncology training, journal sharing and incident review to update their knowledge.
2. Nurses observe for any symptoms or signs of extravasation every 15 – 20 minutes and check injection site before giving each drug.
3. All nurses follow the adopted guideline for chemotherapy infusion. Issues like gravity drip, normal saline flushing and patency check are well observed.
4. For suspected extravasation, the nurse will stop the infusion immediately and report to the doctor-in-charge. The condition will then be handled according to the guideline. Clinical photos may be taken to facilitate follow up.
5. All infusion related incidents will be reported to doctor and included in discharge summary.

### **Result**

3 suspected extravasation was reported (0.022%). The much lower incidence is related to the effective and safe administration of chemotherapy by trained nurses in the Center. Moreover, early detection of any suspected extravasation is crucial to the prevention of subsequent undesirable outcome.

Reference:

Kreidieh FY, et al. (2016). Overview prevention and management of chemotherapy extravasation. World J Clin Oncol.7(1):87–97