Background

Chemotherapy extravasation is an accidental complication of antineoplastic administration. Due to its low incidence but serious consequences, further studies are needed to achieve a better management.

Purpose

- The context in which extravasation occurs
- The degree of compliance with the extravasation protocol
- The impact of electronic record on extravasation notification

Methods

- Retrospective study
- Set in a tertiary-level hospital
- Between 2013 and 2017
- 54 extravasation notifications: on paper or electronically
- Collected variables:
  - Patient demographics
  - Antineoplastic drug extravasated
  - Potential factors for extravasation
  - Protocol adherence
  - Description of resulting damage
  - Degree of fill in the form
  - Follow-up of patients

Results

Patient demographics

- Mean age: 64 years
- Female: 52%
- Male: 48%

Potential factors for extravasation

- Quality of the vein: Weak 36.5%, Small 36.5%, Though 11.5%
- Use of a peripheral catheter: 94%
- Point of puncture: 51.9%
- The safest site is the forearm

Antineoplastic drug extravasated

- Carboplatin (18.5%)
- Paclitaxel (14.8%)

Most frequent drugs

- Vesicant: 38.9%
- Irritant: 48.2%
- Non-vesicant: 12.9%

Protocol adherence

- Edema: 64.8%
- Pain: 57.4%
- Redness: 33.3%

Most frequent signs and symptoms

- Conclusions

Although incidence of extravasation is low, patient education and nursing staff training are essential for an early detection, a correct actuation, an adequate record of the incident and a proper follow-up.

If the patient’s venous assessment indicates a potential issue with access, peripheral catheter should be avoided, especially if the drug is vesicant and it is infused over more than 30 minutes (such as paclitaxel).