Contraindications for Use of Chlorhexidine Prep with the Surgical Patient

Ocular and Otic Effects

There have been at least 4 reports of irreversible corneal damage in patients after accidental ocular exposure to chlorhexidine gluconate 4% solution in a sudsing base (chlorhexidine gluconate 4% skin cleanser) being used for preoperative facial skin preparation. Results of a controlled study in rabbits indicate that marked corneal de-epithelialization, conjunctival chemosis, and anterior stromal edema occurs 3 hours after topical application of chlorhexidine gluconate solution to the eye. If chlorhexidine gluconate topical preparations inadvertently come in contact with eyes, the eyes should be rinsed promptly with water. (See Acute Toxicity: Treatment.)

Sensorineural deafness was reported in patients who received direct application of a chlorhexidine 0.05% solution in alcohol 70% for perioperative disinfection of the ear prior to vascular myringoplasty; the solution apparently penetrated into the inner ear, causing damage to the cochlea. Evidence from animal models support these findings and show that cochlear damage is related to the concentration of chlorhexidine solution, duration of exposure, and time lapse following exposure. In the animals, there were morphologic changes in the organ of Corti and sometimes extending to the mucosal lining of the tympanic cavity. (See Cautions: Precautions and Contraindications.)


Labeled Warnings

ChloraPrep should not be used:

- In children less than 2 months of age because of the potential for excessive skin irritation and increased drug absorption
- On patients with known allergies to chlorhexidine gluconate or isopropyl alcohol
- For lumbar puncture or in contact with the meninges
- On open skin wounds or as a general skin cleanser
- In or around eyes, ears and mouth. May cause serious or permanent injury if permitted to enter and remain

Additional labeled warnings of ChloraPrep include:

- Solution contains alcohol and gives off flammable vapors — allow to dry three minutes on skin
- Do not drape or use ignition source (e.g., cautery, laser) until product is completely dry (minimum of 3 minutes on hairless skin)
- Avoid getting solution into hairy areas. Solution may take much longer to dry or may not dry completely
- Do not allow the solution to pool
- Remove any soaked materials, drapes, and gowns before using ignition sources
- Whenever prepping the neck area, place towels under each side to absorb excess solution

http://www.chloraprep.com/adverseReactions.html