

Decolonization of Non-ICU Patients With Devices



Section 11-8

Nursing Protocol Training

Nasal Iodophor (10% Povidone-Iodine)



Targeted Decolonization Introduction

- Our hospital is adopting a targeted decolonization protocol for adult non-intensive care unit (ICU) patients with selected medical devices:
 - Central lines
 - Midline catheters*
 - Lumbar drains
- From this training you will learn:
 - How to implement nasal decolonization with iodophor (10% povidone-iodine) for patients with medical devices who are also known to be methicillin-resistant *Staphylococcus aureus* (MRSA) carriers (by history, screening test [if performed], or clinical culture)
 - How to address special circumstances related to nasal decolonization
- This training module will take approximately 5 minutes to complete

*NOTE: The ABATE Infection Trial showed the same 32% reduction in bloodstream infection for midlines as it did for central lines.

Why Are We Targeting MRSA Carriers With Medical Devices?

- Body bacteria can cause infection in hospitals and nursing homes due to wounds, devices, and poor health of the patient
- Decolonization has been shown to prevent infections
 - For patients with multidrug-resistant organisms
 - In hospital ICUs
 - In long-term acute care hospitals
 - In hospital non-ICU patients with devices
- The **Active Bathing to Eliminate (ABATE) Infection Trial found that decolonization for adult non-ICU patients with specific medical devices reduced all-cause bloodstream infections by 32 percent and positive methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant enterococcus (VRE) cultures by 37 percent¹**

¹ Lancet. 2019 Mar 23;393(10177):1205-15

Targeted Decolonization Allergies and Refusals

- If a patient with a device is allergic to iodophor, do **NOT** apply iodophor
- Do not apply iodophor if a patient with a medical device has nasal packing or another anatomical condition precluding use of iodophor in one or both nostrils
- As is the case with any medical care, patients can refuse the protocol, but your enthusiasm and encouragement can often help them understand the value of removing germs from their nose to protect them from infection

How Do I Perform Targeted Nasal Decolonization?

- For non-ICU patients with devices known to be MRSA carriers by history, screening, or clinical culture, apply nasal iodophor twice a day for 5 days.
- Remember, we are not asking you to change your testing/screening processes for MRSA. Use your hospital's current processes.
- Nasal iodophor is an over-the-counter product and can be applied under a standardized nursing protocol.

How To Use Nasal Iodophor

1. Place patient's bed at 30 degrees, if tolerated.
2. Insert an iodophor swab into one nostril and rotate for 30 seconds covering all surfaces. Apply firmly in a circular manner to entire surface of inner nostril. Firm contact is needed, and bulge should be seen as swab is applied to nares. Discard swab.
3. Using the second swab, repeat step 2 in the other nostril (swab 2).
4. **Do not allow the patient to blow his/her nose.** If solution drips, dab the patient's nose with tissue. Discard tissue.
5. Do this twice a day for 5 days while in the hospital.
6. Stop protocol on hospital discharge.
7. If patient is readmitted and still meets inclusion criteria for the protocol, restart the protocol.

Iodophor and Nasal Devices

- **Removable nasal devices:**
 - If tolerated, briefly remove nasal prongs, etc., before applying iodophor
- **Nasal endotracheal tube/nasogastric tubes:**
 - Apply iodophor around tube
- **Nasal trauma:**
 - Do **NOT** use iodophor if nostrils are packed. If one nostril is unaffected, apply to that side only.