

Chemotherapy Vesicant Extravasation Management [3289]

1. If you suspect or recognize an extravasation, please stop the chemotherapy immediately.
 - a. Vesicant: a medication or agent that is capable of causing tissue damage or tissue necrosis if there is infiltration into the surrounding tissue.
 - b. Extravasation: a passage or escape into the tissues; passage or escape of antineoplastic chemotherapy medications into tissue.
2. Notify the physician ordering the chemotherapy immediately.
3. Use the information below to discuss extravasation management with the physician. The management varies by medication category.

Reference: Olsen, M., LeFebvre, K.B., & Brassill, K.J. (2019). Chemotherapy and Immunotherapy Guidelines and Recommendations for Practice. Oncology Nursing Society, Pittsburgh, PA.

Alkylating Agents (Trabectedin [Yondelis])

Treatment/Monitoring Instructions

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Obtain and initiate antidote	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply cold compress	Routine, Every 6 hours, Starting S with First Occurrence Include Now Affected area: Waking hours only? Nurse to schedule? Special Instructions: for 20 minutes
<input type="checkbox"/> Assess IV site	Routine, Every shift Assess for pain, blister formation, and skin sloughing.
<input type="checkbox"/> Patient education	Routine, Once For 1 Occurrences Education for: Other (specify) Specify: Instruct patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain. Report arm or hand swelling and/or stiffness if a peripheral extravasation.

Alkylating Agents (Mechlorethamine hydrochloride [Nitrogen Mustard Mustargen])

Mechlorethamine Antidote

<input type="checkbox"/> sodium thiosulfate 4% injection solution	subcutaneous, once, For 1 Doses Inject 2 ml of Sodium Thiosulfate 4% (into the extravasation site) FOR EACH MG of MECHLORETHAMINE. Inject the solution subcutaneously into the extravasation site using a 25 gauge or smaller needle. Change needle with each injection.
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Treatment/Monitoring Instructions

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Obtain and initiate antidote	Routine, Once For 1 Occurrences

<input type="checkbox"/> Apply ice pack	Routine, Once For 1 Occurrences Affected area: Special Instructions: For 6-12 hours following sodium thiosulfate
<input type="checkbox"/> Assess IV site	Routine, Every shift Assess for pain, blister formation, and skin sloughing.
<input type="checkbox"/> Patient education	Routine, Once For 1 Occurrences Education for: Other (specify) Specify: Instruct patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain. Report arm or hand swelling and/or stiffness if a peripheral extravasation.

Anthracenediones (Mitoxantrone [Novantrone])

Treatment/Monitoring Instructions

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply ice pack	Routine, Every 6 hours, Starting S For Until specified Affected area: Special Instructions: For 15-20 minutes at least 4 times a day for the first 24 hours
<input type="checkbox"/> Assess IV site	Routine, Every shift Extravasation may cause a bluish discoloration of infusion site area and may require debridement and skin grafting. Assess site for pain, blister formation, and skin sloughing.

Anthracyclines (Daunorubicin [Cerubidine]; Doxorubicin [Adriamycin]; Epirubicin [Ellence]; Idarubicin [Idamycin])

Antidote

Dose should be reduced by 50% with creatinine clearance values less than 40 mL/min.

<input type="checkbox"/> dexrazoxane IV	"Followed by" Linked Panel
<input type="checkbox"/> DEXRAZOXANE ORDERABLE (FOR EXTRAVASATION)	1,000 mg/m ² , intravenous, for 1 Hours, every 24 hours, For 2 Doses Dexrazoxane must be given ASAP and within 6 hours of extravasation. Infuse in large vein in an area other than the extravasation.
<input type="checkbox"/> DEXRAZOXANE ORDERABLE (FOR EXTRAVASATION)	500 mg/m ² , intravenous, for 1 Hours, every 24 hours, Starting S+2, For 1 Doses Infuse in large vein in an area other than the extravasation.

Treatment/Monitoring Considerations

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Obtain and initiate antidote	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply ice pack	Routine, Once For 1 Occurrences Affected area: Special Instructions: Apply ice pack, but remove at least 15 minutes prior to Dexrazoxane treatment.

<input type="checkbox"/> Assess IV site	Routine, Every shift For pain, blister formation, and skin sloughing, or worsening pain.
<input type="checkbox"/> Patient education	Routine, Once For 1 Occurrences Education for: Other (specify) Specify: Instruct patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain. Report arm or hand swelling and/or stiffness if a peripheral extravasation.

Antitumor Antibiotics: (Mitomycin; Dactinomycin; Daunorubicin and cytarabine; Doxorubicin hydrochloride liposome)

Antidote for Mitomycin

<input type="checkbox"/> dimethyl sulfoxide (RIMSO-50) 50 % solution	50 mL, topical (top), PRN, extravasation Apply 50% DMSO using a saturated gauze pad to an area twice the size of the extravasation. May repeat every 4-8 hours for 7-14 days.
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Treatment/Monitoring Considerations

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<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate Extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply ice pack	Routine, Every 6 hours, Starting S For Until specified Affected area: Special Instructions: For 15-20 minutes at least 4 times per day for the first 24 hours
<input type="checkbox"/> Assess IV site	Routine, Every shift Assess extravasation area for pain, blister formation, and skin sloughing.

Plant alkaloids and microtubule inhibitors (Vinblastine [Velban]; Vincristine [Oncovin]; Vinorelbine [Navelbine])

Antidote

<input type="checkbox"/> hyaluronidase (HYLENEX) 150 unit/mL injection	150 Units, subcutaneous, once Administer 150 units of hyaluronidase solution as 5 separate injections each containing 0.2 ml subcutaneously into extravasation site using a 25 gauge or smaller needle. Change needle with each injection.
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Treatment/Monitoring Considerations

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Obtain and initiate antidote	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply heat to affected area	Routine, Every 6 hours, Starting S For 4 Occurrences Affected area: Apply warm pack for 15-20 minutes four times per day for the first 24 hours.

<input type="checkbox"/> Assess IV site	Routine, Until discontinued, Starting S For pain, blister formation, and skin sloughing, periodically.
<input type="checkbox"/> Patient education	Routine, Once For 1 Occurrences Education for: Other (specify) Specify: Instruct patient to monitor extravasation and report any fever, chills, blistering, skin sloughing, and worsening pain.

Taxanes (Docetaxel [Taxotere]; Paclitaxel [Taxol]; Paclitaxel protein bound [Abraxane]; Cabazitaxel [Jeftana])

Antidote

<input type="checkbox"/> hyaluronidase (HYLENEX) 150 unit/mL injection	150 Units, subcutaneous, once Administer 150 units of hyaluronidase solution as 5 separate injections each containing 0.2 ml subcutaneously into extravasation site using a 25 gauge or smaller needle. Change needle with each injection.
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Treatment/Monitoring Considerations

<input type="checkbox"/> Stop infusion immediately and disconnect, but leave the cannula in place	Routine, Once For 1 Occurrences
<input type="checkbox"/> Gently aspirate as much extravasated fluid as possible through the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> DO NOT FLUSH THE LINE	Routine, Once For 1 Occurrences
<input type="checkbox"/> Remove the cannula	Routine, Once For 1 Occurrences
<input type="checkbox"/> Elevate extremity	Routine, Once For 1 Occurrences
<input type="checkbox"/> Apply ice pack	Routine, Every 6 hours, Starting S Affected area: Special Instructions: For 15-20 minutes at least four times per day for the first 24 hours
<input type="checkbox"/> Assess IV site	Routine, Every shift Assess extravasation site for pain, blister formation, and skin sloughing. Docetaxel extravasation may cause hyperpigmentation, redness, and tenderness. Paclitaxel is a mild vesicant; extravasation may cause induration, blistering, and, rarely, tissue necrosis.
<input type="checkbox"/> Patient education	Routine, Once For 1 Occurrences Education for: Other (specify) Specify: Instruct patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain. Report arm or hand swelling and/or stiffness if a peripheral extravasation.