ANESTHETICS (TOPICAL/MUCOSAL)

benzocaine
(ben-zoe-kane)
Antisepsis (Before/After), Anesthetic, Anesthetic Baby, Anbesol Cold Sore Therapy, Anbesol Jr., Anbesol Maximum Strength, Antipruritic, Benzocain Hemorrhoidal, Benzocaine, Benzocaine Maximum Strength, Benzocaine Cream, Benzocaine Liquid, Benzocaine Maximum Strength, Benzocaine Oral Gel, Betadine

dibucaine
(dye-buk-ane)
Dyclonine Hemorrhoidal, Durapain Hemorrhoidal, Durapain, Durapain Pain Relieving, Hemorex, Lanacane, Paste, Solufax, Supcaine, Thermodyne Hemorrhoidal, Thermodyne

dyclonine
(dye-klon-een)
Sucrets Children’s, Sucrets Maximum Strength, Sucrets Regular Strength

pramoxine
(pram-ox-een)
Calcineal, Pedi, PediFoam NS, Sarna Ultra, Trolamine, Troline Hemorrhoidal

Classification
Therapeutic: anesthetics (topical/local)

Pregnancy Category: US: C

Indications
Topical: Relief of pruritus or pain associated with minor skin disorders including burns, abrasions, bruises, insect stings/bites, dermatitis, hemorrhoids, or other forms of skin irritation. Mucosal: Provide local anesthesia to mucosal surfaces before instrumentation, minor procedures, or endoscopy. Decrease irritation caused by minor mouth and throat conditions including sore throat, gingivitis, stomatitis, or teething. Also used to suppress the gag reflex during endoscopy or intubation.

Action
Inhibit initiation and conduction of sensory nerve impulses. Therapeutic Effects: Local anesthesia with subsequent loss of sensation or relief of pain and/or pruritus.

Pharmacokinetics
Absorption: Benzocaine is poorly absorbed through intact skin. Other agents may be readily absorbed. Degree of absorption varies with surface area, presence of lesions, cuts, or abrasions; and amount of agent applied.

Distribution: Unknown.

Metabolism and Excretion: Ester-type agents (PABA derivatives, benzocaine) are metabolized by plasma and liver cholinesterases. Small amounts of amide-type agents (dibucaine) that may be absorbed are mostly metabolized by the liver.

Half-life: Unknown.

TIME/ACTION PROFILE (mucosal anesthetic effects)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzocaine</td>
<td>about 1 min</td>
<td>unknown</td>
<td>15–20 min</td>
</tr>
<tr>
<td>Dibucaine</td>
<td>within 15 min</td>
<td>unknown</td>
<td>2–4 hr</td>
</tr>
<tr>
<td>Dyclonine</td>
<td>up to 10 min</td>
<td>unknown</td>
<td>60 min</td>
</tr>
<tr>
<td>Pramoxine</td>
<td>3–5 min</td>
<td>unknown</td>
<td>unknown</td>
</tr>
</tbody>
</table>

Contraindications/Precautions
Contraindicated in: Hypersensitivity. Cross-sensitivity may occur among related agents (amide type—dibucaine; ester type—benzocaine, tetracaine). Hypersensitivity to any components of preparations including stabilizers, colorants, or bases; Active, untreated infection of affected area; Not to be used in the eye; Some products contain alcohol and should be avoided in patients with known alcohol intolerance; Pedi: Topical benzocaine products should not be used in children under 2 yr.

Use Cautiously in: Debilitated patients; Large or severely abraded areas of skin or mucous membrane; Prolonged use (not recommended); Pedi: q risk of systemic toxicity, safety not established for some products; use smaller doses due to potential for methemoglobinemia; Geri: q risk of toxicity; use smaller doses.

Adverse Reactions/Side Effects
EENT: mucosal use — loss or absent gag reflex. Derm: topical use — burning, irritation, itching, stinging, tenderness, urticaria. Misc: allergic reactions including ANAPHYLAXIS.

Interactions
Drug-Drug: Toxicity of ester-type agents may be increased by concurrent use of cholinesterase inhibitors.

Pharmacologic Class: Anesthetics
Route/Dosage

Benzocaine
Topical/Mucosal (Adults and Children): Apply cream, ointment, topical solutions, or dental/oral products as needed. Lozenges may be used hourly (not to exceed 12 lozenges/day). Rectal products may be used twice daily.

Dibucaine
Topical (Adults and Children): Apply as needed (not to exceed 30 g/day in adults or 7.5 g/day in children). Can be used 3–4 times daily.

Dyclonine
Mucosal (Adults): 2- or 3-mg lozenges may be dissolved in mouth 2 hr (not to exceed 10 lozenges/day). Solution may be used 4 times daily.

Mucosal (Children 2 yr): 1.2-mg lozenges may be dissolved in mouth q 2 hr (not to exceed 10 lozenges/day).

Pramoxine
Topical/Mucosal (Adults): Topical products may be used q 3 hr as needed. Rectal products may be used up to 5 times daily.

NURSING IMPLICATIONS

Assessment
- Assess type, location, and intensity of pain before and a few minutes after administration.
- Assess integrity of involved skin and mucous membranes before and periodically throughout course of therapy. Notify health care professional if signs of infection or irritation develop.

Potential Nursing Diagnoses

Acute pain (Indications)

Implementation
- High Alert: Overuse of topical anesthetic sprays on mucous membranes can result in methemoglobinemia. Avoid overuse or too liberal application.

Topical:
- Alcohol-free preparation is available for teething pain in babies. Apply to gums by rubbing gel on with fingers or cotton swab.

Throat Spray:
- Ensure that gag reflex is intact before allowing patient to drink or eat.

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Patient/Family Teaching
- Instruct patient on correct application technique. High Alert: Inform patient of potential harm from overdose. Emphasize need to avoid contact with eyes.
- Ensure patient that these agents should not be applied for prolonged periods or to large areas, especially if skin is allred or broken, without consulting health care professional. Patient should also consult health care professional before using these agents for conditions other than indicated.

Administer to relieve pain and prevent health care professional if symptoms, rash, or irritation at site of administration occurs. As treatment continues, medication may be increased or reduced or discontinued after consultation with health care professional.

Topical:
- Apply to mucous membranes by applying a thin layer to affected area. For topical application, apply to any site of pain as needed.

Throat Spray:
- Ensure that gag reflex is intact before allowing patient to drink or eat.

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Why was this drug prescribed for your patient?