dexamethasone (topical)  (dex-a-meth-a-sone)

Aeroseb-Dex, Decadron, Decaspray

Classification
Therapeutic: anti-inflammatories (steroidal)
Pharmacologic: corticosteroids

Pregnancy Category: C

Indications
Management of inflammation and pruritis associated with various allergic/immunologic skin problems.

Action

Pharmacokinetics
Absorption: Minimal. Prolonged use on large surface areas or large amounts applied or use of occlusive dressings may increase systemic absorption.
Distribution: Remains primarily at site of action.
Metabolism and Excretion: Usually metabolized in skin.
Half-life: 3–4 hr (plasma), 36–54 hr (tissue).

TIME/ACTION PROFILE (response depends on condition being treated)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>Topical</td>
<td>min–hrs</td>
<td>hrs–days</td>
<td>hrs–days</td>
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Contraindications/Precautions
Contraindicated in: Hypersensitivity or known intolerance to corticosteroids or components of vehicles (ointment or cream base, preservative, alcohol); Untreated bacterial or viral infections.

Use Cautiously in: Hepatic dysfunction; Diabetes mellitus, cataracts, glaucoma, or tuberculosis (use of large amounts of high-potency agents may worsen condition); Patients with pre-existing skin atrophy; Pregnancy, lactation, or children (chronic high-dose usage may result in adrenal suppression and growth suppression in children; children may be more susceptible to adrenal and growth suppression).

Adverse Reactions/Side Effects
Derm: allergic contact dermatitis, atrophy, burning, dryness, edema, folliculitis, hypertrichosis, hyperpigmentation, irritation, maceration, miliaria, perioral dermatitis, secondary infection, striae. Misc: adrenal suppression (use of occlusive dressings, long-term therapy).

Interactions
Drug-Drug: None significant.

Route/Dosage
Topical (Adults): Apply to affected area(s) 2–4 times daily (depends on preparation and condition being treated).
Topical (Children): Apply to affected area(s) 1–2 times daily (depends on product, preparation, and condition being treated).

NURSING IMPLICATIONS
Assessment
● Assess affected skin before and daily during therapy. Note degree of inflammation and pruritis. Notify physician or other health care professional if symptoms of infection (increased pain, erythema, purulent exudate) develop.

Lab Test Considerations:
Periodic adrenal function tests may be ordered to assess degree of hypothalamic-pituitary-adrenal (HPA) axis suppression in chronic topical therapy of suspected. Children and patients with dose applied in a large area, using an occlusive dressing, or using high-potency products are at highest risk for HPA suppression.

● May cause increased serum and urine glucose concentrations if significant absorption occurs.

Potential Nursing Diagnoses
Risk for impaired skin integrity (Indications)
Risk for infection (Side Effects)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation
● Choice of vehicle depends on site and type of lesion. Ointments are more occlusive and preferred for dry, scaly lesions. Creams should be used on oozing or intertriginous areas, where the occlusive action of ointments might cause folliculitis or maceration. Creams may be preferred for aesthetic reasons even though they may

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be more drying to skin than ointments. Gels, aerosols, lotions, and solutions are useful in hairy areas.

**Topical:** Apply cream sparingly as a thin film to clean, slightly moist skin. Wash hands immediately after application. Apply occlusive dressing only if specified by physician or other health care professional.

Use aerosols by shaking well and spraying on affected area, holding container 3–6 in. away. Sprays for about 2 sec to cover an area the size of a hand. Do not inhale if spraying near face, covered eyes.

**Patient/Family Teaching**

- Instruct patient on correct technique of medication administration. Emphasize importance of avoiding the eyes. If a dose is missed, it should be applied as soon as remembered unless almost time for the next dose.
- Caution patient to use only as directed. Avoid using cosmetics, bandages, dressings, or other skin products over the treated area unless directed by health care professional.
- Advise parents of pediatric patients not to apply tight-fitting diapers or plastic pants on a child treated in the diaper area; these garments work like an occlusive dressing and may cause more of the drug to be absorbed.
- Caution women that medication should not be used extensively, in large amounts, or for protracted periods if they are pregnant or planning to become pregnant.
- Advise patient to consult health care professional before using medicine for condition other than indicated.
- Instruct patient to inform health care professional if symptoms of underlying disease return or worsen or if symptoms of infection develop.

**Evaluation/Desired Outcomes**

- Resolution of skin inflammation, pruritus, or other dermatologic conditions.

*Why was this drug prescribed for your patient?*