

INFUSION AUDIT IN HAEMATOLOGY: IMPORTANCE OF EVALUATION AND OPTIMISATION OF PROFESSIONAL PRACTICES

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BACKGROUND AND IMPORTANCE

Intravenous administration is the source of numerous identified risks requiring periodic **evaluation of professional practices**. In February 2022, an observational audit in the hematology unit was carried out for the **first time** in order to optimize the infusion setups.

AIM AND OBJECTIVES

Evaluate the professional practices of the nursing team and thus to implement **permanent corrective actions**.

MATERIALS AND METHODS

1 EVALUATION GRID

- Update of the **4-part grid** based on the good infusion practices defined by the **OMEDIT*** Centre,
- Validated by a **multidisciplinary** working group.

2 AUDIT

- Observation of **62** **drugs** administered in the hematology unit,
- In **February 2022** over 5 half-days.

3 ANALYSIS

- Analysis of the audit grid associated with **computerized drug prescriptions** (search for physical-chemical incompatibilities and flow rate problems)

4 FEEDBACK

- Presentation** of results with the medical team
- Discussion** of corrective actions

RESULTS

1 Infusion configuration

Peripheral venous access

16%

Central venous access

84%

Presence of plugs at free ends of the ramp for the peripheral infusion

90%

Infusion line for nutrition placed as close to the patient as possible and administered by pump

100%

2 Flow rate problems

Presence of non-return valve for flow sensitive products

91%

Infusion drip chamber filled below maximum limit

99%

Appropriate use of flow regulators (FR)

100%

3 Incompatibilities

Physical-chemical incompatibilities observed

0%

Identification of potential incompatibilities during feedback: pantoprazole with parenteral nutrition

4 Labelling

Patient-identified products

100%

And now, what corrective actions can we put in place ?

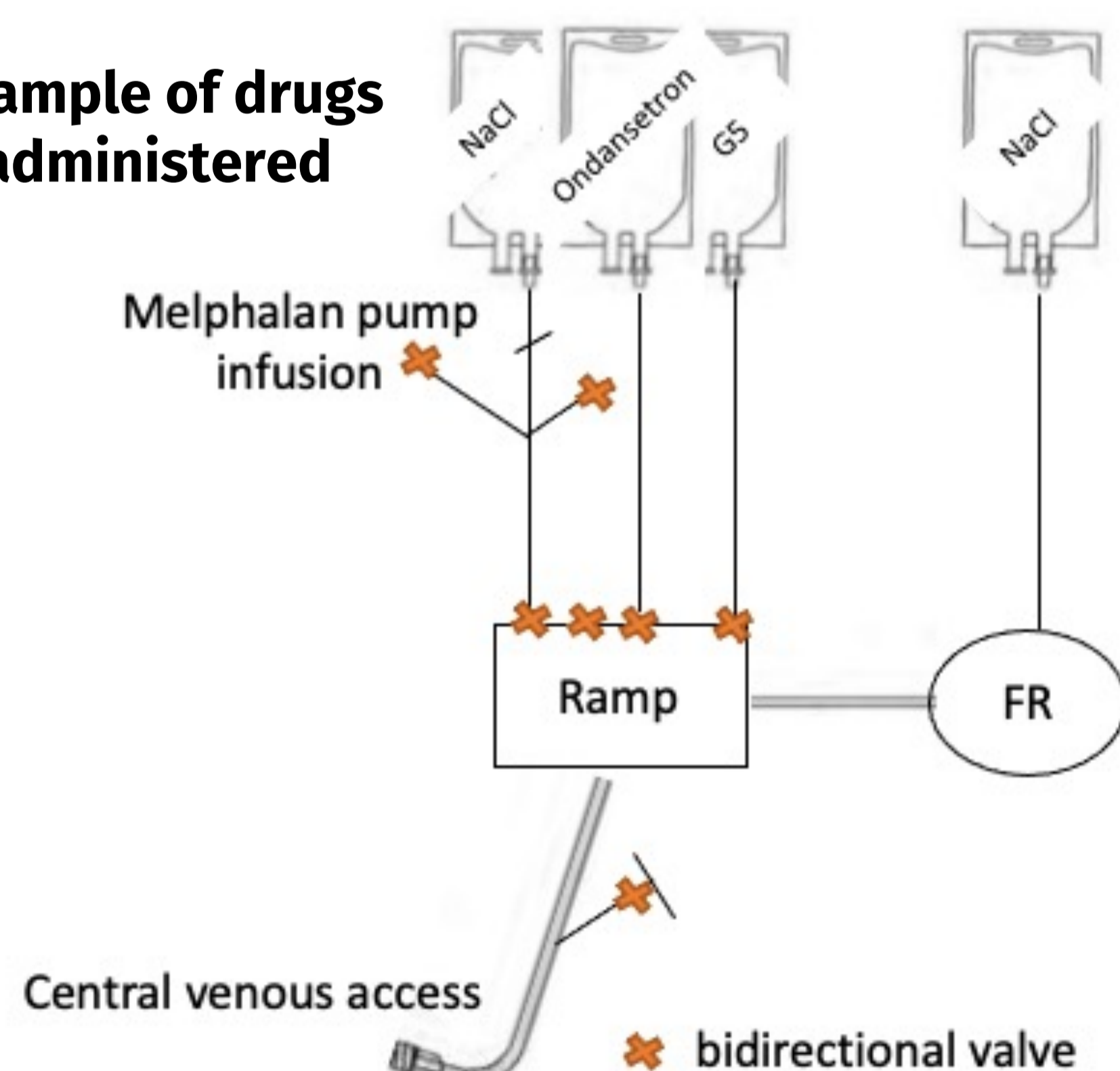
3 to 7 days in hospital (chemotherapy protocols)

Under discussion with the medical team

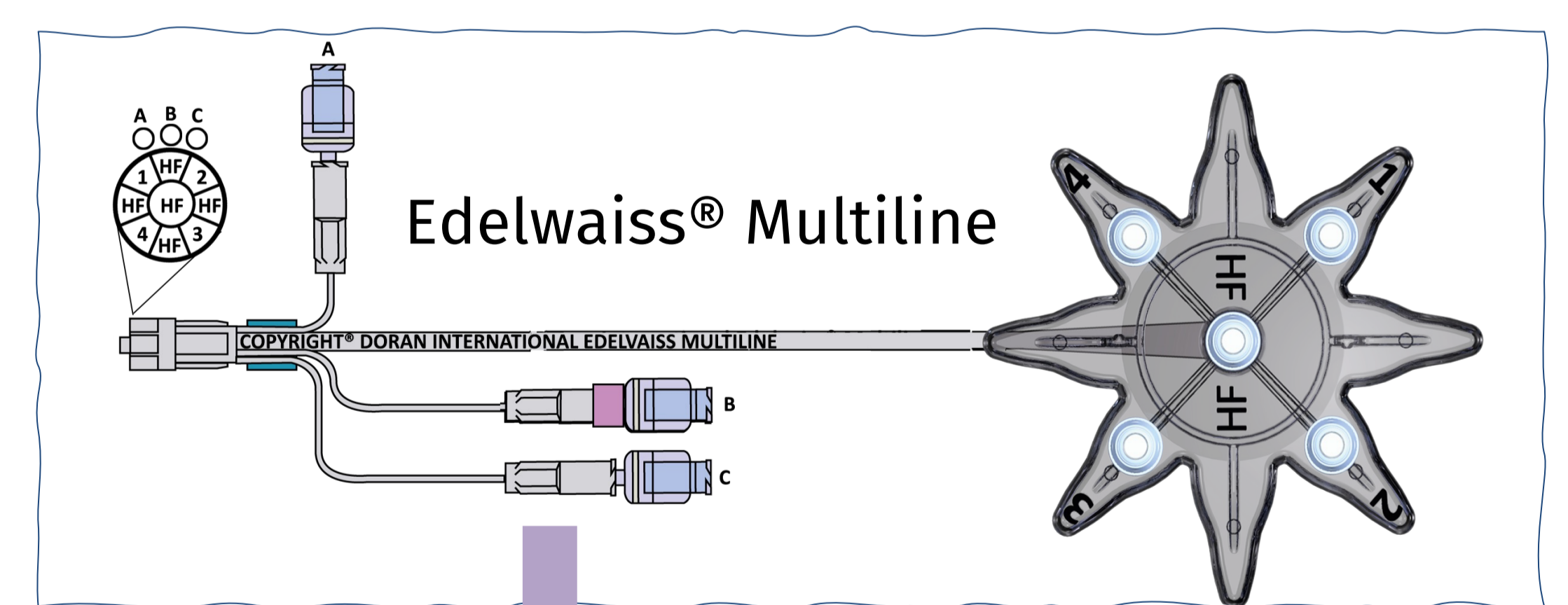
21 days in hospital (autograft and CAR-T infusion)

Very low common volume: Limit **flow rate problems**
8 drugs without mixing: Limit **incompatibilities**
21 days in place: Limit **handling** and the associated **risk of infection**

Example of drugs administered



INFUSION SETUPS IN 2023



CONCLUSION AND RELEVANCE

- The results of this audit appear to be **very positive**. The hematology unit, whose nursing team is aware of the risks associated with the administration of chemotherapy, is a unit accustomed to the availability of pharmacists.
- This audit allowed us to observe **some errors during infusion practice**: absence of plugs, inadequate programmed flow rate and absence of non-return valve during flow-sensitive drugs infusion.
- In order to improve infusion practice, a **new standardized infusion set-up** has been proposed to the unit including non-return valves. This set-up should make it possible to **prevent the risks**, particularly those related to flow rate and incompatibilities. However, this change in practice will require support for the teams and a new audit to evaluate the impact of this work.

