

Pediatric Dermatology

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Conflict of interest

- No financial conflict of interest
- Individual products shown are examples only not a product endorsement

Pediatric Dermatology

- Structure and function of skin
- Basic skin care
- Overview of common dermatology problems
- Discussion of:
 - Atopic dermatitis/eczema
 - Impetigo
 - Scabies
 - Acne

Skin Facts

- Largest organ of your body!
- Functions:
 - Hold everything together
 - Protect from infections and chemicals
 - Protect from UV exposure
 - Maintain temperature
 - Maintain water balance

Skin's Needs

- Oils on surface
- Intact surface
- Avoid contact with chemicals and infections
- Protection from UV exposure



Washing

- Wash regularly, especially hands
- Use a mild soap
- Warm, not hot water
- If your skin is dry, use moisturizer right after the bath



Cuts and Scrapes

- Wash gently and carefully
- Antibiotic ointment
- Cover with bandaid



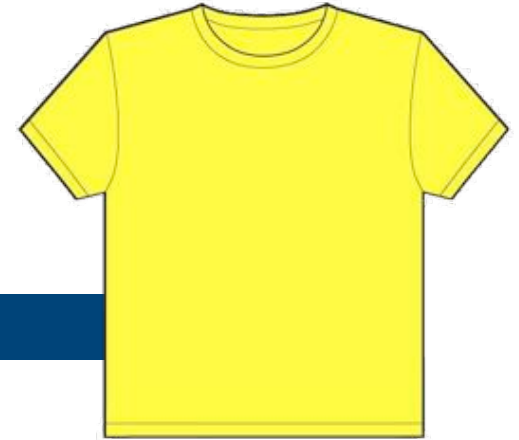


Sun Protection – Why?

- 1) Sunlight can cause a burn.
- 2) Sunlight can change skin color.
- 3) Sunlight can cause wrinkles.
- 4) Sunlight can cause skin cancer.



“Slip! Slop! Slap!”



- Slip on a shirt
- Slop on sunscreen
 - High SPF
 - Zinc Oxide, Titanium Dioxide, Avobenzone
- Slap on a hat



Categories of Skin Problems

- Inflammatory conditions
- Infections
 - Viral infections
 - Bacterial infections
 - Fungal infections
- Infestations, bites and stings
- Pigmentary problems
- Cancers
- Misc others

Inflammatory Conditions



Viral Infections: Localized Molluscum and Warts



Warts - Treatment

- Treatment:

- Over the counter salicylic acid – every night for 3 months or until gone
- Duct tape – leave on 4 days then take off, rub down wart and reapply – use for 3 months or until gone
- Surgery works, but leaves a scar
- Liquid nitrogen



Viral infections: Herpes Simplex



Viral infections: Systemic Varicella-Zoster virus

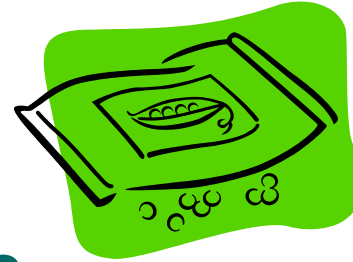


Chicken Pox - Shingles

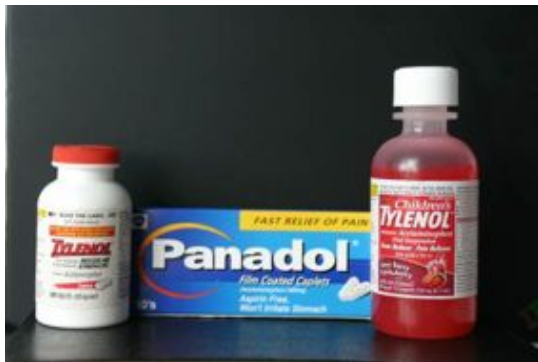


- When to see a doctor
 - If areas get weepy and look infected
 - In an adult – should start treatment within 24-48 hours of first blister
- When can people go back to work/school?
 - No longer have a fever
 - No new spots
 - All old blisters have scabbed over

Hand Foot and Mouth



- Pain relief with tylenol
- May have trouble eating due to pain in mouth
- Eat cold foods



Viral Exanthem

- Seen with many, many different viruses
- Could be a cold, measles, dengue or many other viruses
- Often very difficult to tell apart
- When to see a doctor
 - Fever is high
 - Rash comes on quickly and is all over
 - Unable to hold down fluids, eat



Bacterial Infections

- Examples are staph and strep
- Treated with antibiotics
- Can be just on the surface of skin or can go deep into tissue and even into blood



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Dead
Bacteria

Fungal infections



Tinea Corporis - Treatment

- Antifungal creams:
 - ****-azole
 - Terbinafine (Lamisil)
- Apply twice a day to area plus a bit of normal skin
- Use for 2-3 weeks



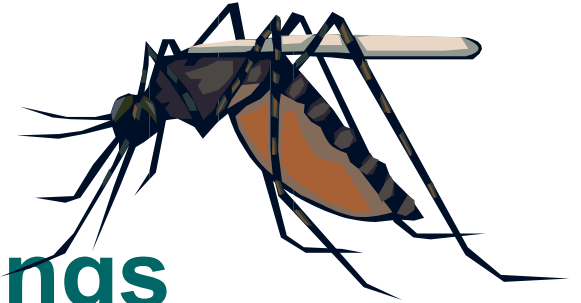
Tinea Versicolor



- Light spots, not white
- About the size of a dime
- Sharp, clear edge
- Can group into larger spots



Infestations, bites and stings



- Head lice, body lice, scabies, bedbugs, insects
- Best treatment is prevention
 - Carry illness – mosquitos: West Nile Virus
 - Bites can get infected
 - Avoid contact with people with infestations

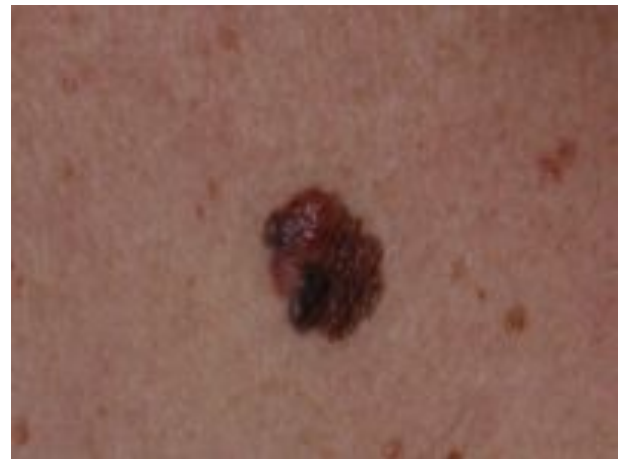
Pigmentary problems



Skin growths: Benign



Skin growths: cancers



Signs of Melanoma

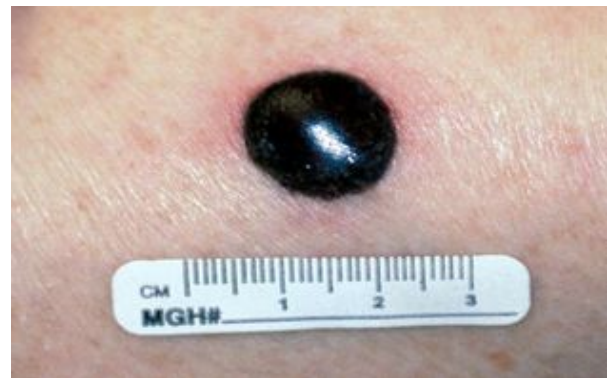
Asymmetry

Border irregularity

Color variability

Diameter greater than 6mm

Evolving



Images courtesy of Susan Swetter, MD

Atopic Dermatitis



Atopic Dermatitis: Infants



Atopic Dermatitis: Older children



Atopic Dermatitis



- Can be all over
- Rough surface with raised or light skin around hair follicles

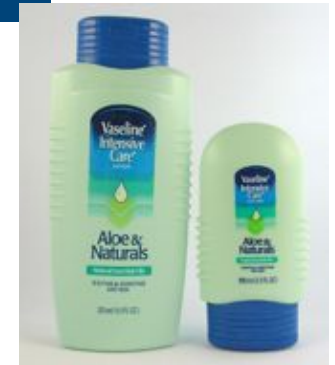


Atopic Dermatitis

- Often seen in families and patients with asthma, hayfever
- Gets worse when:
 - Skin is dry
 - Skin is infected
 - Comes in contact with chemicals or fragrances
 - Certain foods in some patients
 - Stress
- Skin barrier doesn't work well....
 - water out and irritants in
- The “itch that rashes”
- Chronic problem – comes and goes – no cure

Atopic Dermatitis- Treatment

- Keep the skin moist – scoop or squeeze
- Protect from chemicals and fragrances
- Treat the thick areas
 - Corticosteroids...*****-one
 - Hydrocortisone – over the counter – OK to use any time
 - Triamcinolone, betamethasone – prescription – only with doctors suggestion
- Minimize itch
 - Benadryl at bedtime
 - Distraction at times of stress or boredom



Atopic Dermatitis Home Care

- Daily bath: warm not hot, 10 minutes
- No scented products in bath
- Wash with mild cleanser
- Pat dry
- Immediately apply medication
- Seal medication in with plain moisturizer
 - Ointment, cream
- Use moisturizer several other times a day

Atopic Dermatitis

- Infection makes the whole rash worse
- Skin becomes bright red and weepy-wet on the surface or has honey-crust on top



Infections

- Prevention
 - Baths with $\frac{1}{4}$ - $\frac{1}{2}$ cup bleach per tub
 - If recurrent, consider staph carrier state
 - Treat both nares and perianal area with mupirocin BID for 3 weeks
- Impetigo
 - Culture
 - Keflex, Erythromycin, Clindamycin
- Eczema herpeticum
 - IV acyclovir



Atopic Dermatitis

When to see a doctor

- Really thick
- Have shortness of breath also
- Yellowish crust or wet on top – may be infected and need antibiotic
- Just not getting better



Impetigo

- Infection on the very surface of the skin
- Spreads easily and is contagious
- Can begin from infected bug bite, scratch, or other skin problem like atopic dermatitis
- May form blisters



Impetigo



- Often staph or strep bacteria
- Crusted surface
- Often wet and weepy
- Yellowish, honey-colored surface
- May have pus visible

Impetigo Treatment

- If very small area
 - Wash with antibacterial soap
 - Wash with Betadine®
 - Apply antibiotic cream
- Larger area, spreading or redness associated
 - See a doctor, may need antibiotics
- Recurrent impetigo
 - Check family members
 - Might need antibacterial soap regularly
 - Treat nose and perianal area with mupirocin - antibiotics

Scabies

- Mite that lives under the skin
- Very contagious
- Causes itching all over
- Bumps and lines (burrows) seen between fingers and toes, at wrists
- Nodules in groin and under arms



Scabies

- When to see a doctor:
 - Any time someone thinks they have it!
- Treatment
 - Apply medicine from neck down in adult, all over for a baby
 - Leave cream on over night and wash in the morning
 - All sheets, towels, clothes in the wash with hot dryer in the morning
 - Put anything unwashable in bag for several days
 - Vacuum couches and thick carpets
 - Repeat in 1 week
- Treat all close contacts who have itching at the same time
- Families often need a lot of support

Thank you!



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