

# THE RESULT OF THE APPLICATION OF A PROTOCOL FOR THE MANAGEMENT OF THE EXTRAVASATION OF CYTOSTATIC AGENTS

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**Purpose:** To describe the results of the application of a protocol for handling highly vesicant cytostatic agents in outpatient chemotherapy wards.

**Methods and analysis:** A descriptive and prospective study of a series of cases in an ambulatory chemotherapy service, where a management protocol was applied in the extravasation of highly vesicant cytostatic drugs that was designed based on a through review of existing literature.

# PATIENT CHARACTERISTICS

Cases	DX	Age	Line/Cycle	Regimen	ECOG	Gender
Case 1	Sarcoma	64	First line/4 <sup>o</sup> cycle	MAI (Ifosfamide/ Mesna/ Doxorubicin)	0	Female
Case 2	NHL	67	First line/3 <sup>o</sup> cycle	R-CHOP	0	Female

Cases	Extravasated Agent	Vol	Catheter Site	Catheter Size	Safety Barriers
Case 1	Doxorubicin	10cc	Forearm's Dorse	24 GA/ 0.75 IN 0.7 x 19mm	Education Protocols Adherence
Case 2	Doxorubicin	30cc	Forearm	24 GA/ 0.75 IN 0.7 x 19mm	Education Protocols Adherence

# Initial Management of Extravasation



**Step 1**  
Stop infusion, desconect drip, do not remove cannula



**Step 2**  
Identify extravasated agent



**Step 3**  
Aspirate the extravasated agent as much as possible and quantify. Do not press the area. Remove cannula



**Step 4**  
Mark extravasated area



**Step 5**  
Notify MD/ Plastic Surgeon. Start specific management of extravasation.

**VESICANT**

**NON VESICANT**

Locate and neutralize agents:  
Anthracyclines  
Oncologic Antibiotics  
Alkylating Agents

Disperse and Dilute agents:  
Vinca  
Taxanes  
Platinum

Cold compresses

**Step 5 A**  
Locate: Apply dry cold compresses  
for 20 min each 6 h x 48 h  
Avoid alcohol compresses

**Step 5 A**  
Disperse: apply hot compresses  
for 20 min each 6h x 48 h

**Step 5 B**  
Neutralize: Use specific antidotes  
Antraciclínes/ Mitomycin  
  
DMSO (Dimethyl Sulfoxide) for 30 min  
each 6 h x 14 d

**Step 5 B**  
Dilute: Administer agents that  
increase reabsorption  
  
Vinca Alkaloids y Taxanes  
HYALURONIDASE



**Step 6:**  
Elevate the Limb / Pain relief measures

# RESULTS

**Case 2**

**Day 00**

**Day 02**



# CONCLUSION

The application of a protocol for the management of the extravasation of highly vesicant oncological drugs contributes to the safe management of cytostatic extravasation, the prevention of tissue damage, the assurance of treatment continuity and favors the standardization of nursing care for such situation.

