
### Child and Youth Health Manual

**Title:** Medication Administration: Use of Antidotes for the Management of Extravasation

**Version:** June 2011

It is difficult to be certain that injection of antidotes into the area of extravasation is of benefit and reports are conflicting. Most small extravasations do not result in serious problems without injection of antidotes, so that injection of specific antidotes should likely be restricted to larger extravasations (>1-2 mL).

The use of an antidote requires a physician’s order. Antidotes, other than dimethylsulfoxide (DMSO) and dexrazoxane are to be administered by a physician.

<table>
<thead>
<tr>
<th>Extravasated Drug</th>
<th>Suggested Antidote</th>
<th>Method of Administration</th>
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</thead>
<tbody>
<tr>
<td>daunorubicin</td>
<td>dimethylsulfoxide (DMSO) 99% topical solution (4 drops per 10 cm² area)</td>
<td>Apply to an area twice that affected by the extravasation, allow to air dry, do not cover, repeat 4 times per day for at least 7 days. Do not use DMSO in conjunction with dexrazoxane. This combination may increase tissue damage.</td>
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<tr>
<td>doxorubicin</td>
<td>dexrazoxane intravenous (IV) daily for 3 days</td>
<td>1. Dilute reconstituted dexrazoxane with Dextrose 5% or 0.9% sodium chloride to a final concentration of 1.3 to 5 mg/mL. 2. Administer daily over 1-2 hours 24 hours apart for 3 consecutive days: Days 1 &amp; 2: 1000 mg/m²/day (max 2000 mg) Day 3: 500 mg/m² (max 1000 mg) 3. Administer as soon as possible and within 6 hours of extravasation. 4. Remove cooling packs (if used) at least 15 minutes prior to start of dexrazoxane infusion. 5. Do not use DMSO in conjunction with dexrazoxane. This combination may increase tissue damage. 6. Monitor for neutropenia, thrombocytopeia.</td>
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<tr>
<td>epirubicin</td>
<td>hyaluronidase 1500 units subcutaneous (SC) or intradermal reconstituted and further diluted to 150 unit/mL concentration <strong>DO NOT ADMINISTER INTRAVENOUSLY.</strong></td>
<td>Administration by physician only. 1. Reconstitute hyaluronidase 1500 U vial with 1 mL normal saline (NS). 2. Dilute to 150 U/mL: add 1 mL of 1500 U/mL hyaluronidase to 9 mL NS. 3. Use four or five 1 mL syringes and draw up 0.2 mL into each syringe. 4. Use immediately following reconstitution. Using a 27-30 gauge needle, inject 0.1-0.2 mL subcutaneously or intradermally in 4 to 5 sites around the circumference of</td>
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<tr>
<td>mitomycin</td>
<td>vinblastine vincristine vinorelbine aminophylline calcium chloride (≥ 10%) cloxacillin dextrose (≥ 10%) magnesium sulfate (≥ 20%) mannotol</td>
<td></td>
</tr>
</tbody>
</table>

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