

# مروری بر چند دارو

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1401

نوم دارو	دسته	طبقه	اولين اقدام	آنتى دوت	توضيح
Acetazolamide		Vesicant		No consensus / recommendations available	
Aciclovir		Vesicant	Cold compress	No consensus / recommendations available	
Actinomycin D	Cytotoxic	Vesicant	Cold compress	Dimethyl sulfoxide (DMSO) 99% solution 20	
Adrenaline		Irritant 21 Vesicant	Warm compress	Phentolamine	Ischemic necrosis secondary to local vasoconstriction can result from extravasation.
Amsacrine	Cytotoxic	Vesicant	Cold compress	Dimethyl sulfoxide (DMSO) 99% solution 20	
Aminophylline		Vesicant	Warm compress	No consensus / recommendations available	
Amiodarone		Irritant	Cold compress	No consensus / recommendations	

<b>Amphotericin</b>		Vesicant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Asparaginase</b>		Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Arsenic Trioxide</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Azathioprine</b>	Cytotoxic	Irritant		No consensus / recommendations available	
<b>Benzympenicillin</b>				No consensus / recommendations available	
<b>Bevacizumab</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Warm compress</b>	No consensus / recommendations available	
<b>Bleomycin</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Bortezomib</b>	Cytotoxic	Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Busulfan</b>	Cytotoxic	Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Calcium Chloride</b>		Vesicant	<b>Warm compress</b>	No consensus / recommendations	Hypertonic solutions may cause prolonged

					contraction leading to tissue injury and ischemia
<b>Calcium gluconate</b>		Vesicant	<b>Warm compress</b>	No consensus / recommendations available	Soft tissue calcification (subcutaneous calcinosis) caused by extravasation.
<b>Carboplatin</b>	Cytotoxic	Irritant $\geq$ (10mg/mL)	<b>Cold compress</b>	Evidence conflicting: Dimethyl sulfoxide 34,35 Not indicated 20	Hydrocortisone Cream 36,37
<b>Carmustine</b>	Cytotoxic	Irritant	<b>Cold compress</b> <b>Elevate site of extravasation</b>	No consensus / recommendations available	
<b>Cefotaxime</b>		Vesicant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Ceftriaxone</b>		Unclassified	<b>Cold compress (optional)</b>	No consensus / recommendations available	Can cause phlebitis, pain, induration at injection site <sup>12</sup>
<b>Cidofovir</b>	Cytotoxic	Non-Irritant(Neutral)	<b>Cold compress</b>	No consensus / recommendations available	
<b>Cisplatin</b>	Cytotoxic	Irritant (<0.5mg/mL) <sup>20</sup> Irritant with vesicant properties (>0.5mg/mL) <sup>20</sup> Vesicant>0.4mg/mL	<b>Cold compress</b> <b>Elevate site of extravasation</b>	Evidence conflicting: Not indicated <0.5mg/mL <sup>20</sup> No specific antidote (>0.5mg/mL) <sup>20</sup> Sodium thiosulfate OR Dimethyl sulfoxide (DMSO) 99% solution 34,35 Hydrocortisone Cream	Cisplatin extravasation treatment is only indicated for large volume extravasations (> 20 mL) of a concentrated solution (> 0.4 mg/mL). <sup>34</sup> Doses of sodium thiosulfate for newborns and infants have not been established

<b>Cladrabine</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Clarithromycin</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Clofarabine</b>	Cytotoxic	Non- Irritant(Neutral)	<b>Evidence conflicting: Warm compress 36 None 34,37</b>	<i>Evidence conflicting:</i> Not indicated <sup>34</sup> Hyaluronidase can be considered if large volume extravasation. <sup>36</sup>	
<b>Contrast</b>		Vesicant	<b>Warm compress</b>	Treatment should be individualized if the extravasated volume is between 5 mL and 20 mL. <sup>29</sup>	Hypertonic solutions (e.g., radio contrast media) may cause prolonged depolarization and contraction o f pre- and post-capillary
				Hyaluronidase can be considered if large volume contrast extravasation. <sup>14</sup> For ionic contrast media extravasation >20mL, surgical drainage within 6 hours should be considered.	leading to tissue injury and ischemia. 7, 14, 25, 28, 29, 30, 31, 32, 33 Hyperosmolar solutions (e.g., conventional ionic contrast media) exert osmotic pressure, and may result in compartment syndrome if infiltration occur 7, 14, 29

<b>Co-trimoxazole</b>		Unclassified	<b>Cold compress</b>	No consensus / recommendations available	
<b>Cyclophosphamide</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Cytarabine</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Dacarbazine</b>	Cytotoxic	Irritant	<b>Cold compress Elevate site of extravasation</b>	Evidence conflicting: None 20,34,35 Dimethyl sulfoxide (DMSO) 99% solution 34,35,36 Hydrocortisone 36,3	
<b>Dactinomycin</b>	Cytotoxic	Vesicant	<b>Cold compress Elevate site of extravasation</b>	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,36,37 None vs Dimethyl Sulfoxide (DMSO) 99% solution 34,35	Do not apply heat, it may worsen injury. Protect site from heat and sunlight
<b>Daunorubicin</b>	Cytotoxic	Vesicant	<b>Cold compress Elevate site of extravasation</b>	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,36,37 Dexrazoxane vs Dimethyl Sulfoxide (DMSO) 99% solution 34,35	Do not use Dexrazoxane and DMSO together. The combination may increase tissue damage. Do not apply heat, it may worsen injury. Protect site from heat and sunlight. Corticosteroids worsen toxicity
<b>Daunorubicin Liposomal</b>	Cytotoxic	Irritant with vesicant properties	<b>Cold compress</b>	Dimethyl sulfoxide (DMSO) 99% solution 10-14 days 20	
<b>Diazepam</b>		Vesicant(Irritant)	<b>Cold compress</b>	No consensus / recommendations available	
<b>Digoxin</b>		Vesicant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Dobutamine</b>		Irritant	<b>Warm compress</b>	Phentolamine 7,16,17,18,19,24	

<b>Dopamine</b>		Irritant	<b>Warm compress</b>	Phentolamine 7,16,17,18,19,24	Ischemic necrosis secondary to local vasoconstriction can result from extravasation of sympathomimetic agents dobutamine, dopamine , epinephrine, metaraminol, norepinephrine 7,25,26,27,28
<b>Doxorubicin</b>	Cytotoxic	Vesicant	<b>Cold compress Elevate site of extravasation</b>	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,36,37 Dexrazoxane vs Dimethyl sulfoxide (DMSO) 99% solution 34,35	Do not use Dexrazoxane and DMSO together. The combination may increase tissue damage Do not apply heat, worsen injury. Protect site from heat and sunlight. Corticosteroids worsen . toxicity
<b>Doxorubicin Liposomal</b>	Cytotoxic	Irritant with Vesicant properties	<b>Cold compress</b>	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 10-14 days 36,37 No recommended antidote 20	
<b>Droperidol</b>		Vesicant	<b>Cold compress (optional)</b>	No specific antidote	
<b>Epirubicin</b>	Cytotoxic	Vesicant	<b>Cold compress</b>	Dimethyl sulfoxide (DMSO) 99% solution 20,36,37	
<b>Erythromycin</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Esmolol</b>		Vesicant	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Etoposide</b>	Cytotoxic	Irritant with vesicant properties	<b>Warm compress Elevate site of extravasation</b>	Evidence conflicting: Not indicated 20 Hydrocortisone 36,37 Hyaluronidase 34,35	
<b>Etoposide Phosphate</b>	Cytotoxic	Irritant	<b>Warm compress Elevate site of extravasation</b>	Evidence conflicting: Not indicated 20 Hyaluronidase 34,35	
<b>Fludarabine</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Fluorouracil</b>	Cytotoxic	Irritant	<b>Cold compress</b>	Evidence conflicting: Hydrocortisone 36 None vs Dimethyl sulfoxide (DMSO) 99% solution 34,35 Not indicated 20	

<b>Foscarnet</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Ganciclovir</b>	Cytotoxic	Vesicant 21,22,23 Non-Irritant (Neutral) 20	<b>Cold compress (optional)</b>	No consensus / recommendations available	
<b>Gemcitabine</b>	Cytotoxic	Irritant 20,34 Irritant/Non-irritant (neutral) 34,36,37	<b>Evidence conflicting: Cold compress Warm compress 22,36 None 34,37</b>	Evidence conflicting: No specific antidote 20,34,35 Hyaluronidase 22	
<b>Glucose</b>		Irritant	<b>Warm compress</b>	No consensus / recommendations available	Hypertonic solutions may cause prolonged depolarization and contraction of pre- and post-capillary smooth muscle sphincters , leading to tissue injury and ischemia. 7,14,25,28,29,30,31,32,33.
<b>Hypertonic saline (&gt;5%)</b>		Vesicant	<b>Warm compress</b>	No consensus / recommendations available	
<b>Idarubicin</b>	Cytotoxic	Vesicant (DNA binding)	<b>Cold compress Elevate site of extravasation</b>	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,37 Dexrazoxane vs Dimethyl Sulfoxide (DMSO) 99% solution 34,35,36	Do not use Dexrazoxane and DMSO together. The combination may increase tissue damage. Do not apply heat, it may worsen injury Protect site from heat and sunlight Corticosteroids worsen toxicity
<b>Ifosfamide</b>	Cytotoxic	Non-Irritant (Neutral) 20,36 Irritant 34	<b>Cold compress (optional)</b>	Evidence conflicting: Not indicated 20,21,37 None vs Dimethyl sulfoxide (DMSO) 99% solution 34,35	
<b>Irinotecan</b>	Cytotoxic	Irritant	<b>Evidence conflicting: Ice 34 Cold compress 20,22,36,37 Warm compress 21</b>	Evidence conflicting: Not indicated 20 No specific antidote 22,34 Hydrocortisone 21,3	
<b>Iron sucrose (venofer)</b>		Vesicant	<b>Cold compress</b>	No consensus / recommendations available	



		Non-irritant (Neutral) 36	None 37 Elevate site of extravasation		
<b>Metaraminol</b>		Irritant	Warm compress	Phentolamine 7,16,17,18,19,24	Ischemic necrosis secondary to local vasoconstriction can result from extravasation of sympathomimetic agents including dobutamine , dopamine, epinephrine, metaraminol, and Norepinephrine 7,25,26,27,28
<b>Methotrexate</b>	Cytotoxic	Non-Irritant (Neutral)	Cold compress (optional)	Evidence conflicting: Not indicated 20,34,35 Hydrocortisone 22,36,3	
<b>Mitomycin C</b>	Cytotoxic	Vesicant	Cold compress Elevate site of extravasation	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,22,36,37 Dimethyl sulfoxide (DMSO) 99% solution vs Sodium thiosulfate 34,35	Do not apply heat It may worsen injury. Protect extravasation site from heat and sunlight. Delayed injuries from Mitomycin have been documented at sites distant from the site of extravasation
<b>Mitozantrone</b>	Cytotoxic	Irritant with Vesicant properties	Cold compress Elevate site of extravasation	Evidence conflicting: Dimethyl sulfoxide (DMSO) 99% solution 20,22,36,37 Dexrazoxane vs Dimethyl Sulfoxide (DMSO) 99% solution 34,35 Hydrocortisone 21,36	Do not use Dexrazoxane and DMSO together. The combination may increase tissue damage
<b>Noradrenaline</b>		Vesicant	Warm compress	Phentolamine 7,16,17,18,19,24	
<b>Omeprazole</b>		Irritant		No consensus / recommendations available	
<b>Oxaliplatin</b>	Cytotoxic	Irritant with Vesicant Properties	Warm compress DO NOT APPLY COLD Cold can precipitate acute neurotoxicity Elevate site of extravasation	No consensus / recommendations available	Early administration of corticosteroids may be beneficial to decrease inflammation
<b>Paclitaxel</b>	Cytotoxic	Irritant with Vesicant properties	Cold compress Elevate site of extravasation	Evidence conflicting: No recommended antidote 20 Hyaluronidase 22.34.35.37	

				Hydrocortisone for inflammation 22	
<b>Phenobarbitone</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Phentolamine</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Phenytoin</b>		Vesicant	<b>Warm compress</b>	Hyaluronidase	
<b>Potassium Chloride (&gt;40mmol/L)</b>		Vesicant	<b>Warm compress</b>	No consensus / recommendations available	Hypertonic solutions may cause prolonged depolarization and contraction of pre- and post-capillary smooth muscle sphincters , leading to tissue injury and ischemia. 7,14,25,28,29,30,31,32,33
<b>Promethazine</b>		Irritant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Sodium Bicarbonate</b>		Vesicant	<b>Warm compress</b>	No consensus / recommendations available	
<b>Teniposide</b>	Cytotoxic	Irritant 21 Irritant with vesicant properties 20,34	<b>Evidence conflicting: Warm compress 21 Cold compress 20,34 Elevate site of extravasation</b>	Evidence conflicting: No specific antidote 20 Hyaluronidase 34,35 Hydrocortisone 21,36	
<b>Thiopentone</b>		Vesicant	<b>Cold compress</b>	No consensus / recommendations available	
<b>Thiotepa</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Evidence conflicting: None 20,21,34 Warm compress</b>	Evidence conflicting: Not indicated 20,34 Hyaluronidase 22,36,37	
<b>Topotecan</b>	Cytotoxic	Non-Irritant (Neutral)	<b>Evidence conflicting: None 20 Warm compress 21 Cold compress 34,36,37</b>	Evidence conflicting: No specific antidote 34 Not indicated 20 Hydrocortisone 22,36	
<b>TPN</b>		Vesicant	<b>Warm compress</b>	Hyaluronidase 22	Hyperosmolar solutions (e.g. parenteral nutrition and conventional ionic contrast media) exert osmotic pressure,

					and may result in compartment syndrome if infiltration occurs 7,14,29
Vancomycin		Irritant	Cold compress	No consensus / recommendations available	
Vinblastine	Cytotoxic	Vesicant	Warm compress Elevate site of extravasation	Hyaluronidase 20	Corticosteroids and topical cooling . worsen toxicity
Vincristine	Cytotoxic	Vesicant	Warm compress Elevate site of extravasation	Hyaluronidase 20	Corticosteroids and topical cooling . worsen toxicity
Vinorelbine	Cytotoxic	Vesicant	Warm compress Elevate site of extravasation	Hyaluronidase 2	Corticosteroids and topical cooling worsen . toxicity

از توجه شما سپاس گزارم