

Mandatory Standard for vinca alkaloids

1. Introduction

Vinca alkaloids are a class of chemotherapeutic agents which includes vinblastine, vincristine, vinflunine and vinorelbine.

Health Service Providers are required to have local guidelines in place which adhere to the minimum safety requirements outlined in this Standard.

This Standard is based on a national alert on vinca alkaloids developed by the Australian Council for Safety and Quality in Health Care. The Australian Commission for Safety and Quality in Health Care published an updated alert in February 2019.¹

2. Vinca Alkaloids Standard

While any medication administered via the incorrect route can result in harm, the inadvertent intrathecal administration of vinca alkaloids has resulted in death or permanent disability and remains a potential risk.²

Vinca alkaloids can be fatal if given by the intrathecal route and must therefore ONLY be administered intravenously.

Specific requirements for hospitals and health services are outlined below.

2.1 Prescribing requirements

- In accordance with the Clinical Oncological Society of Australia guidelines, vinca alkaloids must only be prescribed by medical practitioners with appropriate skills, training and qualifications in the management of cancer.
- Dosing of vinca alkaloids must be calculated by a medical practitioner skilled in this task.

2.2 Preparation and dispensing

- All vinca alkaloids must be prepared and supplied in a minibag of compatible solution, never in a syringe. For adult dosing the minibag must contain a total volume of 50mL or more.
- Vinca alkaloids must only be prepared and dispensed by appropriately trained staff
 that have been assessed as competent to prepare and dispense chemotherapy. The
 total milligram dose of vinca alkaloid to be added to the minibag must be verified by
 a chemotherapy competent pharmacist before it is dispensed in the Pharmacy
 Compounding Unit.
- All vinca alkaloids must be labelled clearly with the warning 'FOR INTRAVENOUS USE ONLY – FATAL IF ADMINISTERED BY ANY OTHER ROUTE'.
- Vinca alkaloids must NOT be prepared at the same time in the same location as medicines that are intended for intrathecal administration.

2.3 Administration Requirements

- Vinca alkaloids must never be administered intrathecally.
- Vinca alkaloids must only be administered by appropriately trained staff who have been assessed as competent to administer chemotherapy.

- Staff administering vinca alkaloids must be aware of the risk of extravasation and ensure procedures for preventing, monitoring for, and treating extravasation are followed.
- Immediately prior to the administration of a vinca alkaloid the following must be checked by two registered nurses with appropriate training and skills:
 - o the patient's name
 - o name of the medication
 - o dose
 - route of administration
 - o date and time of administration
 - expiration date of the medication
 - patient allergies.
- Where a second nurse is not available then a pharmacist or medical practitioner with appropriate knowledge and skills can perform this function.
- Vinca alkaloids must never be administered using a motorised pump through a
 peripherally inserted intravenous cannula. They must be administered using gravity
 to reduce the chance of extravasation injuries.
- The administration line must be clearly labelled with the required blue 'IntraVENOUS' label as specified in the National Labelling Standards for Injectable Medicines, Fluids and Lines2 and documentation must include the date and time the line was commenced (Figure 1).
- The date and time that the line is required to be changed must be documented on the line label for intravenous medicines (Figure 1).

Figure 1: Line Label for Intravenous Medicines



References

- High Risk Medication Alert Vincristine. Australian Commission on Safety and Quality in Health Care February 2019 (Former Australian Council for Safety and Quality in Health Care Medication Alert – Vincristine can be fatal if administered by the intrathecal route Alert 2, December 2005)
 - https://www.safetyandquality.gov.au/wp-content/uploads/2019/02/High-Risk-Medication-Alert----Vincristine-2005-328KB.pdf
- 2. National Standard for User-Applied Labelling of Injectable Medicines, Fluids and Lines. Australian Commission for Safety and Quality in Health Care. August 2015. https://www.safetyandquality.gov.au/our-work/Medication-safety/Safer-naming-labelling-and-packaging-of-medicines/National-Standard-for-User-applied-Labelling-of-Injectable-Medicines-Fluids-and-Lines/

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