

Child With a Skin Condition

Chapter 36
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Introduction

- Important to know difference between adult skin and children skin
- Use this to guide thinking as reviewing chapter
 - Prevention
 - Care
 - Medication administration

Introduction: Skin is largest organ in the body

- | | |
|--------------------|-------------------------|
| ○ Skin layers: | ○ Accessory structures: |
| ○ Epidermis | ○ Sebaceous glands |
| ○ Dermis | ○ Sweat glands |
| ○ Subcutaneous fat | ○ Nails |

Introduction

- Sensitive to:
 - Temperature
 - Touch
 - Pain
 - Pressure
- Common skin disorder classifications
 - Chemical
 - Allergic
 - Microbial
- Rashes (**exanthems**)
 - Allergies
 - Chemicals
 - Microbes

Wheals

- Round, elevated skin lesions, often temporary, that look white in the center and are surrounded by red inflammation
- Itchiness treated with antihistamine (topical, oral, or IV)

Bites



Urticaria



Skin and Childhood: Neonatal skin

- Thin
- Lanugo: fine soft hair that sheds within 28 days
- Little subcutaneous fat
- Rapid heat loss
- Body water loss through evaporation
- Milia: clogged pores
- Skin exam important! Included in Meditech

Skin and Childhood: Infant skin

- More sensitive than adult
- Thin
- Bruise easily
- Skin more reactive/sensitive to variety of factors

Skin and Childhood: Macular rash

- Flat
- Circumscribed boundaries
- Color changes



Skin and Childhood: Papular rash

- Raised
- Solid lesion
- Circumscribed boundaries
- Color changes



Skin and Childhood: Vesicle

- Raised
- Fluid filled
- Circumscribed boundaries
- NOT blisters
 - Vesicle: 5-10 mm
 - If larger: considered blister



Skin and Childhood: Assessment Considerations

- Discomfort, tenderness, pruritus
- Hives present? (urticaria)
- Status of hair shafts for signs of infection, pus, lice, nits
- Travel history or exposure to communicable diseases
- History of allergies to topical creams, food, or environment
- Newborn history of trying new foods

Special Considerations for Children

- Difficulties keeping hands away from lesion/wound
- Avoid picking or manipulating wound
- Keep wound covered
- Teach good hand hygiene to prevent spread of infection to other areas of skin

Special Considerations for Children Aggravation of Skin Disorders

Heat

- Irritates rash
- Avoid heat packs
- Apply cool compress, cool water bath
- Baking soda paste, calamine lotion, oatmeal paste, oral antipruritic/antihistamine

Special Considerations for Children Aggravation of Skin Disorders

Heat Rash aka "Prickly Heat"

- Dressing young children too warmly
- Exposure to high heat and humidity
- Causes blocked sweat ducts
- Blisters form (neck, chest, shoulders)
- Described as "prickly"
- Treatment same as previous slide

Special Considerations for Children Delayed Wound Healing

Causes

- Dry wound base environments
- Nutritional deficiencies
- Issues with circulation
- Chronic illnesses
- Infection
- Medications

Special Considerations for Children Preventing Spread of Infection

- Nursing:
 - PPE and contact isolation
- At home:
 - Hand washing!!
 - Isolate from others if necessary
 - Follow CDC guidelines for isolation

Special Considerations for Children Clothing Suggestions for Children

- Loose, comfortably fitting cotton clothing
- Cotton wicks perspiration and secretions away from rash/lesion
- Wash soiled clothing/linen separately

Common Skin Disorders: Contact Dermatitis

- AKA "Diaper Rash"
- Assessment:
 - Bright red maculopapular rash in area between skin and diaper
 - Contiguous boundaries without satellite lesions
 - Irritability or inconsolability of infant

Common Skin Disorders: Contact Dermatitis

- Nursing considerations
 - Keep skin clean/dry
 - Mild soap
 - Layer vitamin A and D or zinc-oxide ointment
 - Determine if allergy
- **good table pg 657**

Common Skin Disorders: Contact Dermatitis



Common Skin Disorders: Poison Oak and Poison Ivy

- Delayed reaction; 5-25 days post exposure
- Severe pruritus, red streaks
- Vesicles that break and crust
- If child has breathing issues; may have inhaled smoke from burning branches/leaves

Common Skin Disorders: Poison Oak and Poison Ivy

- Interventions
 - Wash skin to remove all plant oils
 - Wash entire surface of skin and scalp
 - Do not touch other body parts; avoid cross contaminating
 - Wash clothing separately
 - Clean car upholstery, if necessary
 - Calamine lotion
 - Topical or oral antihistamines

Common Skin Disorders: Poison Oak and Poison Ivy



Common Skin Disorders: Cellulitis

- Bacterial infection of skin
- Recent trauma, puncture wound, sinusitis, impetigo, otitis media
- Usually found on face, eye orbit, arms, and legs
- Spreads rapidly
- IV or oral antibiotics

Common Skin Disorders: Cellulitis

- Assessment
 - Inspection and palpation
- Nursing considerations
 - Broad spectrum antibiotic
 - Contact precautions
 - Blood cultures

Common Skin Disorders: Cellulitis



Common Skin Disorders: Eczema

- Autoimmune pruritic superficial inflammatory skin disorder
- "atopic dermatitis"
- Reaction to stress, allergic reaction
- Usually on face first
- Red, raised papules
- Diagnosed between infancy and age 5
- Many triggers, see text

Common Skin Disorders: Eczema

- Assessment
 - Gather history (including allergies)
 - After face, spreads to scalp and arms, elbows
- Nursing considerations
 - Prevent scratching/spread
 - Avoid fragrance/dyed topical ointments
 - Avoid tight fitting clothing

Common Skin Disorders: Eczema



Common Skin Disorders: Thrush

- Yeast-like fungus
- Warm, moist areas
- Common when on antibiotic therapy
- Assessment
 - Itching, burning irritated areas
 - White plaques in mouth, bright red under patches

Common Skin Disorders: Thrush

- Nursing considerations
 - Thin layer antifungal cream on skin
 - Healing ointment on top of antifungal
 - Cool water soaks
 - Loose fitting cotton clothing
 - Alternative food options if in mouth due to change of taste

Common Skin Disorders: Thrush



Common Skin Disorders: Ringworm

- Cutaneous fungal infection
- Acquired through close personal contact and infected pets
- NOT caused by worms



Common Skin Disorders: Ringworm

- Several types
 - Tinea capitis: scalp and hair
 - Tinea pedis: athlete's foot
 - Tinea unguium: fingernail/toenail fungal infection
 - Tinea cruris: jock itch
 - Tinea corporis: groin, extremities, trunk
 - Tinea versicolor

Common Skin Disorders: Ringworm

- Assessment
 - Hair loss on scalp
 - Intense itchiness between toes, groin, skin folds
- Nursing considerations
 - Especially high risk when wearing equipment; keep CLEAN
 - Topical antifungal medication
 - Sandals in public showers

Common Skin Disorders: Scabies

- Assessment
 - Severe itching (worse at night)
 - Characteristic red lines with bright, red patchy lesions
- VERY contagious
- Tiny insects that burrow deep into skin
- Incubation period: 1-2 months after contact with infected person

Common Skin Disorders: Scabies

- Treatment
 - Scabicide cream
 - ENTIRE family may need treatment
- Nursing considerations
 - Contact precautions
 - Wash ALL clothing/linen in HOT water
 - Wash sheets DAILY until mite free
 - Follow school requirements for returning

Common Skin Disorders: Scabies



Common Skin Disorders: Impetigo

- Superficial infection on skin
- Mainly on face or extremities
- Round, oozing lesions
- Highly contagious
- Can spread to other parts of body by scratching and passing bacteria

Common Skin Disorders: Impetigo

- Assessment
 - Macular rash progresses to papular rash then vesicular rash then pustule
- Nursing considerations
 - Topical or oral antibiotics
 - Soaking lesion and gently washing to remove crusts
 - Nails should be cut short
 - Prevent scratching
 - Good handwashing

Common Skin Disorders: Impetigo



Common Skin Disorders: Lice

- Highly communicable parasites
- Spread via hairbrush/comb, linen, coats, hoods, clothes, hats
- Can infest couch, bed, or car upholstery
- Need DIRECT contact to spread
- Intense itching from: crawling behaviors, feeding behaviors, and waste products of adult lice

Common Skin Disorders: Lice

- Assessment
 - Search for adult lice or nits (nit 1-2 mm in diameter)
- Nursing considerations
 - Treat with pediculicide
 - Nits must be removed meticulously, one by one
 - Combs/brushes to be replaced
 - Linen all washed in HOT water

Common Skin Disorders: Lice



Common Skin Disorders: Acne

- Skin condition associated with clogged pores
- Increased androgens in teenagers = main cause
- Normal bacteria on skin contributes to acne
- Severe cases of acne called "acne vulgaris"

Common Skin Disorders: Acne

- Assessment
 - Presence of clogged pores and comedones
 - Physical scarring?
 - Emotional impact on self esteem
- Nursing considerations
 - Appropriate skin care
 - Medications if necessary

Common Skin Disorders: Acne



Common Skin Disorders: Vitiligo

- Condition of depigmentation or loss of natural skin color
- No known cause
- Progressive, acquired absence of melanocytes in skin
- May impact eyes and hair color
- Cause emotional distress

Common Skin Disorders: Vitiligo

- Nursing considerations
 - Provide families with information on treatment/enhancements
 - Surgical procedures are under study
 - Skin grafts
 - Cultured and non cultured cellular transplantation

Common Skin Disorders: Vitiligo



Common Skin Disorders: Burns

TYPES

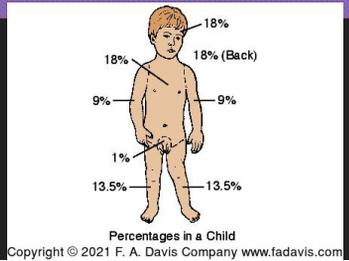
- Electrical: caused by electrical current
- Thermal: caused by contact (heat burns)
- Chemical: exposure to caustic chemical
- Radioactive: caused by ionizing radiation
- Immersive: immersed in scalding water

Common Skin Disorders: Burns

- Assessment
 - Find percentage burned
 - Rule of nines (next slide)
 - Late adolescent or adult
 - Calculate child's fluid resuscitation
 - Minor burns: less than 10% of body surface area
 - Major burns: greater than 10% BSA, or any involvement of respiratory tract

Common Skin Disorders: Burns RULE OF NINES

Modified percentages for body surface area of a child



Common Skin Disorders: Burns

- Nursing considerations
 - Remove source of burn
 - Cool water (NOT ICE)
 - Cool, moist, clean cloth on burn to prevent heat loss
 - Pain medication
 - Stabilization of child airway and provide fluids
 - High infection risk

Common Skin Disorders: Tattoo and Piercings

- Body modifications
- Goal for healthcare team: prevent infection
- Assessment
 - Redness, warmth, drainage, discomfort, rash
- Nursing consideration
 - Educate on tattoo/piercing care
 - Educate on risks of not using licensed professional

NCLEX Question

The mother of a 13-year-old is upset because the child had a tattoo placed on the upper arm. What should the nurse instruct this mother?

- a. Apply sunblock over the tattoo
- b. Cleanse the area with rubbing alcohol
- c. Wash the area with hot water and soap
- d. Dab the area with hydrogen peroxide daily

NCLEX Question

a. Apply sunblock over the tattoo

Sunblock lotion or cream should always be applied to a tattoo. Solutions with hydrogen peroxide or alcohol should not be used as they may cause an interference with healing. The tattoo site should be cleansed with mild soap and water daily. A child with a new tattoo should not swim, soak in baths, or use a hot tub until the skin on the tattoo is completely healed.
