

Decolonization of Non-ICU Patients With Devices

Section 14-6 – Addressing Questions Asked by Staff: Safety and Side Effects of Chlorhexidine and Mupirocin

This hospital will be using chlorhexidine gluconate (CHG) and nasal mupirocin to reduce bacteria that can cause infection in adult patients who have medical devices but are not in intensive care units (ICUs). Both products have excellent safety profiles.

CHG and mupirocin are only used topically and are not absorbed into the bloodstream during use. These products have been used in healthcare for a very long time and are considered safe for use in adults.

Most people have no side effects when using mupirocin or CHG. However, as with any product, side effects may occur. With topically applied products like mupirocin and CHG, the most common side effect is irritation at the site of application.

Are CHG and mupirocin commonly used?

CHG has been used for cleansing and bathing of millions of patients.

Its use is currently considered standard of care for:

- Central line and surgical skin prep
- Surgical preoperative bathing
- Wound cleansing and irrigation
- Daily bathing in intensive care units

Nasal mupirocin has been used in thousands of patients prior to surgery, in ICUs, and in the outpatient setting to prevent MRSA and methicillin-sensitive *Staphylococcus aureus* (MSSA) infection.

How safe are CHG and mupirocin?

Local CHG side effects are estimated to occur in 1–3 percent of patients. These side effects are generally mild and resolve quickly when CHG is stopped.



Possible side effects from CHG use include:

- Skin irritation
- Rash
- Redness of skin

Similarly, the use of topically applied nasal mupirocin may cause mild side effects that include:

- Burning
- Change in sense of taste
- Congestion
- Cough
- Headache
- Sore throat
- Stinging
- Stuffy nose (unlikely)

What should I do if I suspect my patient is having an allergic reaction to CHG or mupirocin?

In **extremely rare** circumstances, severe allergic reactions to chlorhexidine or topical nasal mupirocin have been reported. **Such serious reactions are so rare that their occurrence prompts the submission of case reports.** However, if you think a patient may be developing a severe allergic reaction (including hives, severe itching, difficulty breathing, tightness in the chest, or swelling of the mouth, face, lips, or tongue), stop the decolonization drug and immediately call for rapid response. For less severe side effects, please contact the treating physician for all patient care needs. Any questions regarding issues related to the decolonization products should be directed to the patient's nurses and treating physicians.

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