

Topical Antimicrobials For Selective Use In Wound Care

Agent	Vehicle	Spectrum							Comments
		SA	MRSA	Strep	PS	F	Anaerobic	VRE	
Benzyl Peroxide	<ul style="list-style-type: none"> Gel Lotion 	X		X	X		X		<ul style="list-style-type: none"> Reserve for MRSA and other resistant gram positive organisms May be an allergen Requires direct contact with the wound surface
Povidone Iodine	<ul style="list-style-type: none"> Solution 	X	X	X	X	X	X	X	<ul style="list-style-type: none"> Has a moderate cytotoxic effect Appropriate for use on 'maintenance'/'non-healable' wounds May use on 'healable' wounds, if reduction of bacterial burden is of greater immediate concern than wound healing (two week course maximum) Requires direct contact with the wound surface An iodine-surfactant complex
Chlorhexidine	<ul style="list-style-type: none"> Solution Tulle gauze 	X	X	X	X	X	X	X	<ul style="list-style-type: none"> Appropriate for use on 'maintenance'/'non-healable' wounds May use on 'healable' wounds, if reduction of bacterial burden is of greater immediate concern than wound healing (two week course maximum) In 'healable' wounds, it is best used during the inflammatory stage of wound healing, as it is cytotoxic during the proliferative phase Requires direct contact with the wound surface
Acetic Acid	<ul style="list-style-type: none"> Solution 				X				<ul style="list-style-type: none"> Requires direct contact with the wound surface for a minimum of five minutes to be effective Apply a 0.5-1% strength (i.e. 4 parts water to 1 part white table vinegar) compress to the wound to manage Pseudomonas – STOP when the greenish wound discharge stops Consider protecting periwound skin during use
Mupuricin	<ul style="list-style-type: none"> Cream Ointment 	X	X	X					<ul style="list-style-type: none"> MUST be in direct contact with the wound bed Reserve for MRSA decolonization
Metronidazole	<ul style="list-style-type: none"> Cream Lotion Gel 						X		<ul style="list-style-type: none"> Requires direct contact with the wound surface Reserve for use on anaerobes, i.e. to reduce odor

Selective Use

Legend: (SA=Staphylococcus Aureus), (MRSA=Methicillin Resistant Staph Aureus), (Strep=Streptococci), (PS=Pseudomonas), (F=Fungi –Mucor, Aspergillus, Candida Albicans, Candida Topicalis, Candida Glabrata, & Saccharomyces), (VRE=Vancomycin- Resistant Enterococci).

References (adapted from):

1. Keast D and Lindholm C. Ensuring that the correct antimicrobial dressing is selected. Wounds International. 2012;3(3):22-28.
2. Registered Nurses Association of Ontario. Assessment and management of foot ulcers for people with diabetes, second edition. Last retrieved October 23, 2014 from: <http://rnao.ca/bpg/guidelines/assessment-and-management-foot-ulcers-people-diabetes-second-edition>

