PURPOSE:
To provide guidelines for the safe use of silver nitrate sticks to reduce and/or eliminate the risk of unintentional injury. Use of Silver Nitrate stick is to remove dead, dying or infected tissue on wounds.

CONSIDERATIONS:
1. Silver Nitrate Stick Therapy is an antimicrobial, and has anti-inflammatory and healing characteristics.
2. Be sure to have a physician’s order before proceeding with treatment.
3. Silver Nitrate Stick Therapy is a chemical cautery agent which is used to:
   a. Remove excess granulation tissue around stomas such as gastrostomy and tracheotomy stomas.
   b. Remove necrotic tissue from a nonhealing or infected wound.
   c. Remove warts, moles and other unwanted skin blemishes.
   d. Treat hemostasis issues such as oral ulcers and nosebleeds.
4. Silver nitrate is a caustic agent and therefore great care should be taken when used as it can leak and cause skin staining and tissue burns to other unintended areas of treatment.
5. If the silver nitrate leaks into unintended areas, the site should be irrigated with copious amounts of sterile water.
6. Eye protection should be worn in the event it is splattered from the nose or tracheostomy stoma of a breathing patient.
7. Due to the type of action, pain is associated to the use of silver nitrate. Consider patient’s pain tolerance and need for pre-medication prior to procedure including use of topical anesthetic.

EQUIPMENT:
Clean wound dressings
Nitrile gloves
Normal saline
Silver nitrate sticks or pencils
Vaseline, or petroleum jelly
Topical anesthetic

PROCEDURE:
1. Adhere to Standard Precautions
2. Explain procedure to the patient.
3. Medicate patient with pain medication, as needed.
4. Assess wound, review physician orders and appropriate use of Silver Nitrate Stick Therapy for wound debridement.
5. Using normal saline, cleanse the wound bed prior to debridement. Dry surrounding area with a sterile dressing.
6. Apply skin preparation or barrier product to surrounding skin for protection against skin staining and tissue burns.
7. Don nitrile gloves as opposed to vinyl gloves. Vinyl gloves do not protect from burn through or from staining hands.
8. Apply silver nitrate sticks gently to the wound. A moist, or bleeding wound will be wet enough to activate the stick. However, if it is dry, briefly touch the edge of the stick into the normal saline to activate the stick.
9. Use a rolling method to apply sticks to wound, being careful not to touch healthy skin. Time for application on wound is dependent on wound status.
10. It may take more than one stick and/or more than one session to debride entire wound.
11. If using for cauterizing purposes, apply some pressure during the procedure.
12. Be sure to stop treatment procedure if the burning sensation is too much for patient without any anesthetic.
13. Remove all dead and extra tissue to reduce risk of bacterial growth.
14. Flush with normal saline again to cleanse the wound.
15. Treat wound with any necessary topical antibiotics as ordered by physician.
17. If treatment is ineffective on granulation tissue, consult a dermatologist for biopsy of tissue.

AFTER CARE:
1. Instruct the patient on the appearance of the wound. The silver with burn the dead tissue leaving it grey. This is normal. The wound may look worse at next dressing change, but the grey tissue will come off easily when wiped with saline-moistened gauze.
2. Record procedure and patient response in the clinical record.
3. Follow-up with physician as needed or when changes to orders are warranted for patient condition.

REFERENCES:
Application and Use of Silver Nitrate (AgNO3). (2009 December) VNA Home Health and Hospice Clinical Policy Manual.


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http://www.health.state.mn.us/divs/fpc/cww/pressureulcersbrochure.pdf
