Dermatology Potpourri: Interesting Cases

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Disclosures

- There are no financial interests or relationships to disclose
- Any unlabeled/unapproved uses of drugs or products referenced will be discussed

Restrictions

- Permission granted to the Skin, Bones, Hearts, and Private Parts 2017 and its attendees
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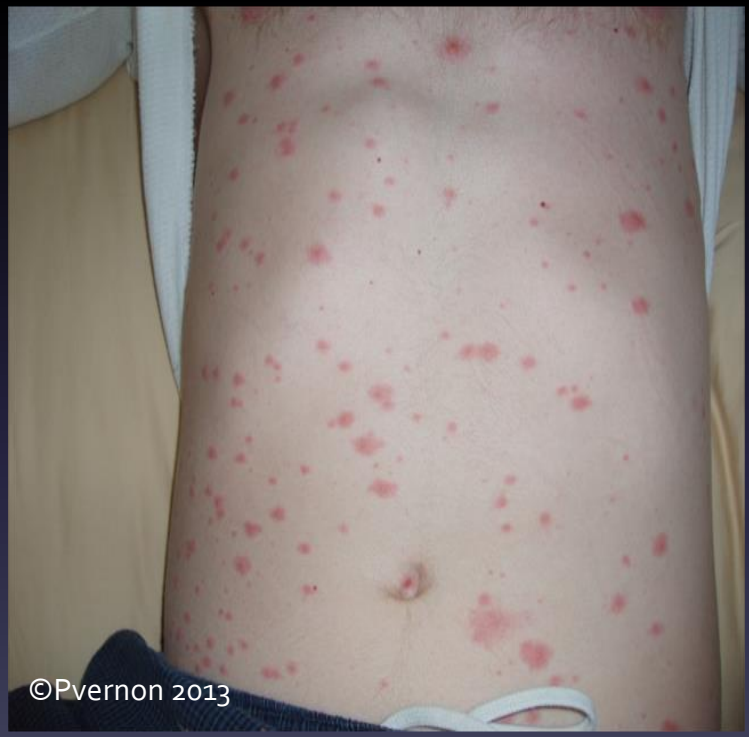
Session Objectives

- Name common contacts in phytophotodermatitis
- List two common causes of Majocchi Granuloma
- List two treatment options for Granuloma Annularae

31 YEAR OLD MALE

- Two day history pruritic, tender papules and vesicles
- Recent camping trip
- Recent fever, headache, lethargy, "flu symptoms"
- Developed rash on trunk day two
- Day three increased lesions spreading to entire body with increased lethargy and fever

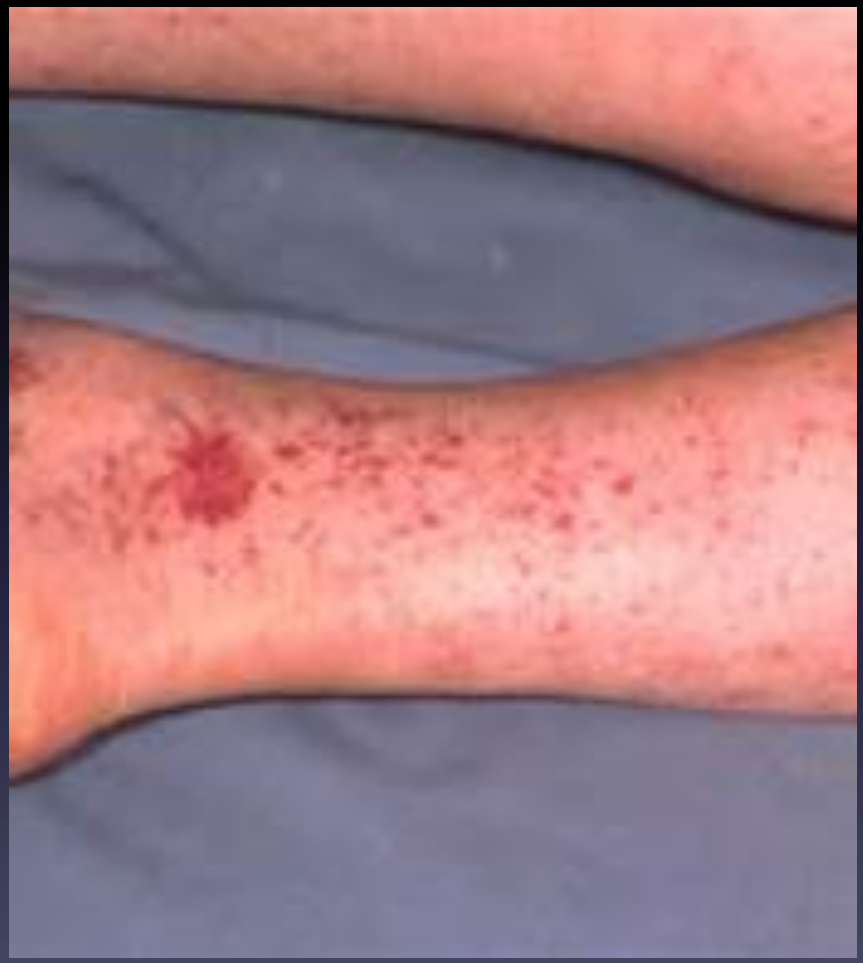


DIFFERENTIAL DIAGNOSIS

- Rocky Mountain Spotted Fever
- Lyme Disease
- Varicella

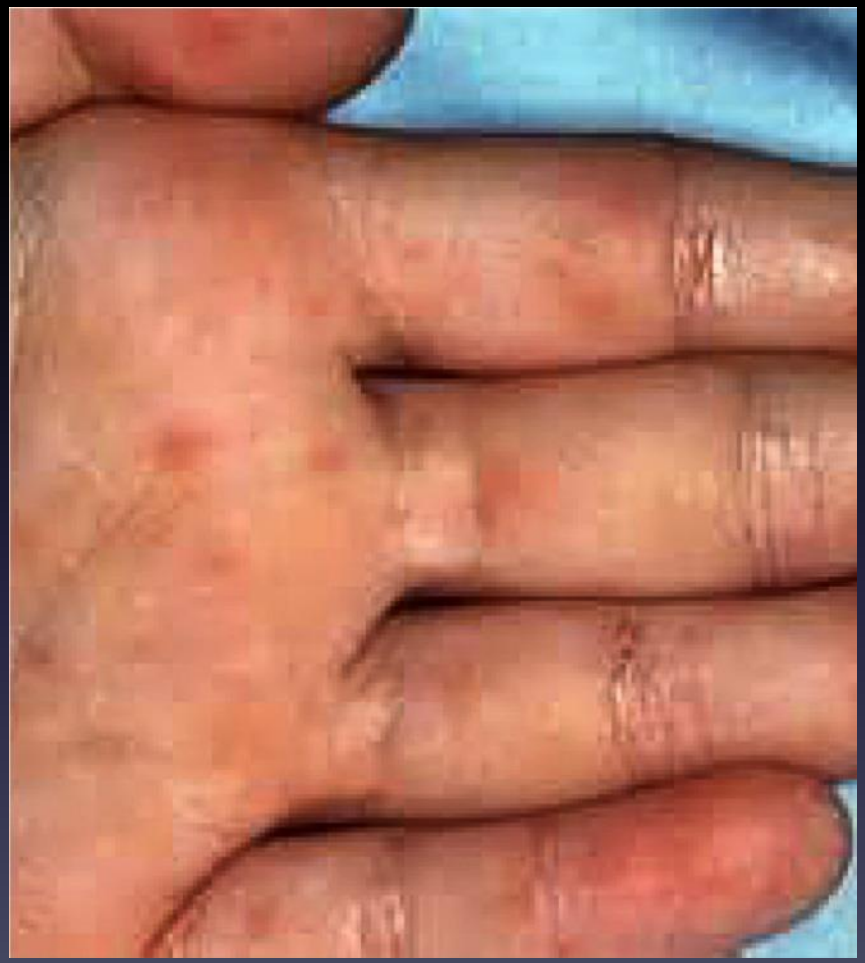
Rocky Mountain Spotted Fever

- 2-4 days after infected tick bite
- Fever
- Headache
- Nausea, Vomiting
- Abdominal pain
- Muscle pain



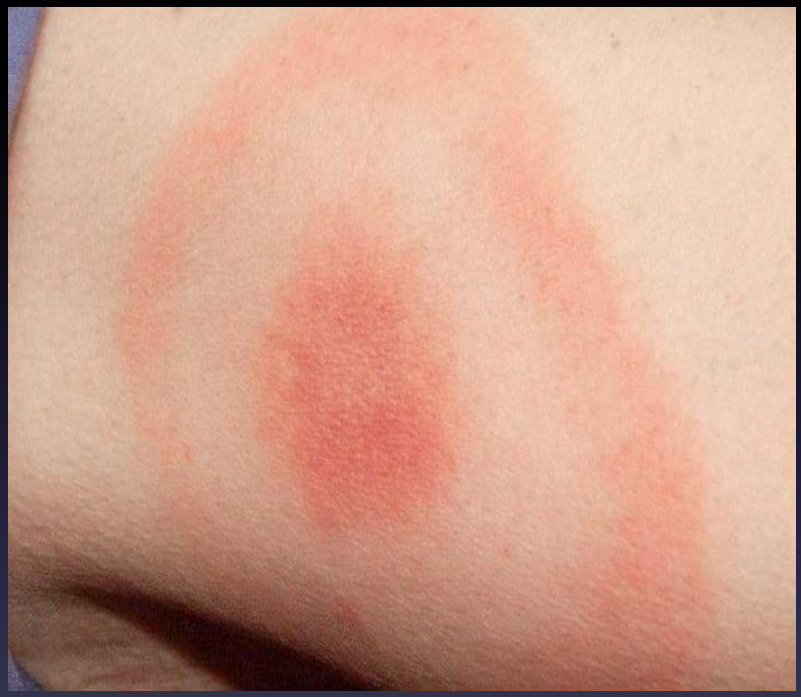
RMSF

- Rash appears 2-5 days after onset of symptoms
- Macular, erythematous
- Begins on extremities, spreads to trunk
- Petechiae appear on sixth day or later



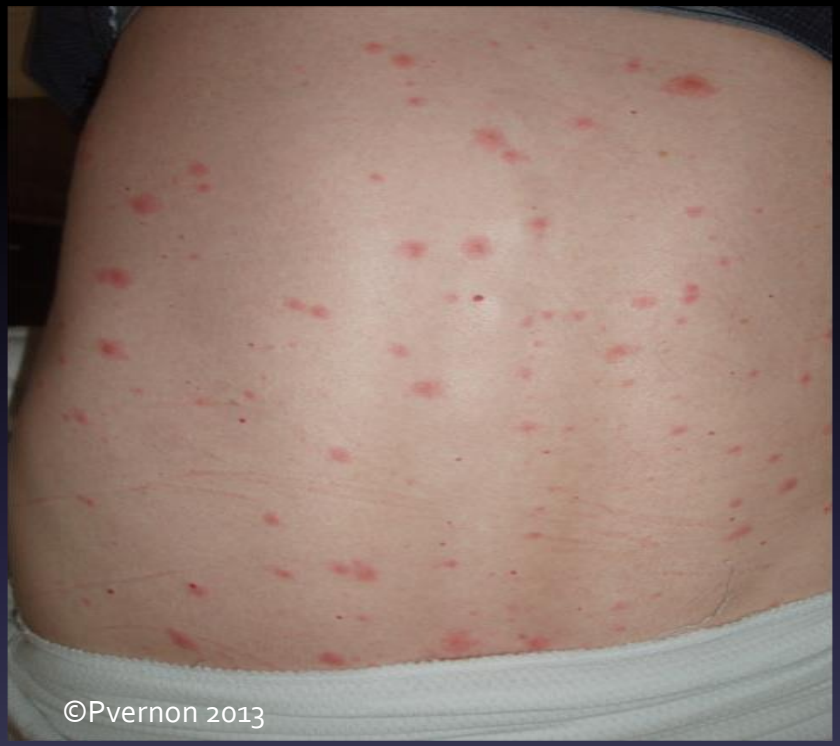
Lyme Disease

- Fever
- Headache
- Fatigue
- Rash at site of tick bite
  - circular outwardly expanding rash (erythema migrans)
  - innermost portion dark red, indurated (bull's eye)



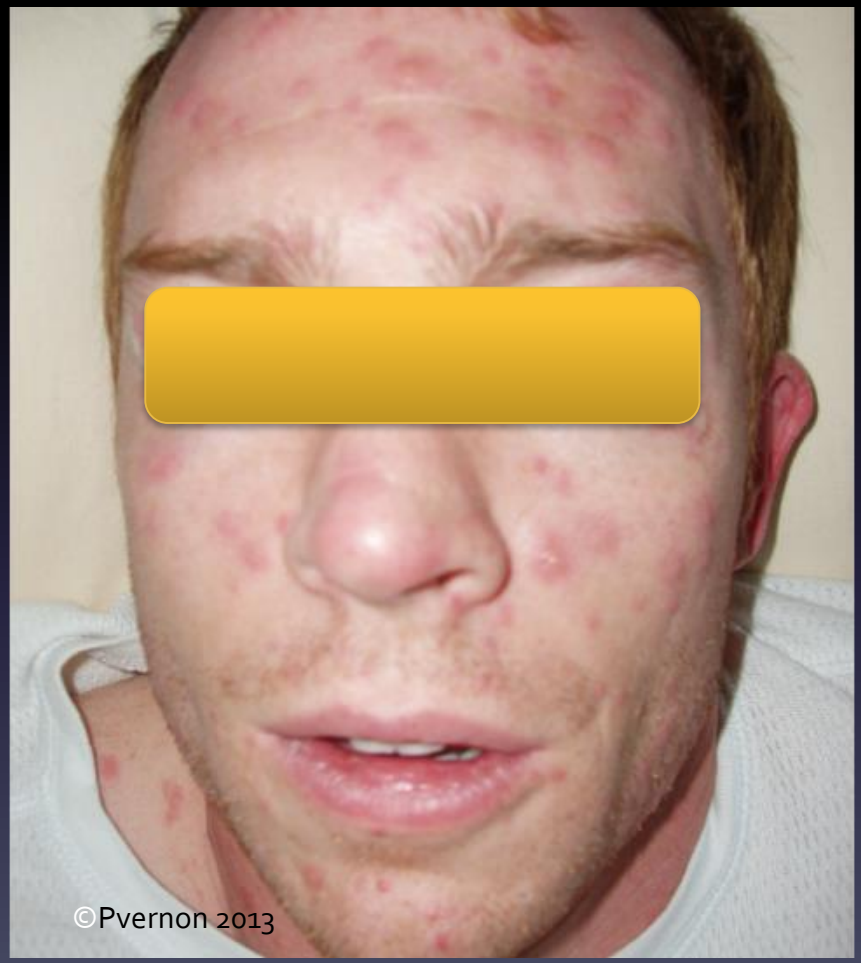
Varicella

- Prodrome nausea, anorexia, myalgias, headache
- Vesicles and pustules
- Begins on head and trunk, spreads to extremities
- Lesions at various stages of healing



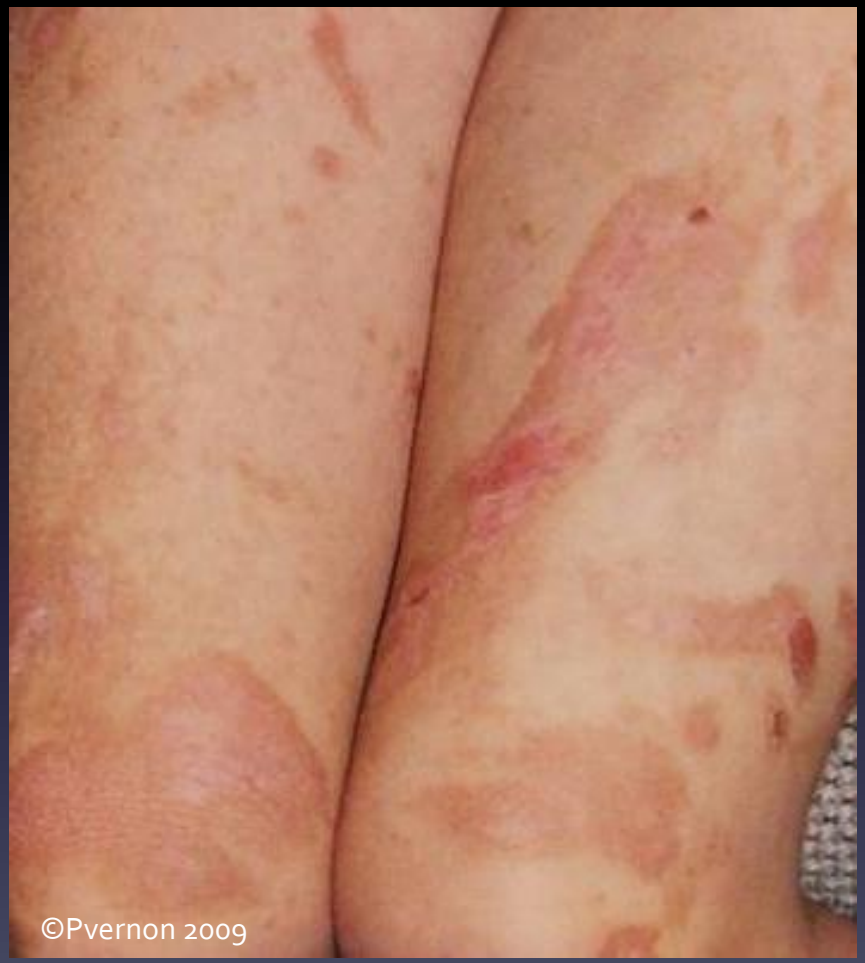
VARICELLA TREATMENT

- Valacyclovir (Valtrex) 1 gm TID x 7 days
- Famciclovir (Famvir) 500 mg q8h x 7 days
- Acyclovir (Zovirax) 800 mg qid x 5 days
- Symptomatic care
- IMMUNIZE



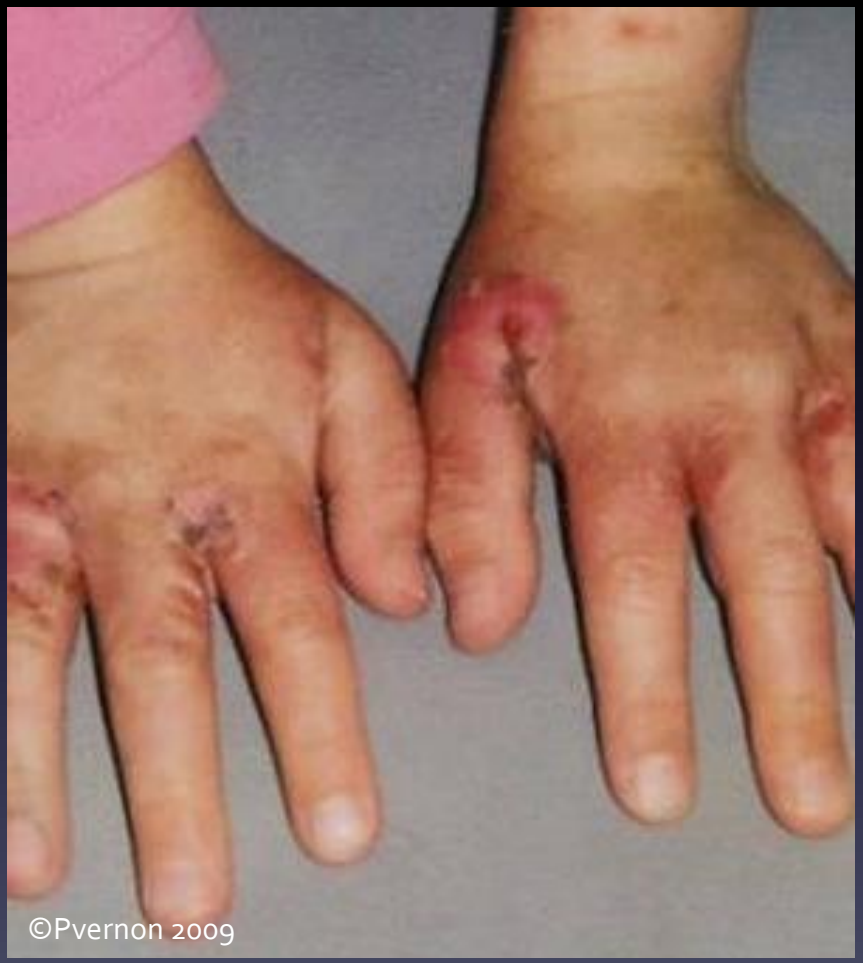
10 year old female

- Developed blisters and itching on legs and hands while on vacation
- Lesions have not spread
- Slight itching



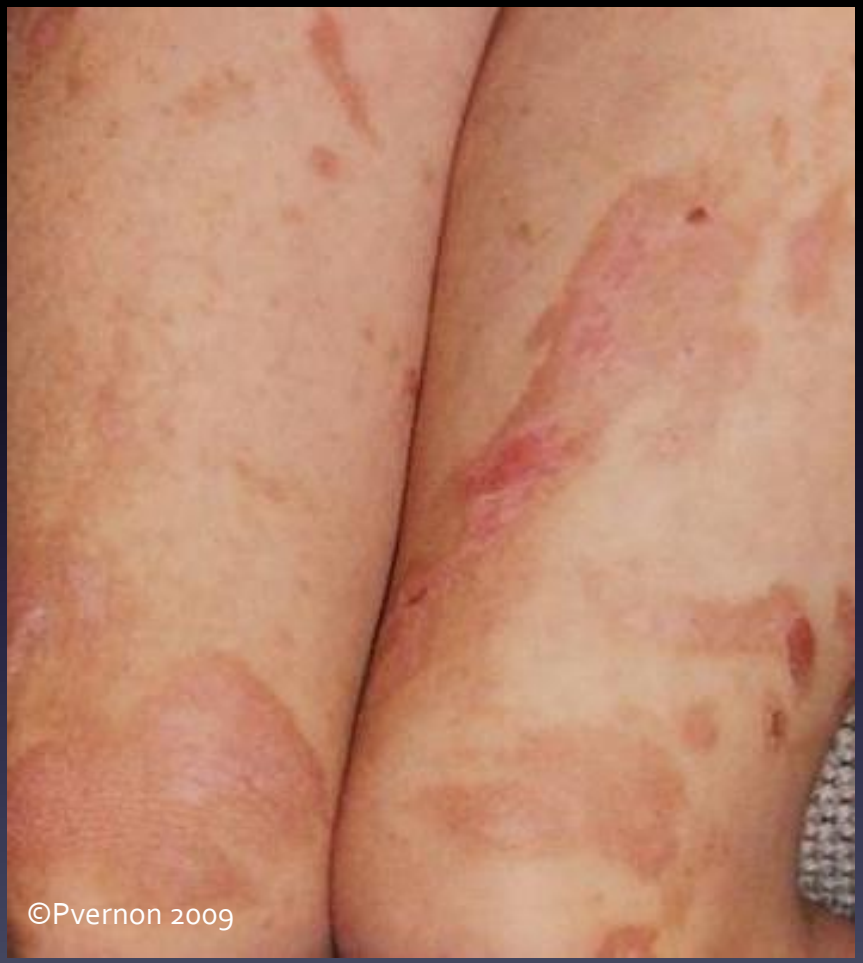
Differential Diagnosis

- Burns
- Atopic Dermatitis
- Contact Dermatitis
- Child Abuse
- Berloque Dermatitis



Berloque Dermatitis

- Redness and blisters in bizarre shapes
- Exposure to plants, especially those in celery, citrus, and grass family
- Plants produce psoralen on the skin
- Exposure to sunlight produces photodermatitis with blister formation, followed by intense stimulation of melanin



Berloque Dermatitis Causes

- Citrus and Lime found in drinks and food
  - Figs
  - Celery
  - Lemon and Lime oil
  - Queen Anne's lace
  - Giant Russian hogweed
- Bergapten
  - Component of bergamot oil
  - Found in cosmetics, perfumes, lotions, sunscreens and household products

Workup

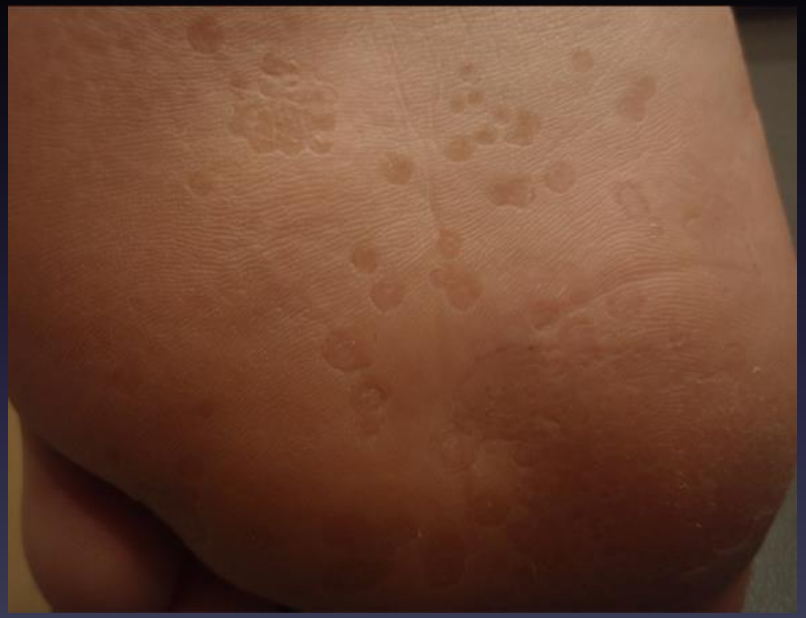
- Clinical suspicion
- Photopatch test if photoallergy suspected:
  - Occlusive application of test chemical(s)
  - Irradiation with UV light at several intervals
  - Phototoxicity: controls positive
  - Photoallergy: controls negative

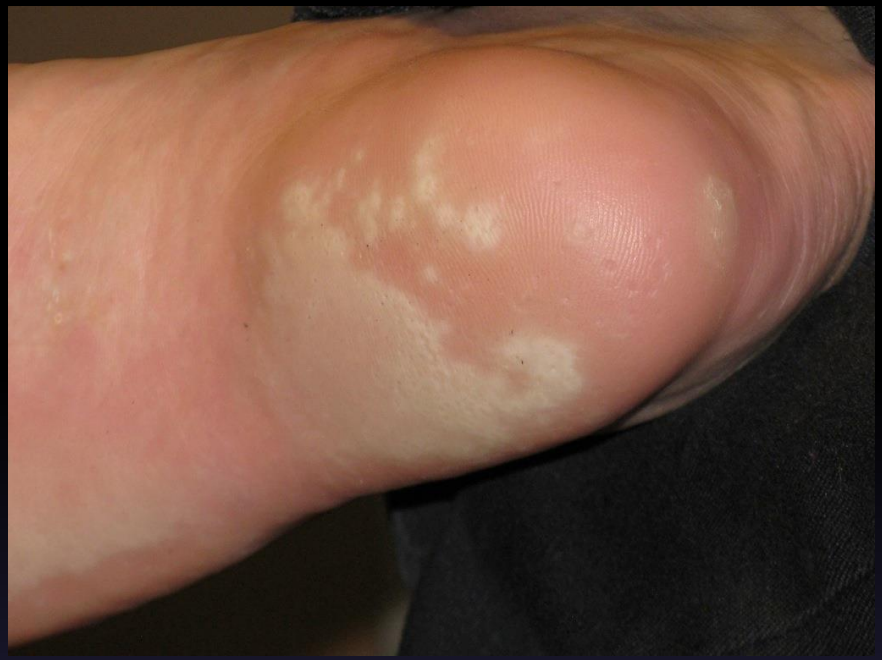
Treatment

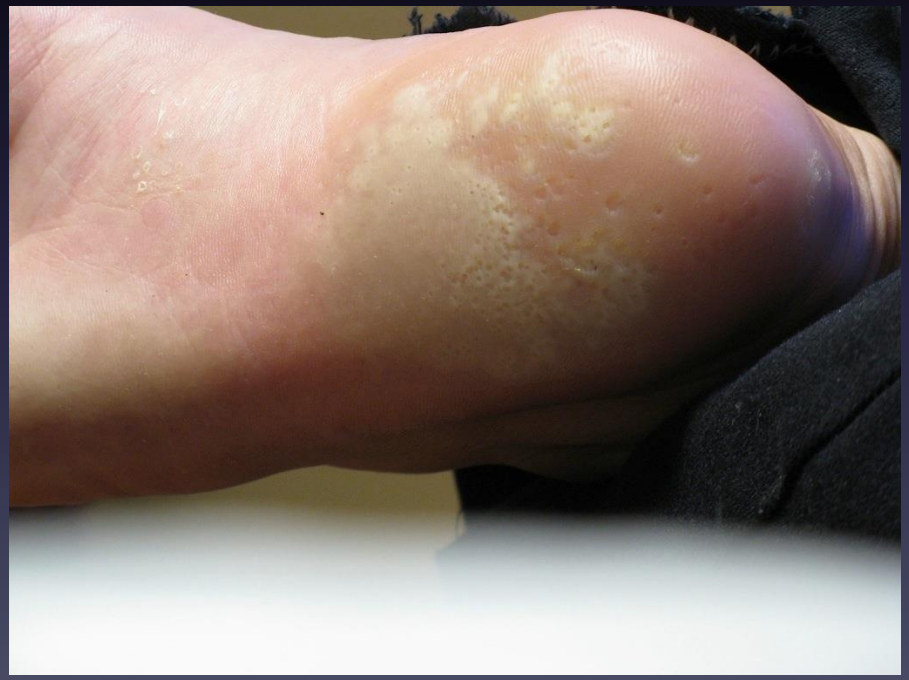
- Remove offending substance
- No treatment necessary if asymptomatic
- Topical corticosteroids if pruritic
- Analgesics
- Sunscreen
- Treat resulting PIH

23 YEAR OLD MALE

- Multiple pits on soles of feet
- Feet, socks, and shoes damp
- Malodorous
- Asymptomatic

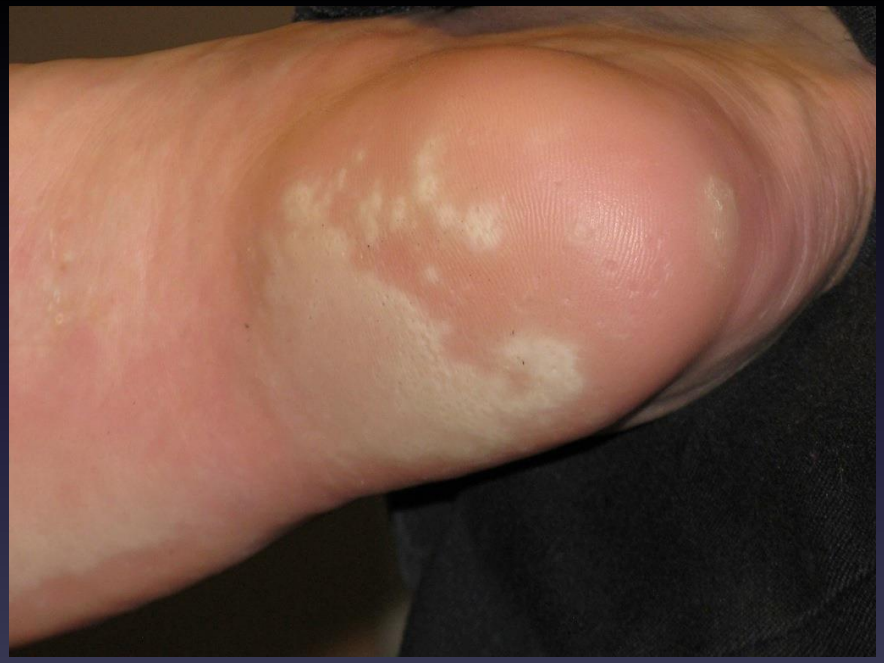




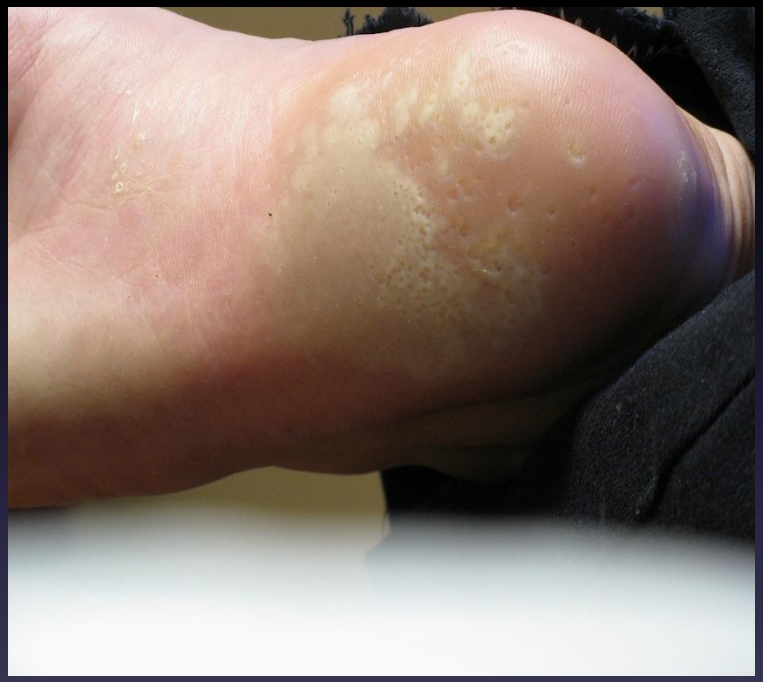


DIFFERENTIAL DIAGNOSIS

- Tinea
- Warts
- Pitted Keratolysis
- Dyshidrosis



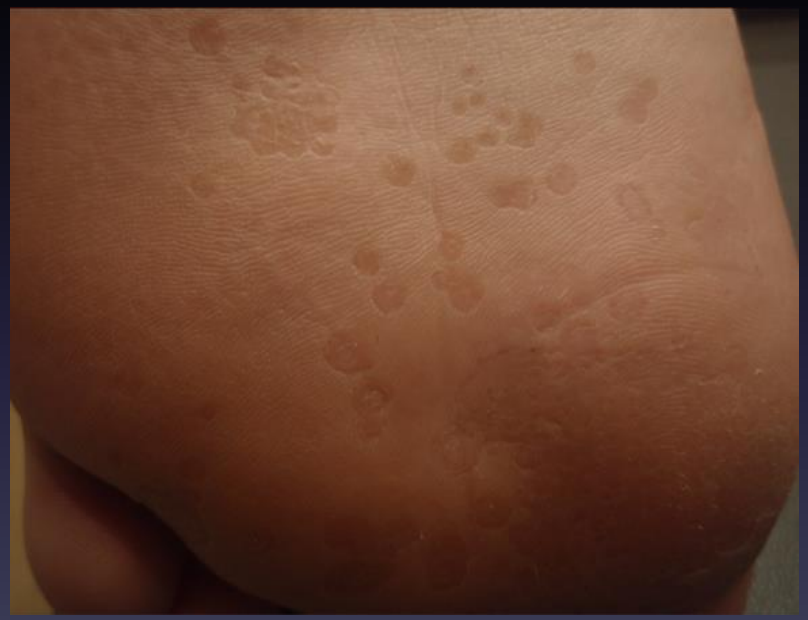
PITTED KERATOLYSIS



- Superficial bacterial infection of the soles of the foot, lateral toes, occasionally palms
- Asymptomatic erythematous plaques and shallow pits; occasionally painful
- Often misdiagnosed as tinea
- Hyperhidrosis, moist socks, humid environment, occlusive shoes and prolonged immersion in water are predisposing factors

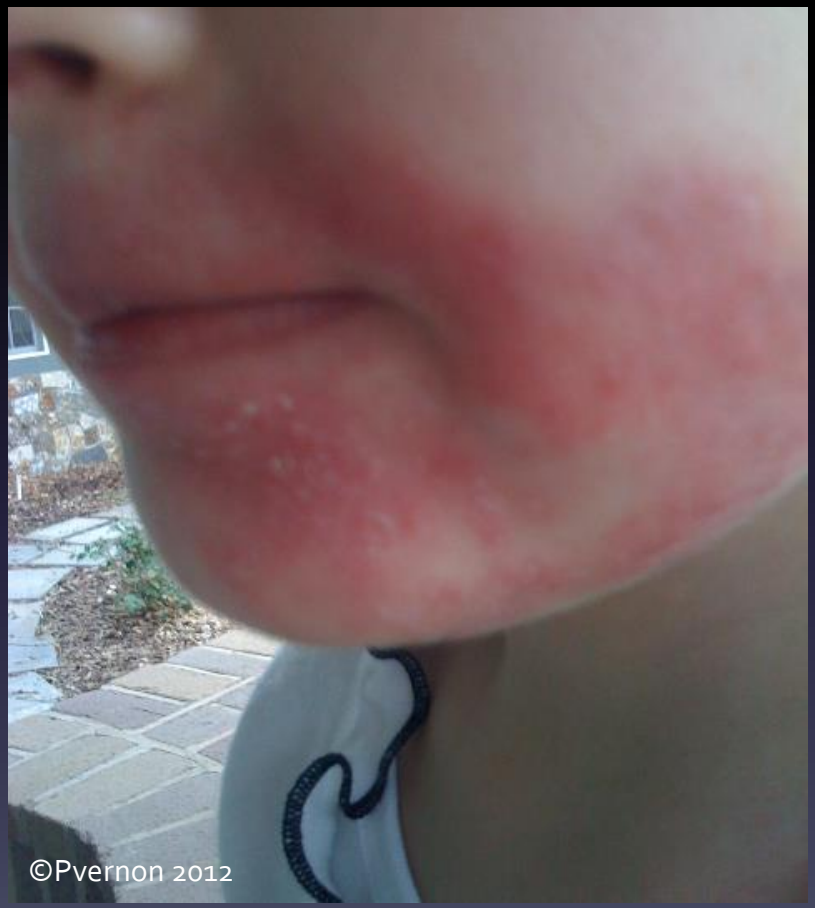
PITTED KERATOLYSIS MANAGEMENT

- Remove environment, promote dryness
- 20% aluminum chloride BID
- Alcohol-based benzoyl peroxide
- Topical erythromycin or clindamycin



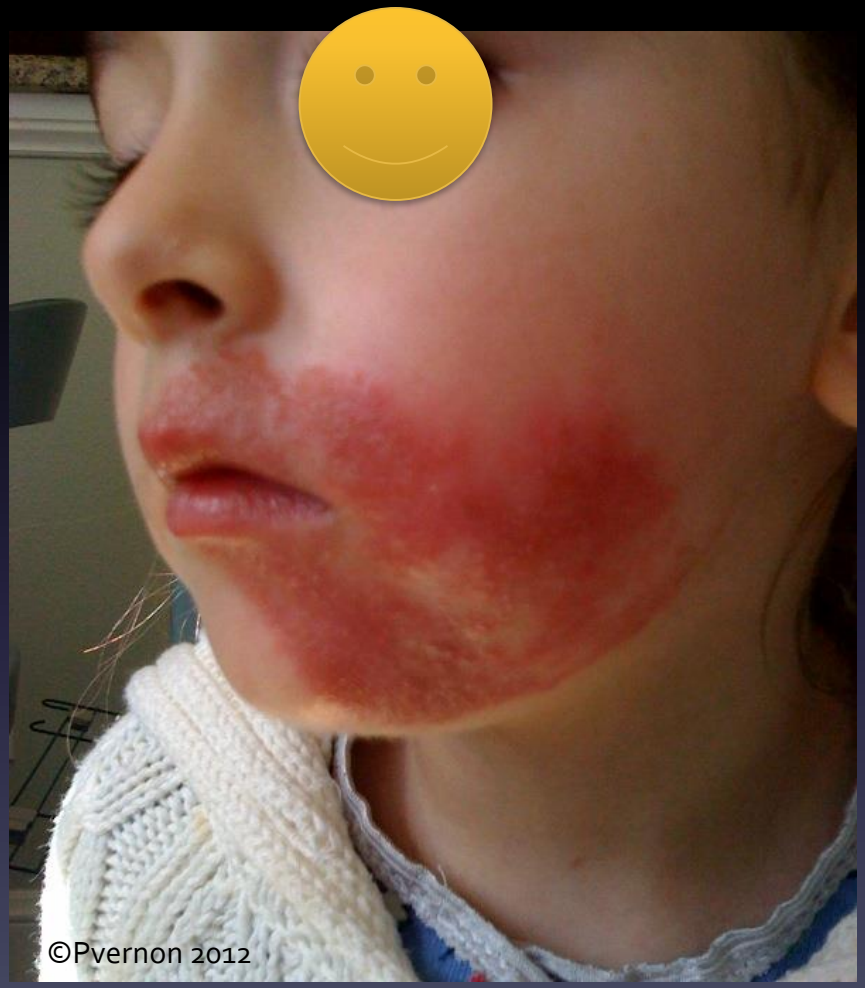
8 year old female

- Developed red, pruritic rash
- Began as small cut at oral commissure
- Spreading to chin and cheeks



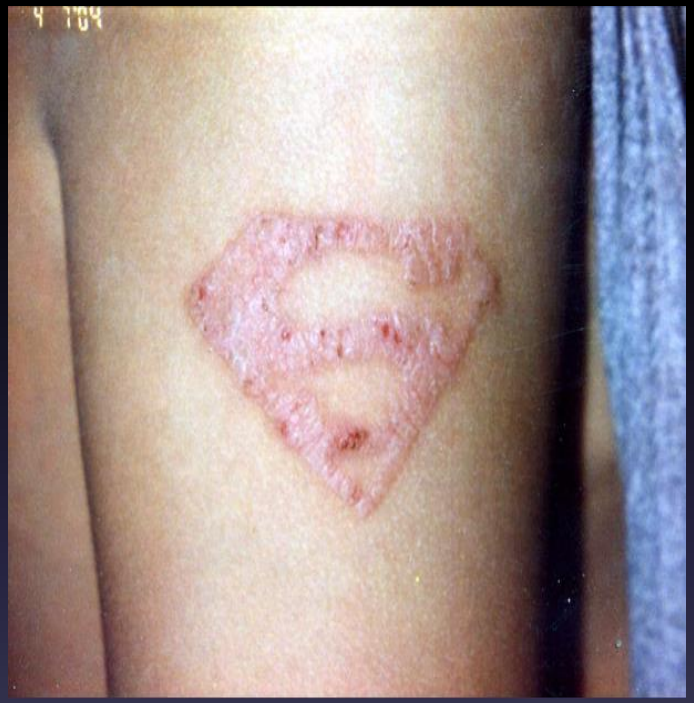
Neosporin Contact Dermatitis

- Neomycin: 2010 Allergen of the Year (American Contact Dermatitis Society)
- Remove offending agent



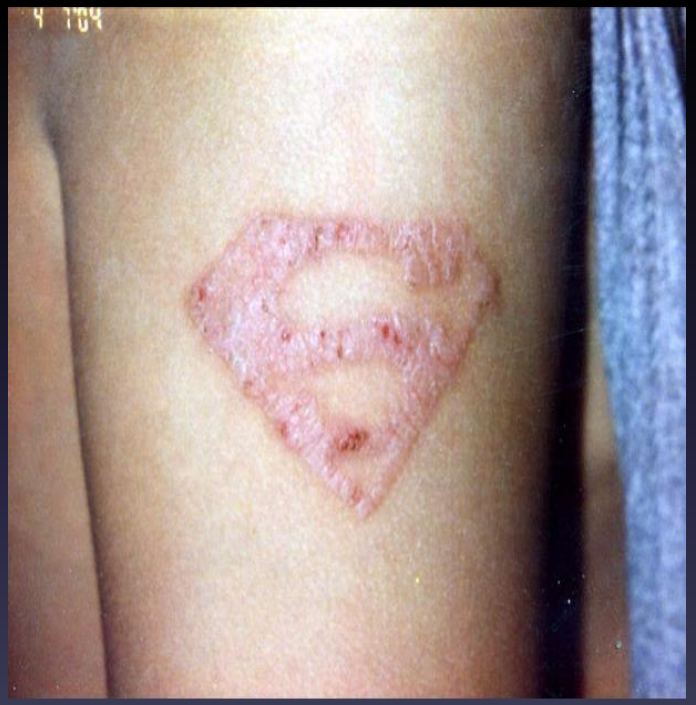
5 YEAR OLD MALE

- Erythematous plaque in bizarre shape on upper right arm
- Pruritic
- Recent travel to Mexico



DIFFERENTIAL DIAGNOSIS

- Sunburn
- Atopic dermatitis
- Contact dermatitis
- Irritant dermatitis



CONTACT DERMATITIS TREATMENT

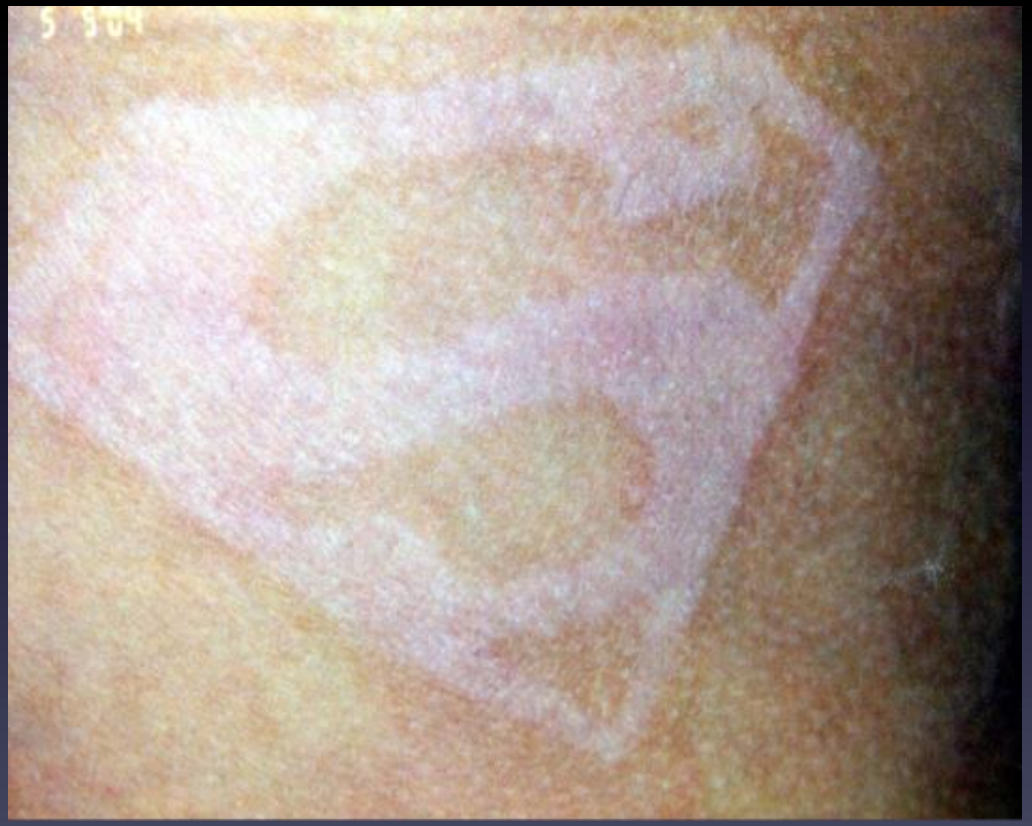
- Topical

  corticosteroid BID x

  2 weeks

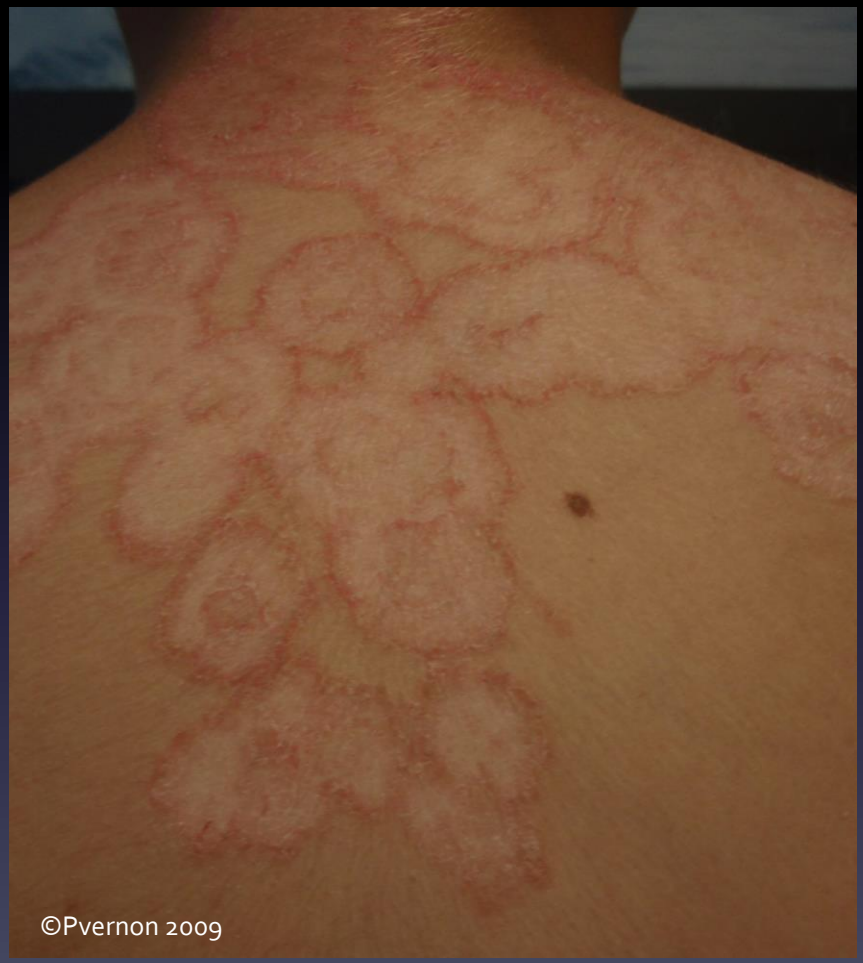
- Moisturizer

- Sunscreen



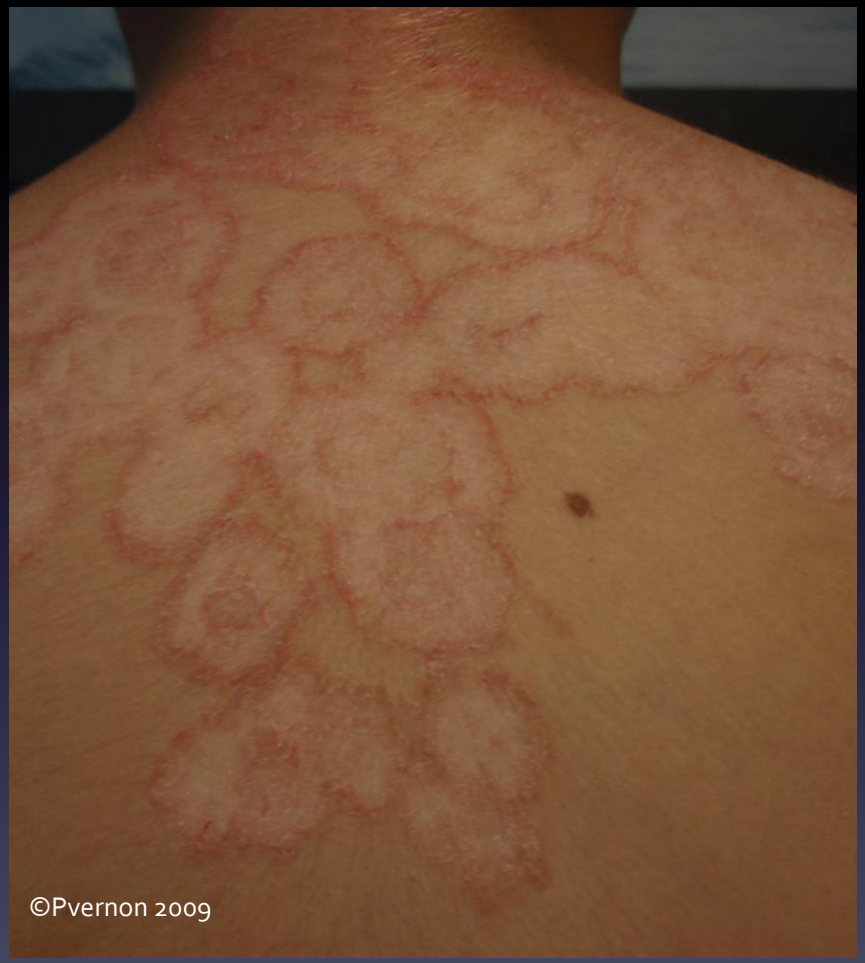
58 year old Female

- Annular plaques on upper back
- Red borders with scale
- Central clearing
- Recent vacation with sun exposure



Differential

- Tinea corporis
- Nummular Dermatitis
- Psoriasis
- Sarcoidosis
- Lupus
- Syphilis
- Drug eruption
- Photodermatitis

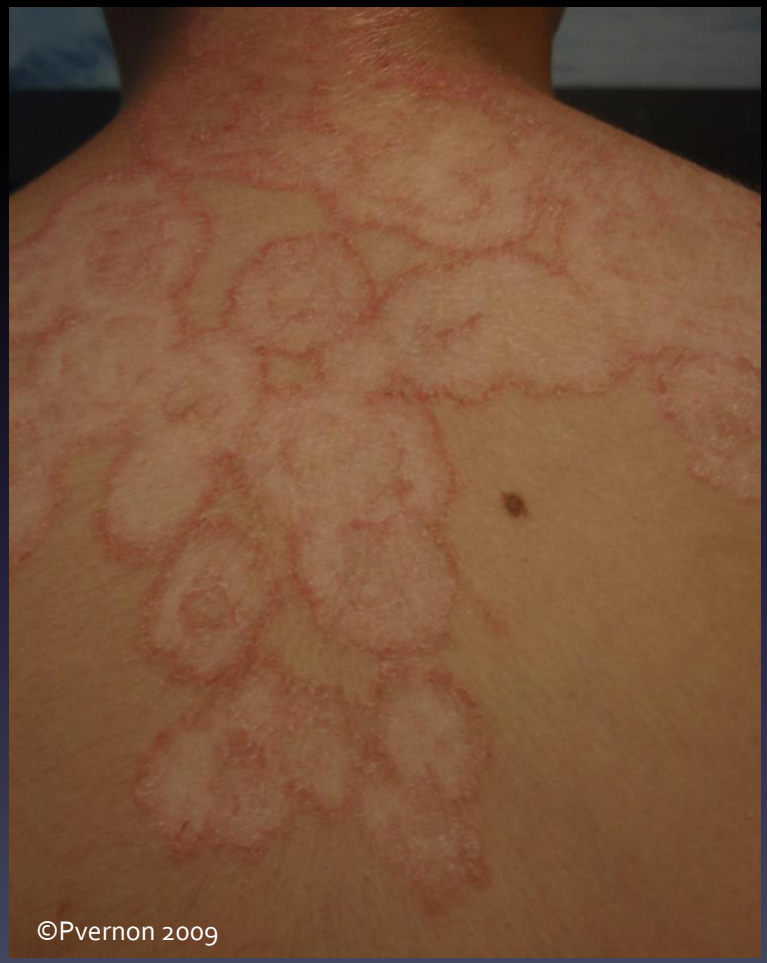


Diagnostics

- ANA, CBC with Differential, ESR (sedimentation rate)
- UA
- Biopsy
  - Hematoxylin and eosin staining (H & E)
  - Direct immunofluorescnce (DIF) on lesional and peri-lesional skin

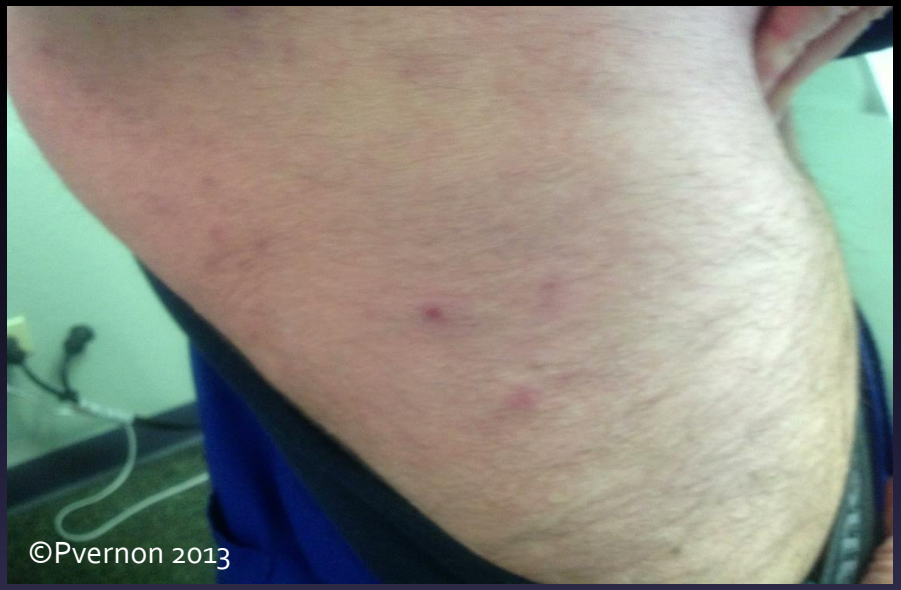
Lupus Management

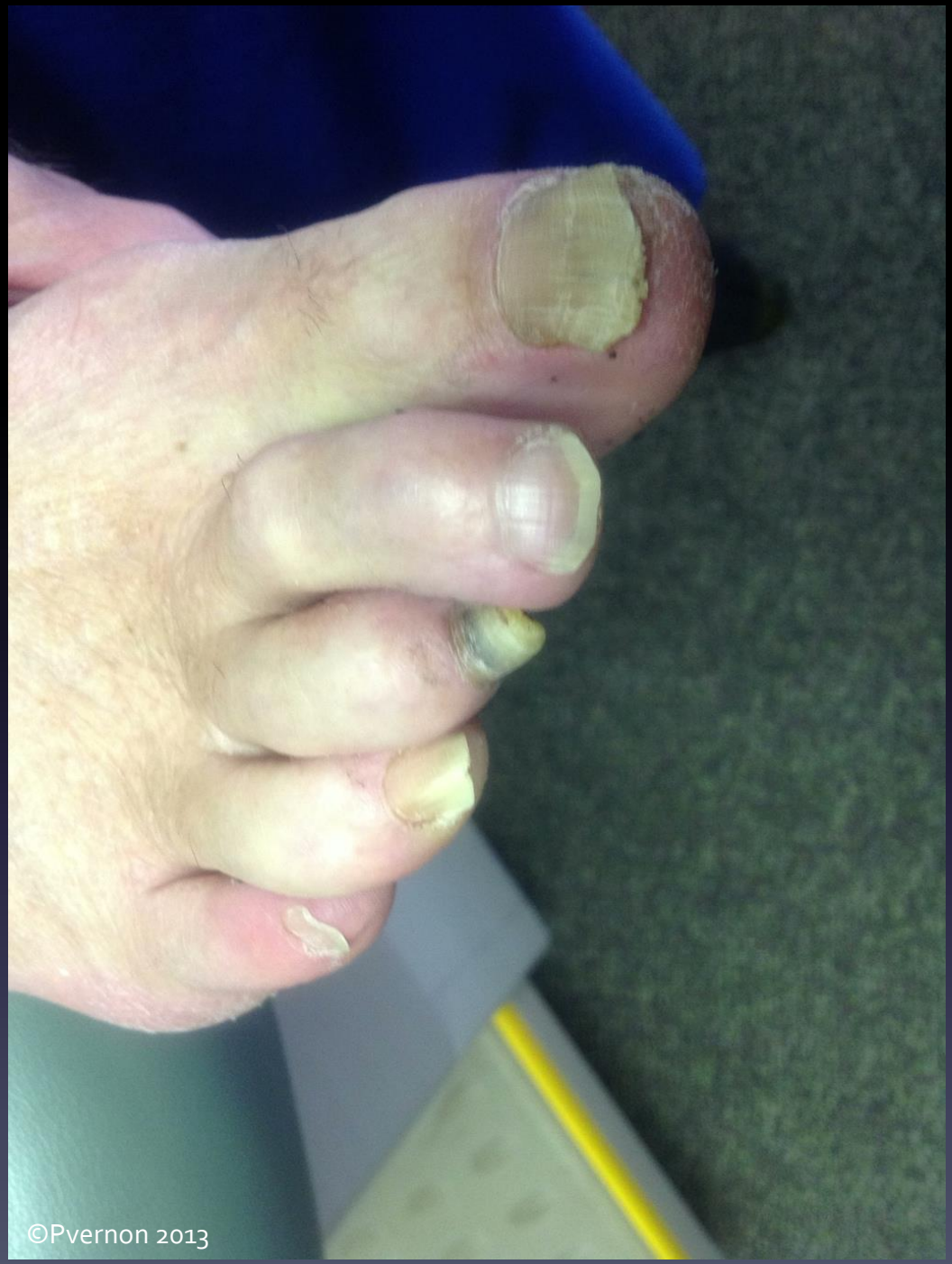
- **Refer to rheumatology and dermatology for co-management**
- Sunscreen
- Topical and intralesional steroids
- Oral steroids
- Azathioprine
- Cyclophosphamide
- Cyclosporine
- Plaquenil
- Mycophenolate
- Methotrexate
- Benlysta



63 Year Old Male

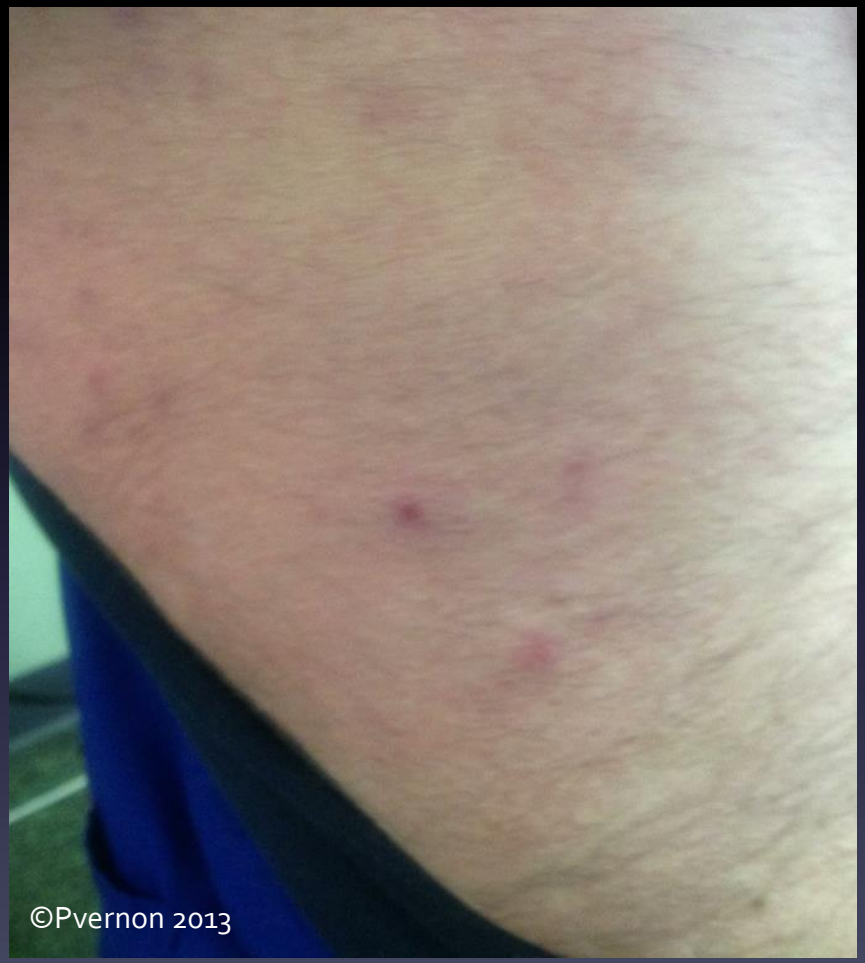
- Long standing history of folliculitis on hips, buttocks, and lower back
- Coincidental history of tinea cruris: untreated
- Treated with oral antibiotics and topical corticosteroids without relief





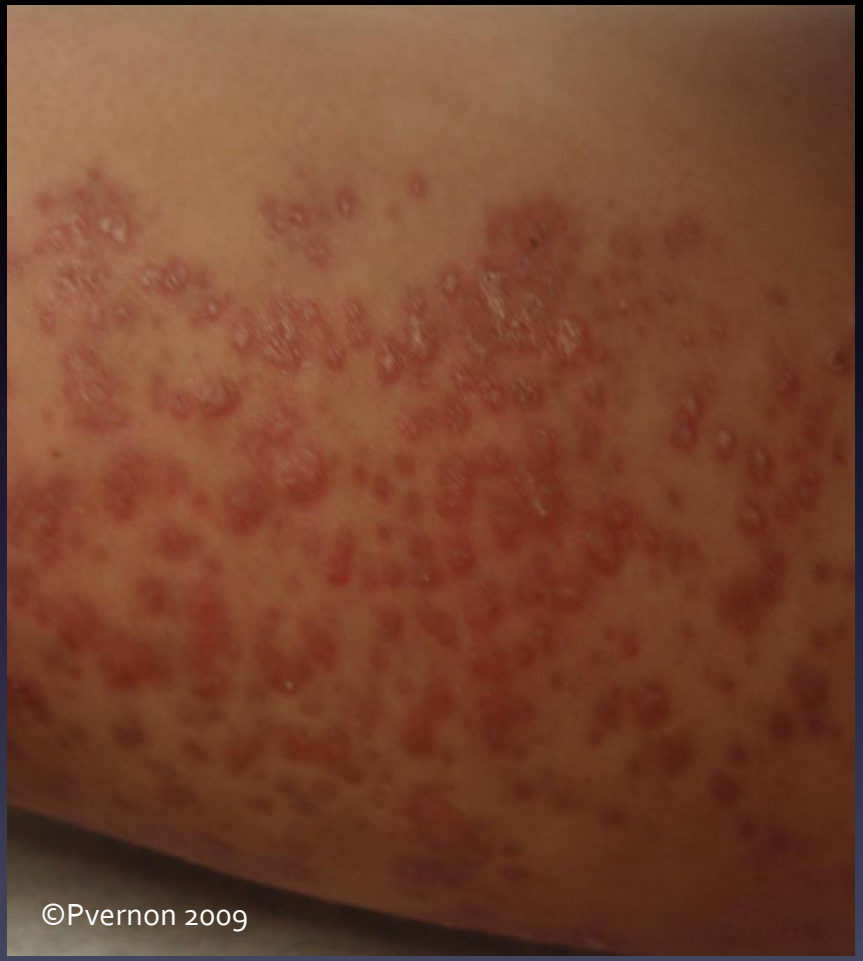
DIFFERENTIAL

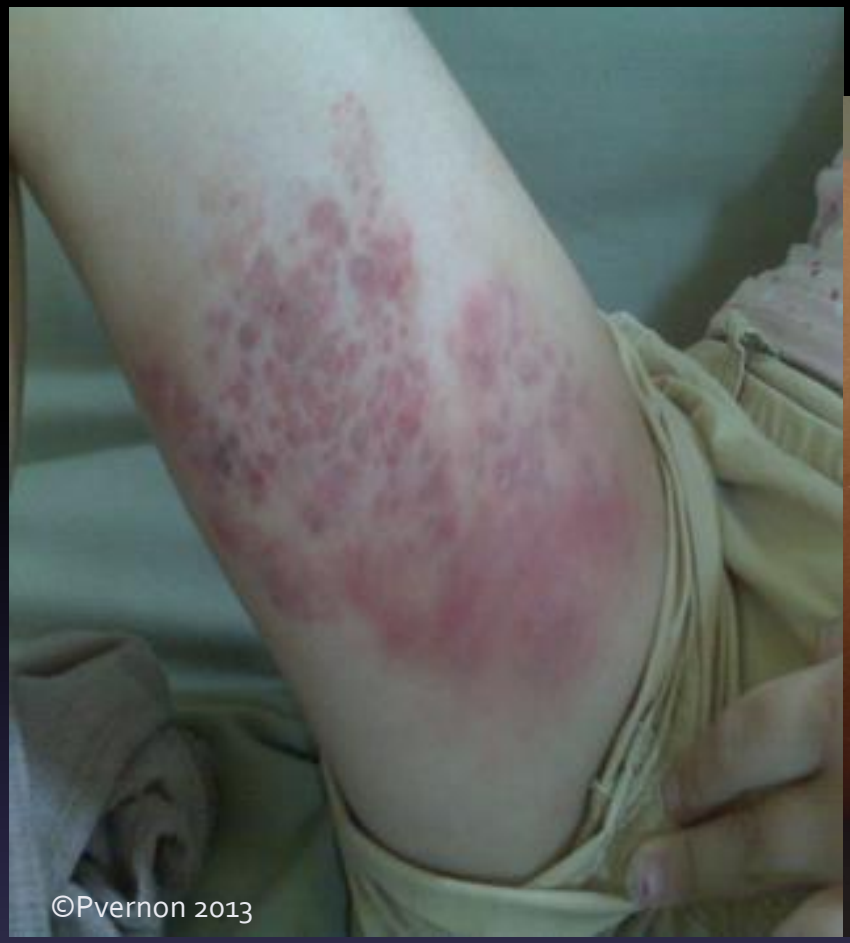
- Folliculitis
- Acne Keloidalis
- Scabies
- Kaposi Sarcoma
- Nodular Vasculitis
- Majocchi Granuloma

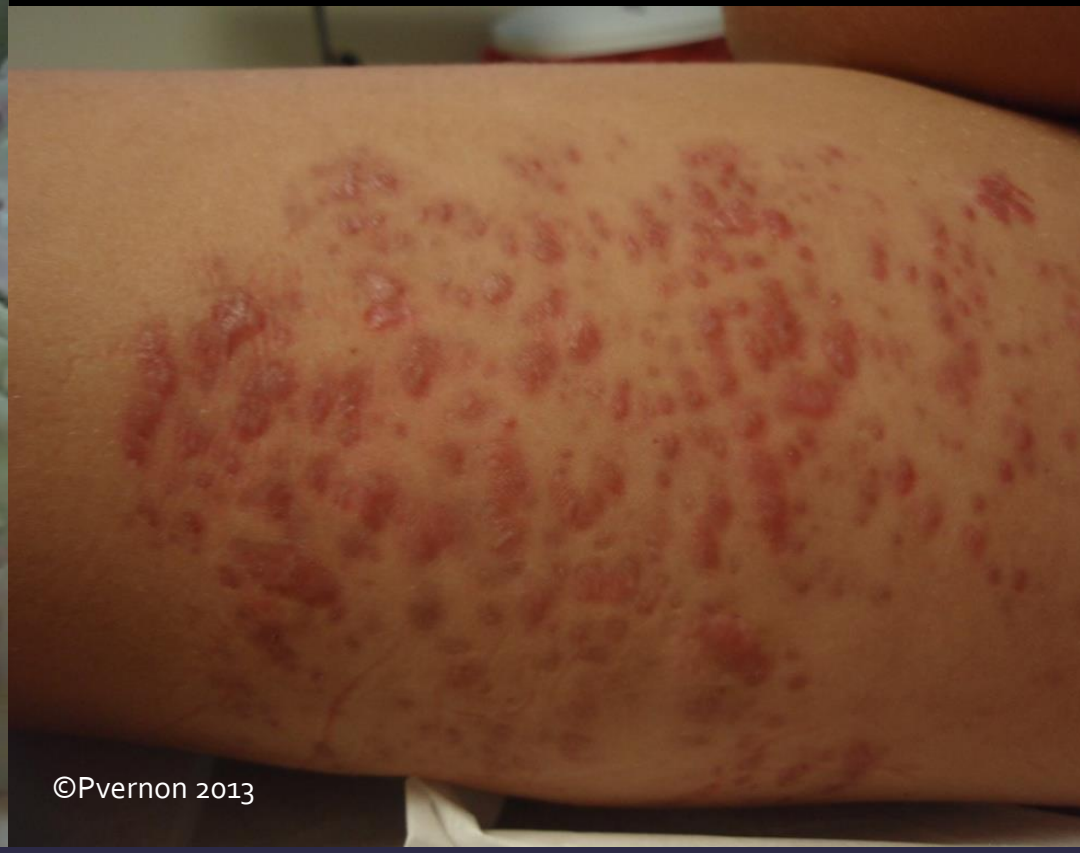


MAJOCCHI GRANULOMA

- Deep suppurative granulomatous folliculitis
- Common in females who frequently shave
- Commonly occurs as result of use of potent topical steroids on tinea
- Most commonly due to *Trichophyton rubrum*



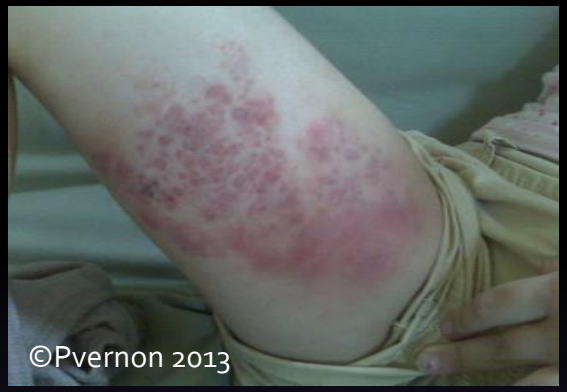




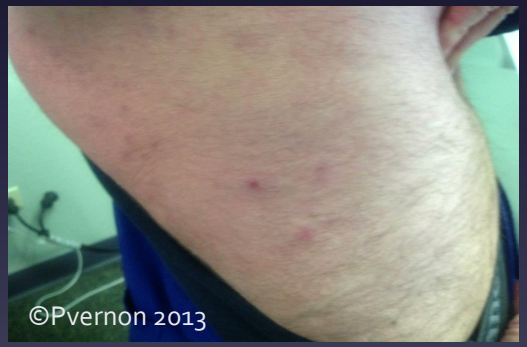
DIAGNOSIS

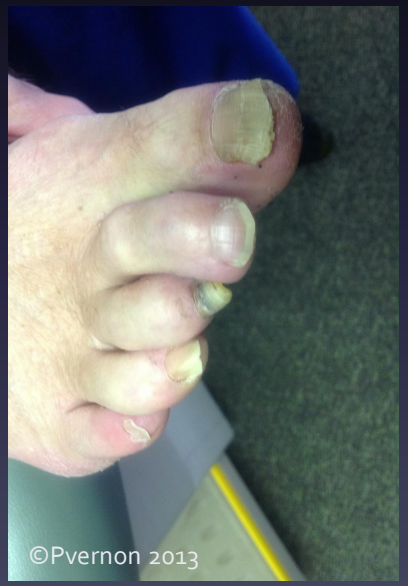
- KOH usually negative
- Tissue biopsy
- Gram stains
- Periodic acid-Schiff (PAS) stains reveal fungal hyphae in tissue, surrounded by granulomatous reaction

TREATMENT



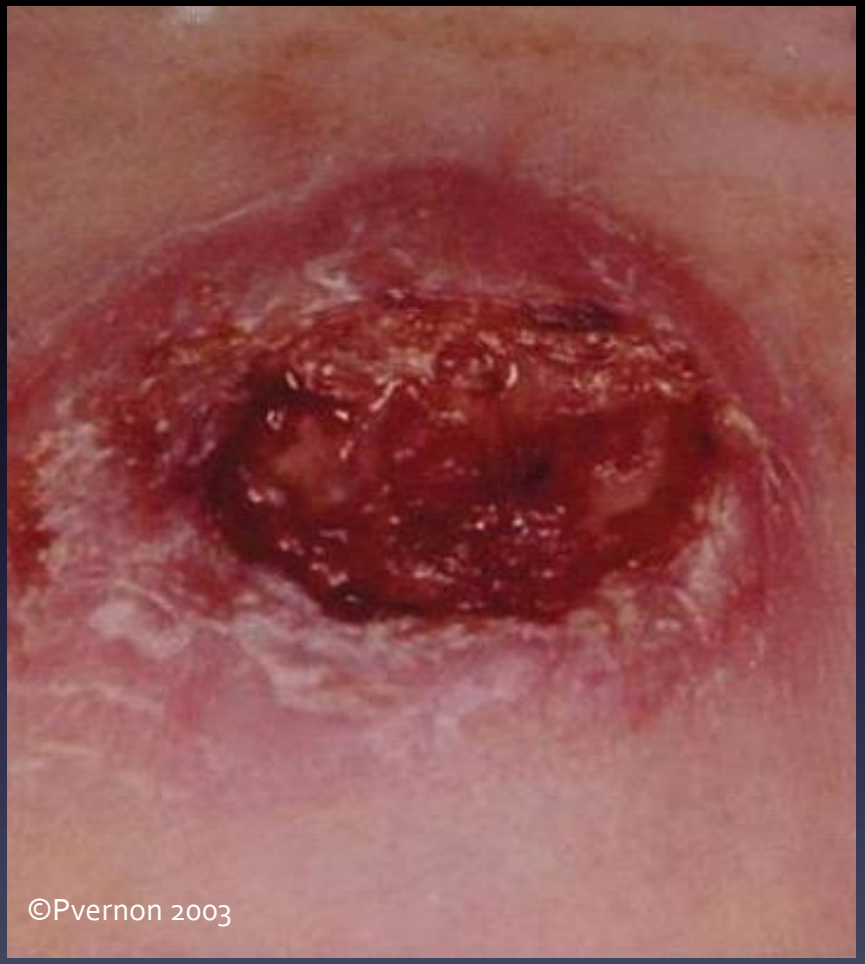
- Systemic antifungals: terbinafine x 6 weeks
- Remove exacerbating factors: topical steroids
- Antibiotics for secondary bacterial infections





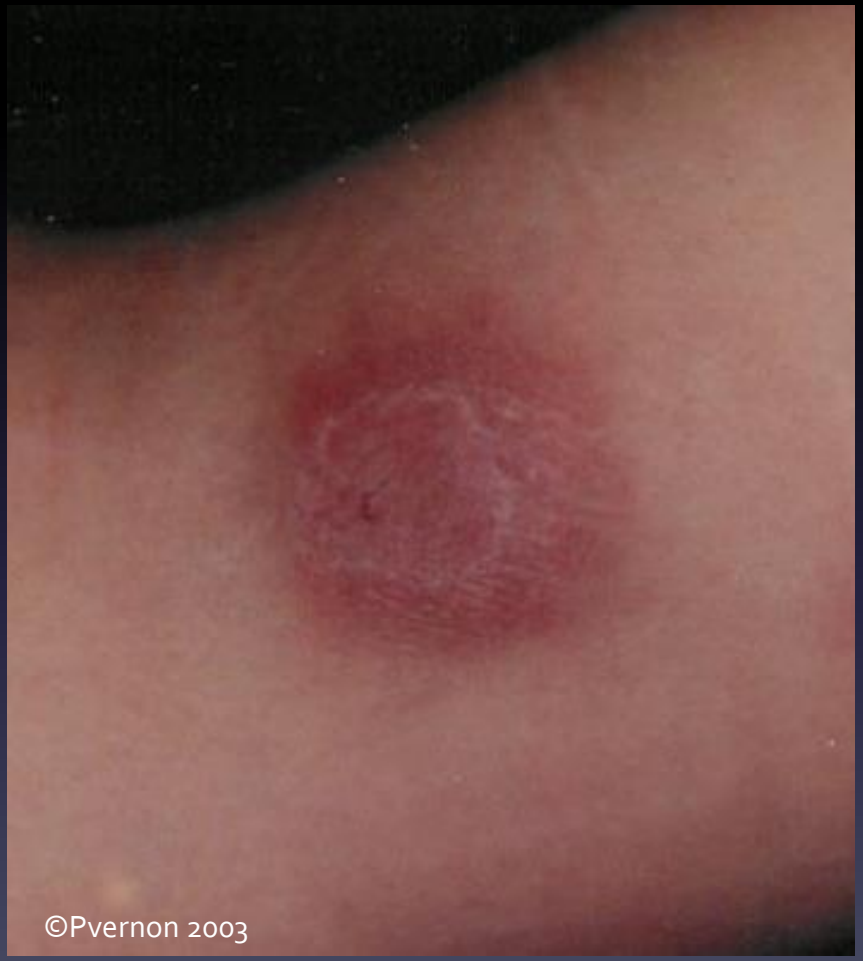
28 YEAR OLD MALE

- 2-3 cm enlarging non-tender violaceous ulcer with rolled edges on right forearm.
- Tender adenopathy with erythema in antecubetal fossa.
- Visibly enlarged node above the fossa.
- Tender shoddy subcutaneous nodes along lymphatic drainage proximal arm to axillary node.



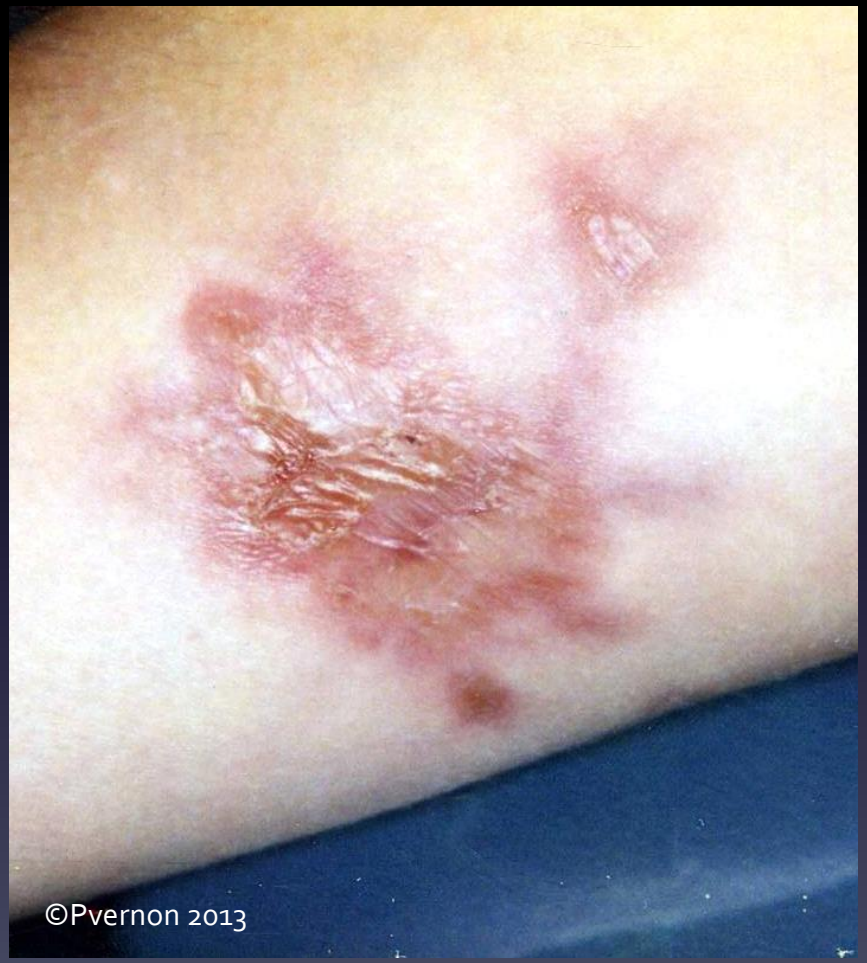
Past History

- Previously healthy, and currently no acute distress. No recent travel. Family members well.
- Ulcer developed 4 weeks ago.
- Chopping wood 3 weeks prior to ulcer development.
- PCP treated with Keflex 1 week ago without response.



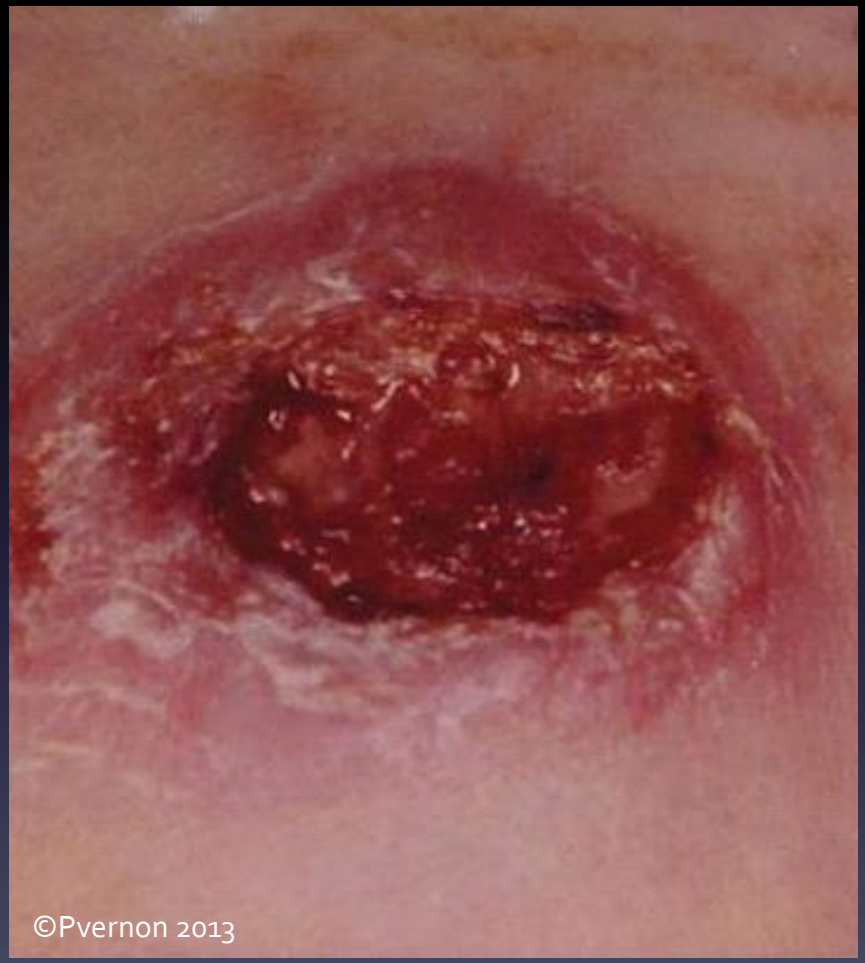
Differential Diagnosis

- Cellulitis
- Sporothrix
- Norcardia
- Brown recluse spider bite



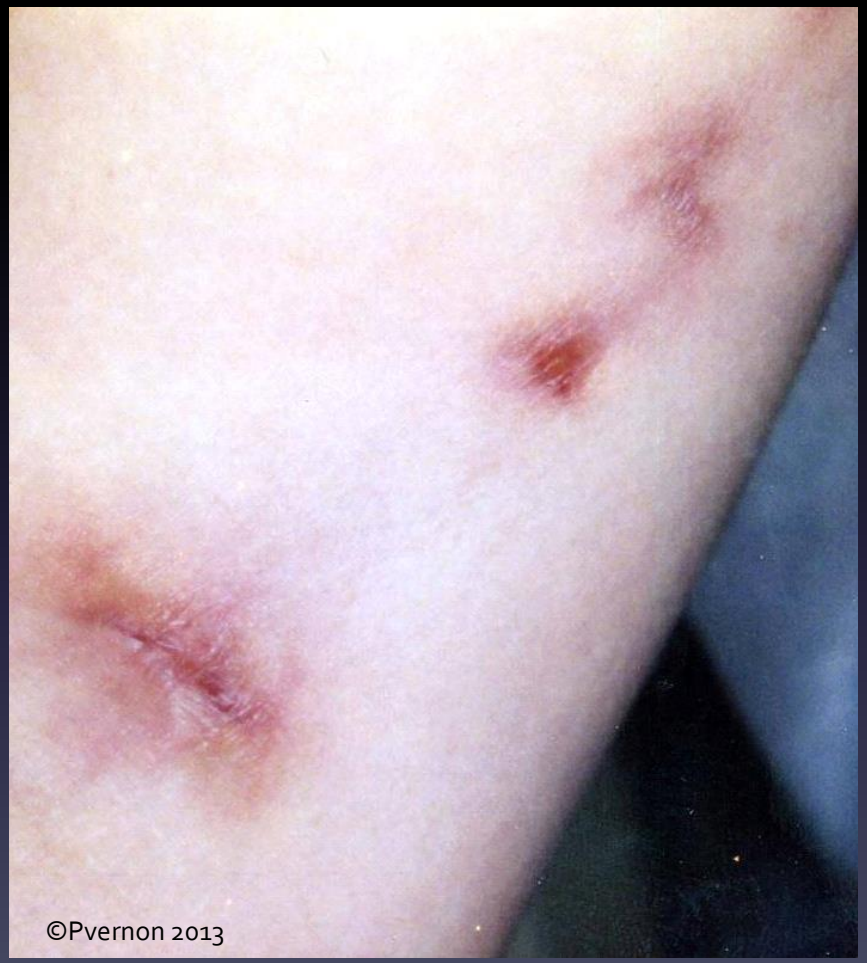
SPOROTRICHOSIS

- Granulomatous fungal infection
- Occurs in all ages in patients exposed to contaminated soil or vegetation
- Usually follows a wound inflicted by a contaminated object (splinter, thorn, straw, grain, rock, glass, cat bite, or cat scratch)



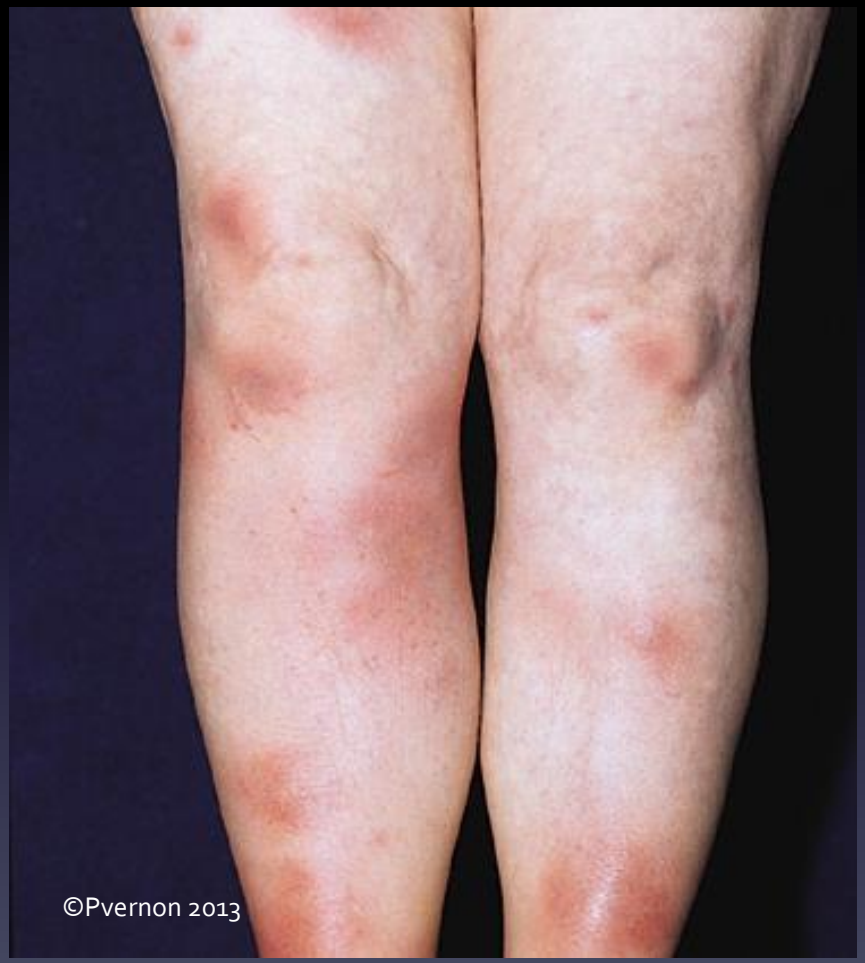
Treatment

- Itraconazole (Sporonox) 100-200 mg/day
- Terbinafine (Lamisil) 250 mg/day
- Fluconazole (Diflucan) 100-200 mg/day
- Amphotericin B 0.25mg/kg- ro 1.0 mg/kg by slow IV infusion



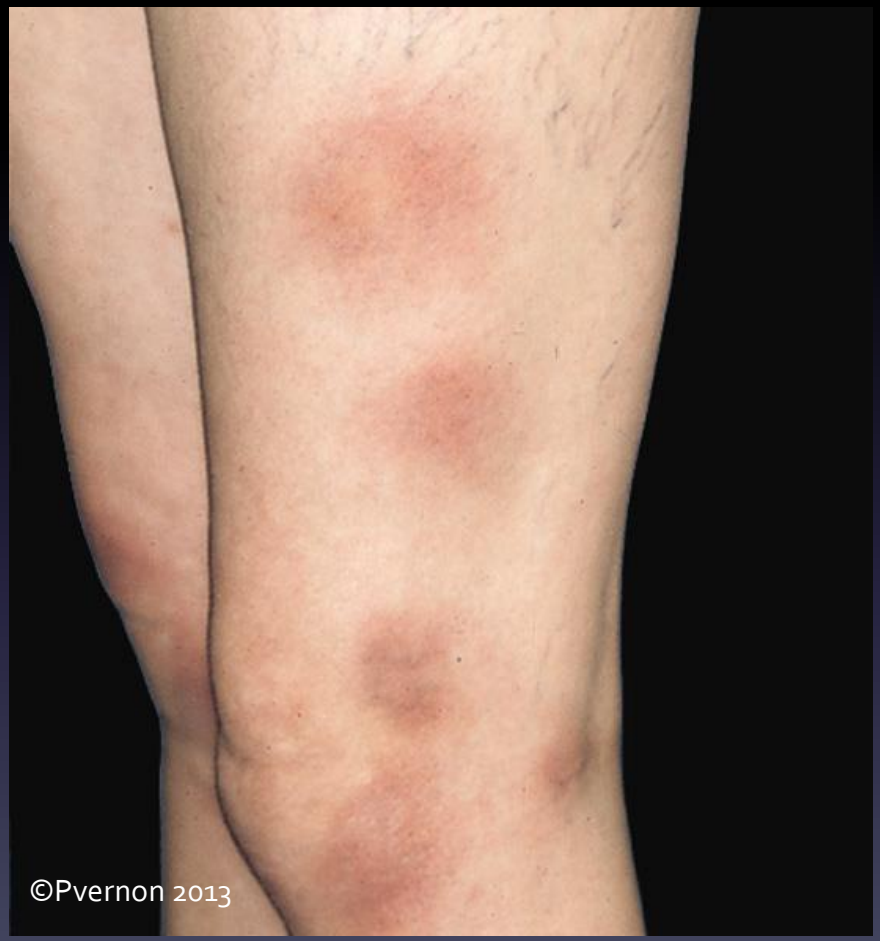
26 year old Female

- Developed tender, warm nodules on lower extremities
- No change in activities
- No recent illness
- Started OCP 4 months ago

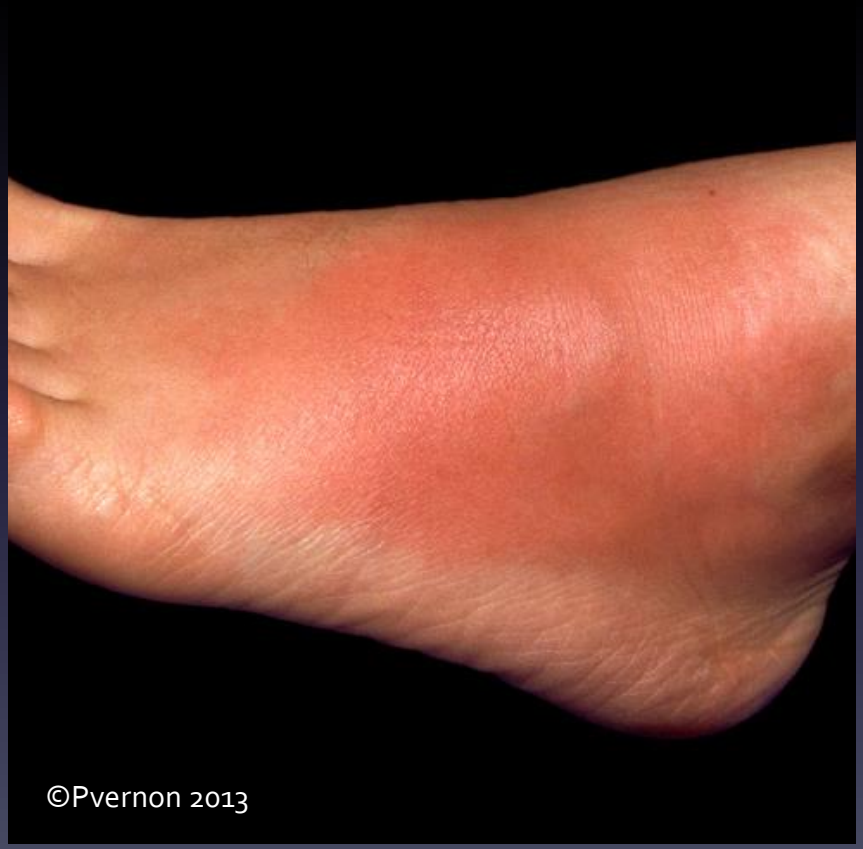


Erythema Nodosum

- 1 to 5 mm red tender subcutaneous nodules
- Extensor surfaces of lower legs
- Occasionally involving arms
- May be self-limiting, resolving in 3-6 weeks
- Onset may be associated with fever, generalized arthralgias, leg swelling , joint pain



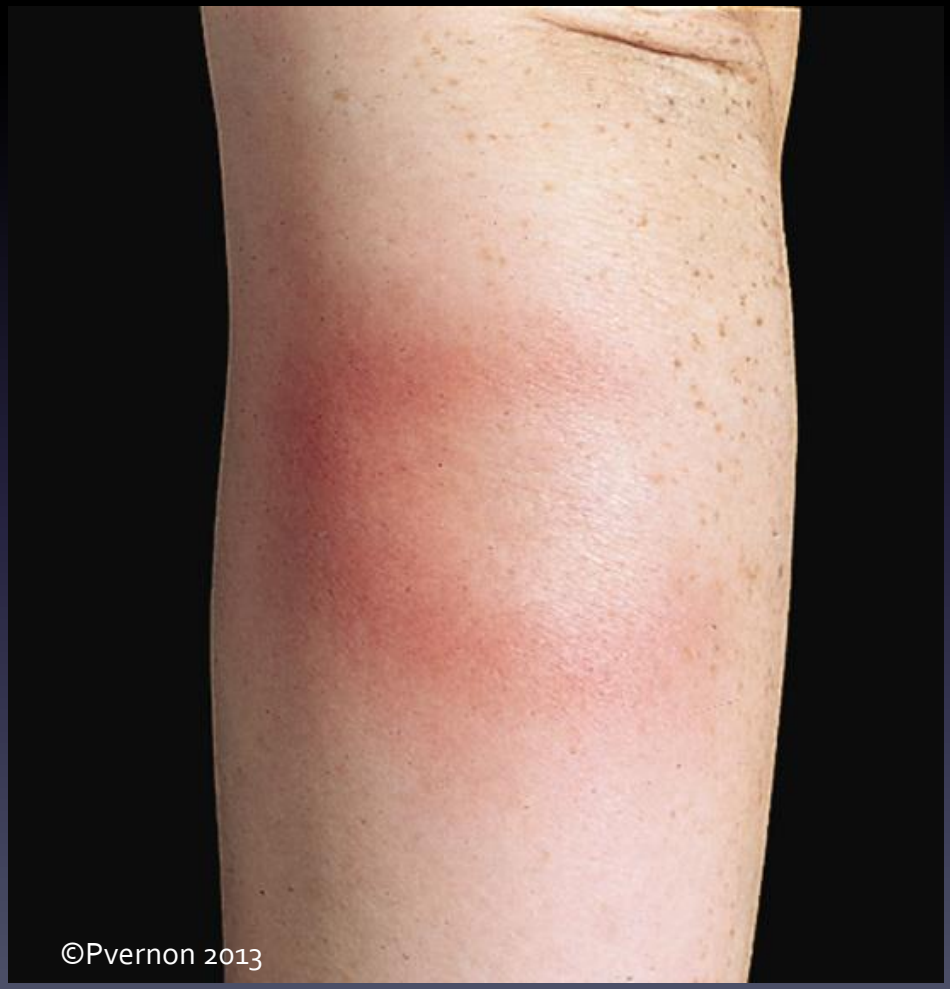
Erythema Nodosum Epidemiology



- Any age, sex, or ethnicity
- Most common in young adults
- Female: Male 4:1

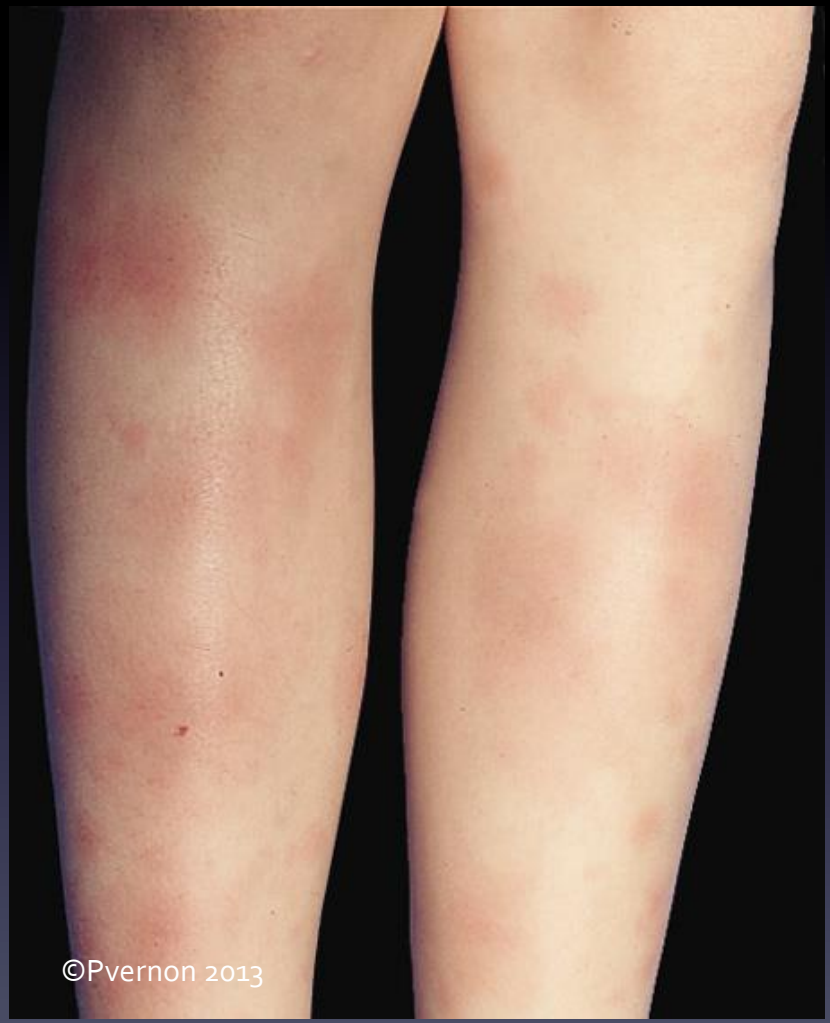
Erythema Nodosum: Infections

- Strep infections, esp. upper respiratory
- Ulcerative colitis
- Histoplasmosis
- Syphilis, Leprosy
- Sarcoidosis
- Fungal infections: coccisiodomycosis, histoplasmosis



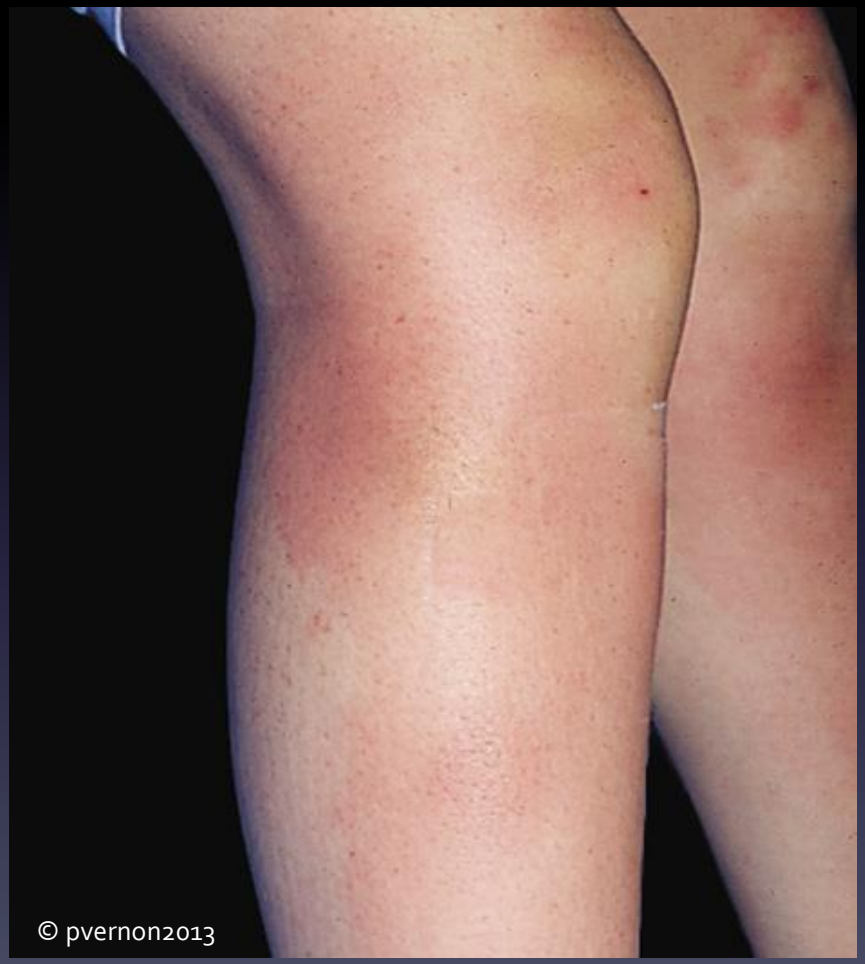
Erythema Nodosum Underlying Medical Conditions

- Pregnancy
- Inflammatory Bowel Disease: ulcerative colitis, Crohn's disease
- Sarcoidosis
- Lymphoma
- Leukemia



Erythema Nodosum: Drugs

- Oral contraceptives
- Estrogens
- Antibiotics: sulfonamides, penicillins
- Iodides
- Bromides

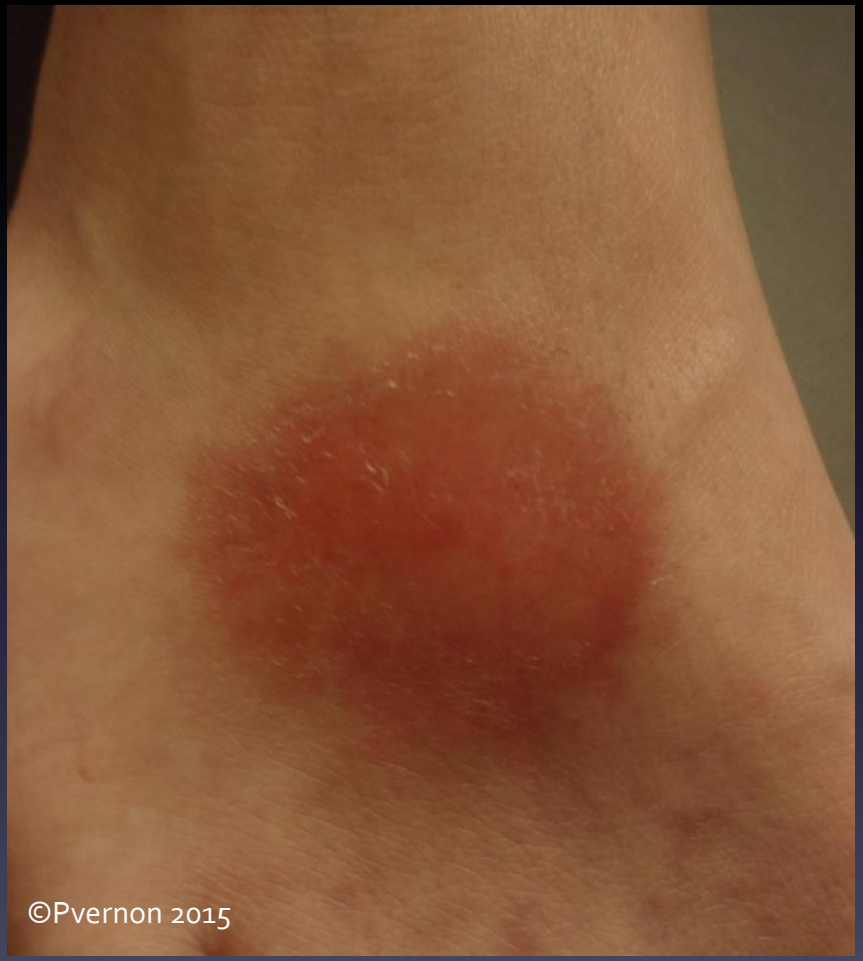


Erythema Nodosum Treatment

- Supportive: can be self-healing
- Rest, elevation
- NSAIDS
- Oral or intralesional steroids
- Remove/treat underlying cause

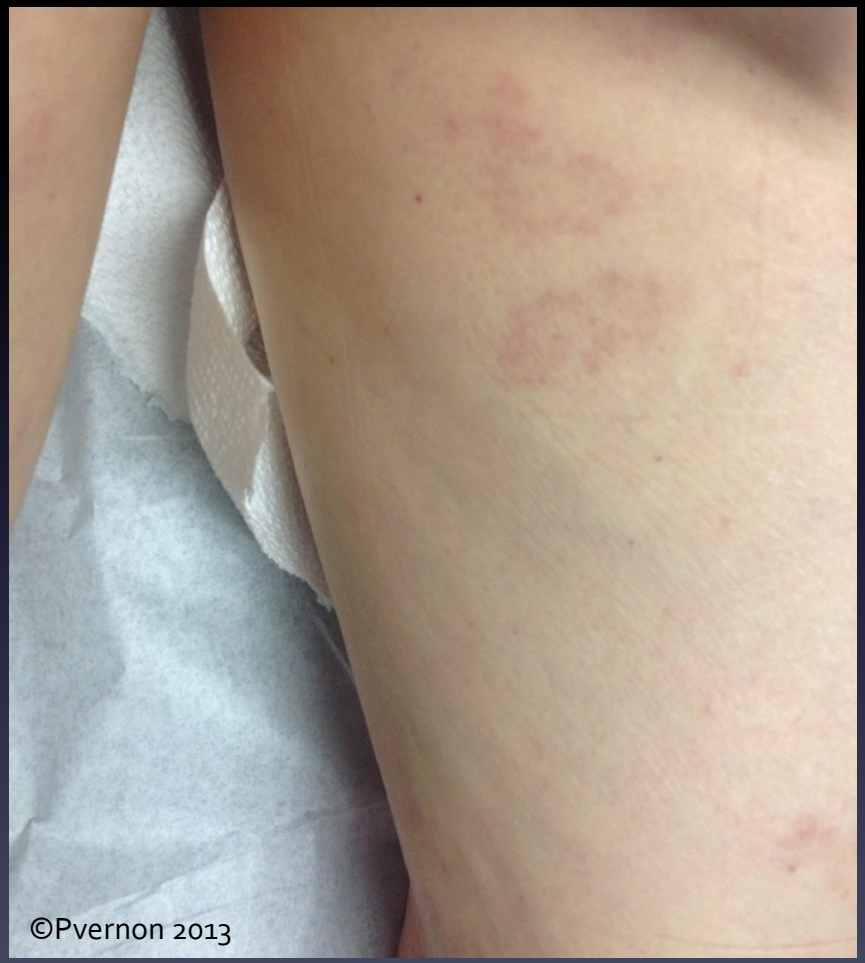
37 YEAR OLD FEMALE

- Annular pink/red papule on dorsal right foot
- Light pink/brown plaques on posterior legs
- Slightly itchy; mostly cosmetically bothersome
- Present for most of past winter

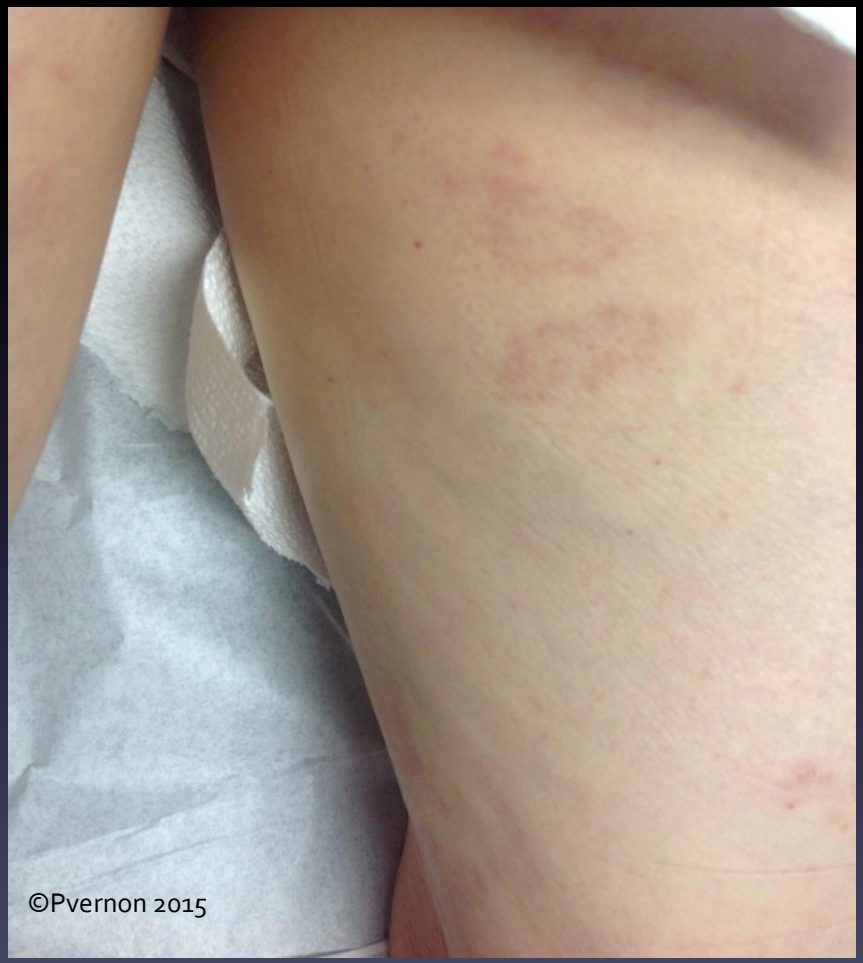


DIFFERENTIAL DIAGNOSIS

- Tinea
- Lichen Planus
- Nummular dermatitis
- Granuloma Annulare
- Erythema Migrans of Lyme disease
- Lupus
- Rheumatoid nodules



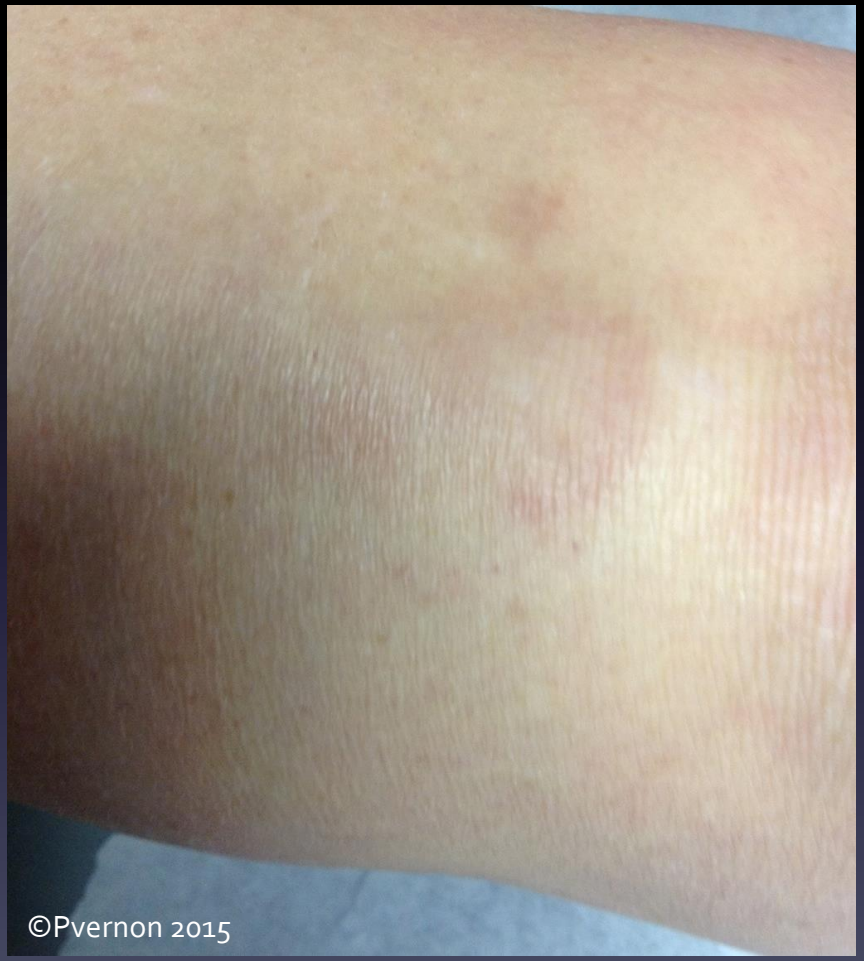
GRANULOMA ANNULARE



- Benign inflammatory dermatosis
- Occurs in all age groups, all races; rare in infancy
- Female: Male 2 : 1
- Often asymptomatic, occasionally pruritic
- Most resolve spontaneously without adverse sequelae

TREATMENT

- Intralesional corticosteroid injections
- Topical corticosteroid
- Cryotherapy
- UVB



9 Year Old Male

- Swimming off the coast of Spain
- Presented at ER with hives and lesions on medial right thigh
- Intense stinging and pain
- No SOB

56

Jellyfish

- Free-swimming non-aggressive gelatinous marine animals surrounded by tentacles
- Tentacles covered with nematocysts filled with venom
- Found near the water surface at dusk

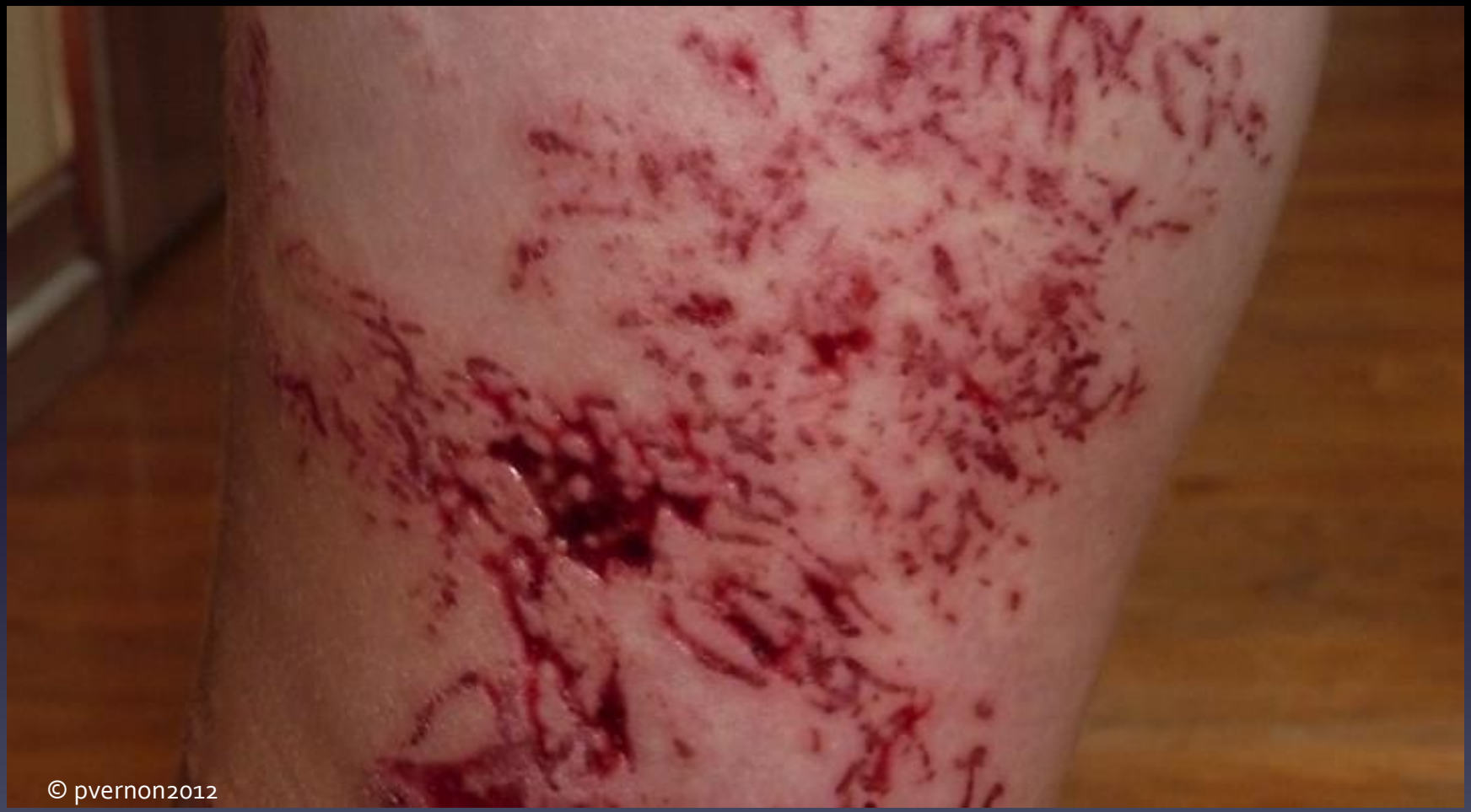
Jellyfish Symptoms

- Intense stinging, pain, rash
- Progressive symptoms: nausea, vomiting, diarrhea, adenopathy, muscle spasms
- Severe reactions cause difficulty breathing, coma, death

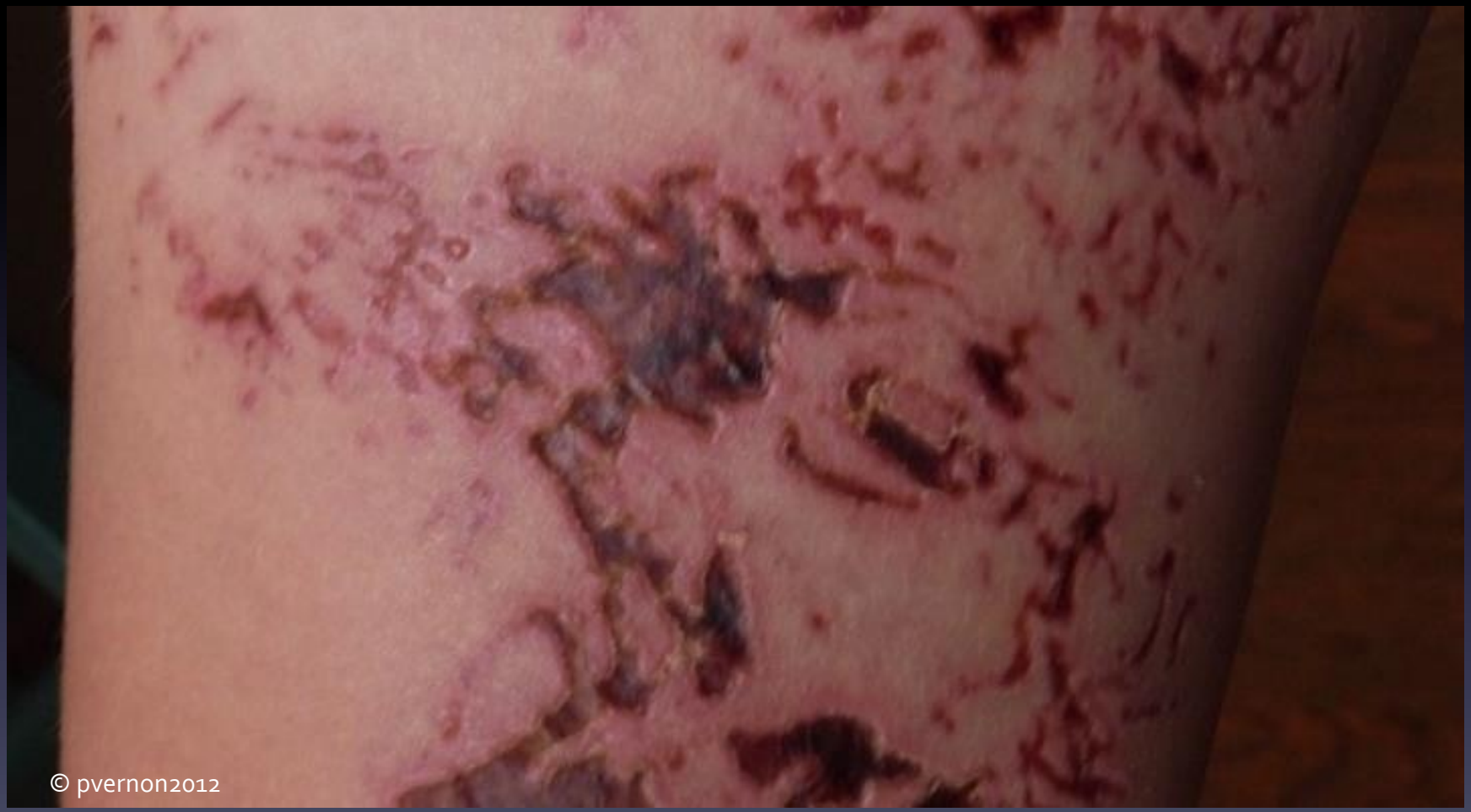
Jellyfish Sting Treatment

- Benadryl and acetaminophen or ibuprofen
- Soak area in acetic acid (vinegar), sea water, or 70% isopropyl alcohol 15-30 minutes (fresh water will cause nematocysts to continue to release toxins)
- Remove tentacles with tweezers
- Apply shaving cream or paste of baking powder, shave area with razor or credit card

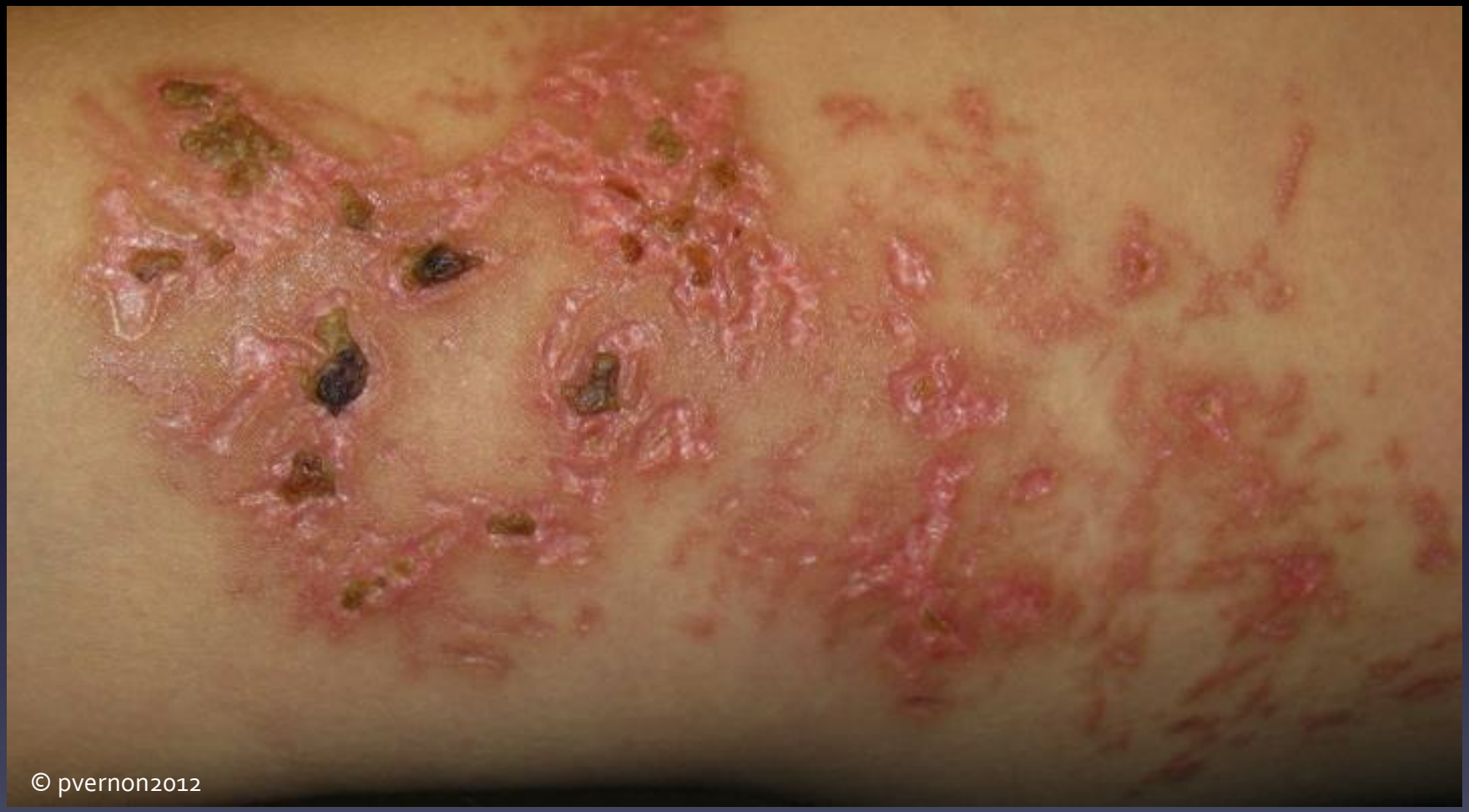
10 Days Post-Injury

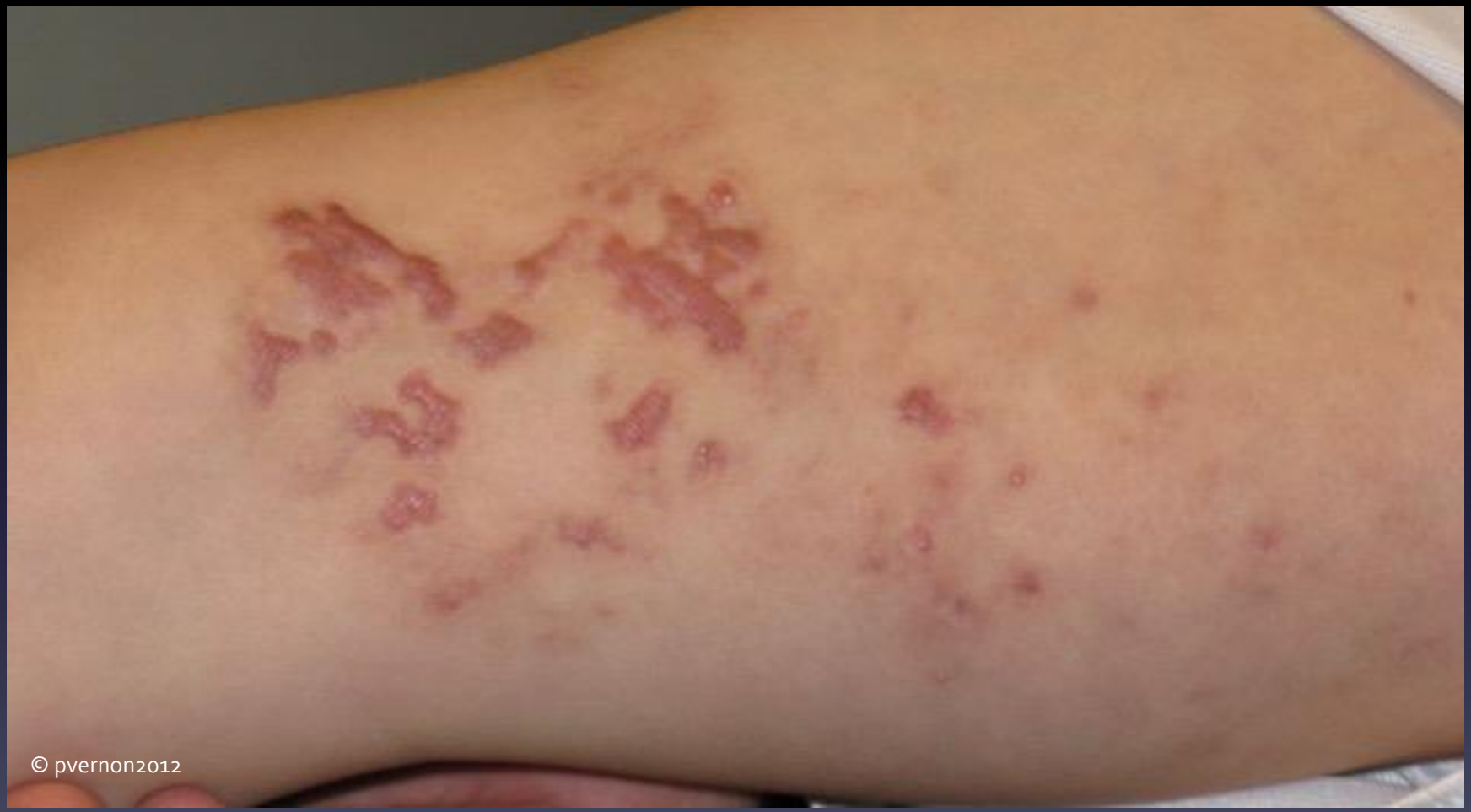


2 Weeks Post-Injury



6 Weeks Post-Injury



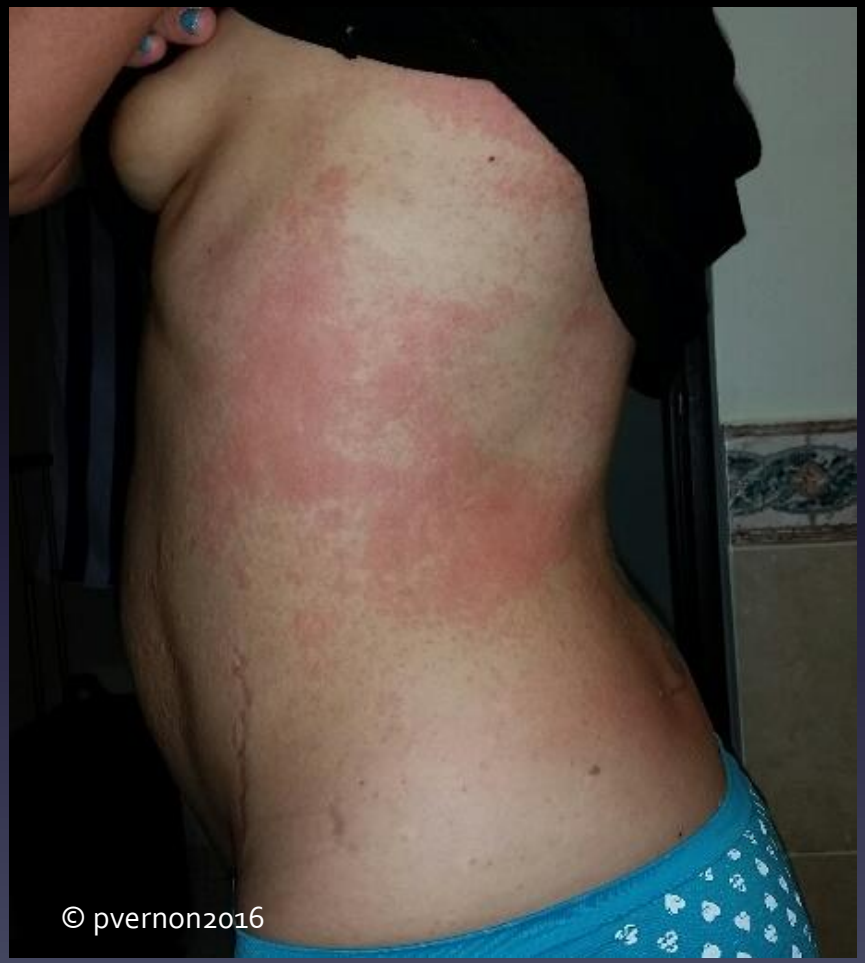


36 Year Old Female

- Developed rash on 4th day of vacation in Costa Rica
- Developed papular, pruritic rash after swimming in ocean
- Now spreading on trunk

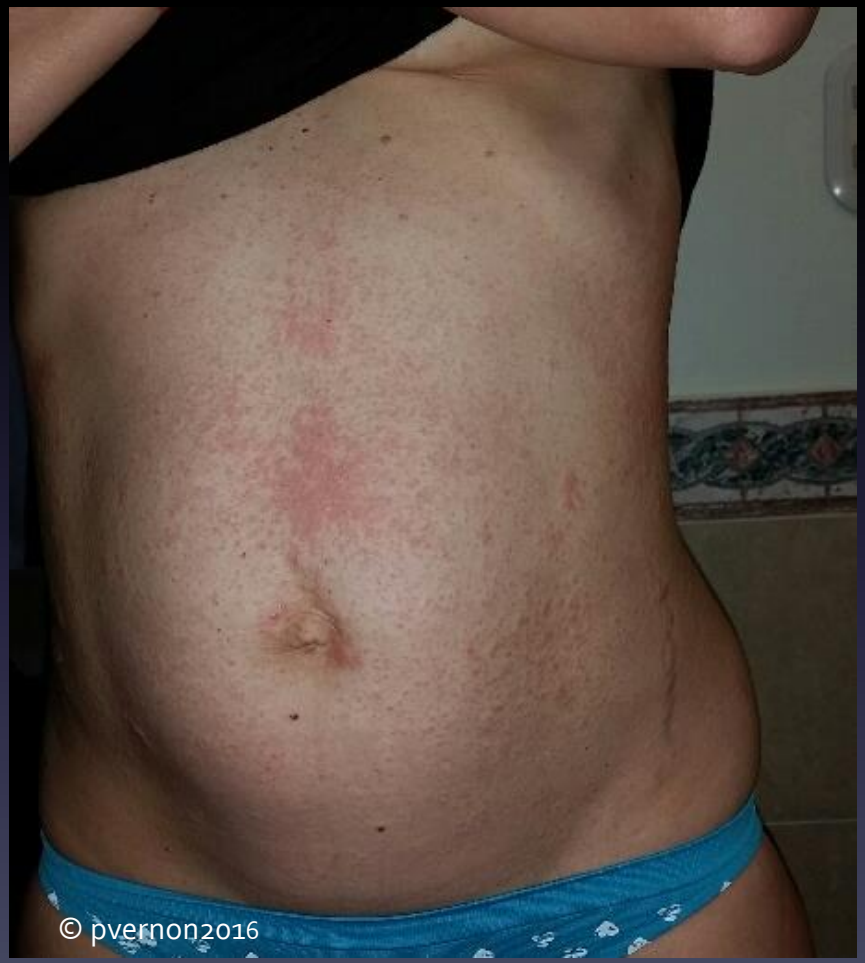
Seabather's Eruption

- Pruritic dermatitis
- Hypersensitivity reaction to nematocysts of larval-stage thimble jellyfish
- Sometimes called "sea lice"



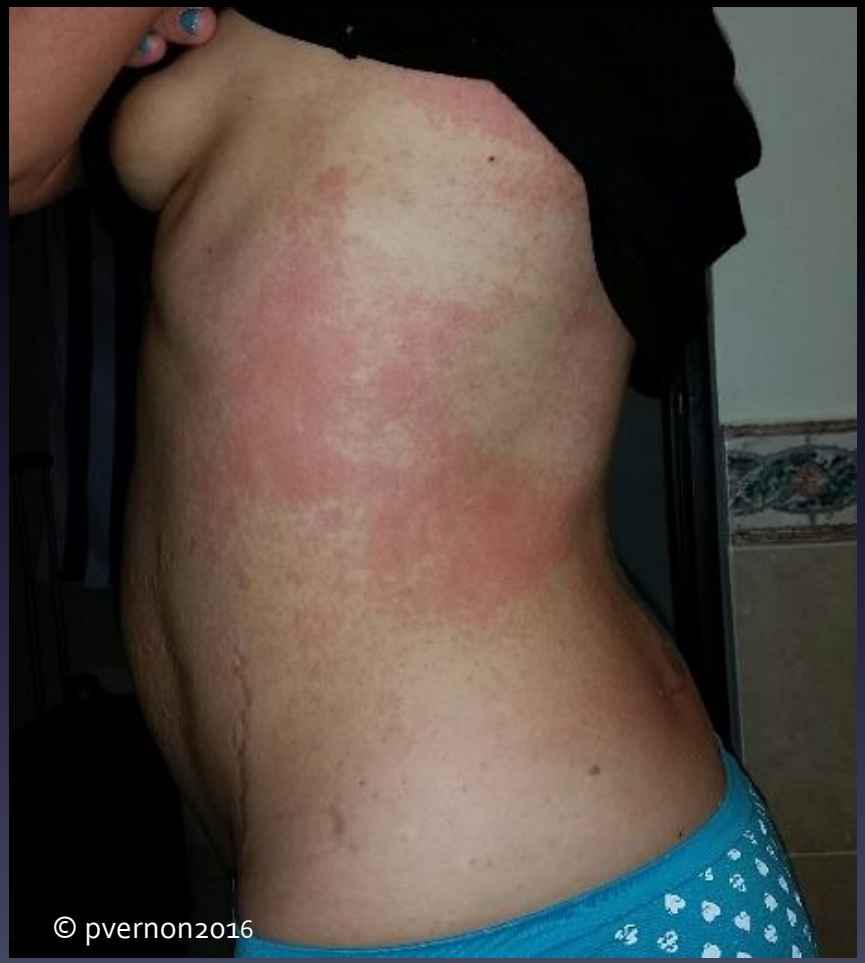
Seabather's Eruption

- Small red papules on areas covered by water-permeable clothing during ocean swimming
- Upon leaving the ocean, organisms stuck against skin die, discharge nematocysts



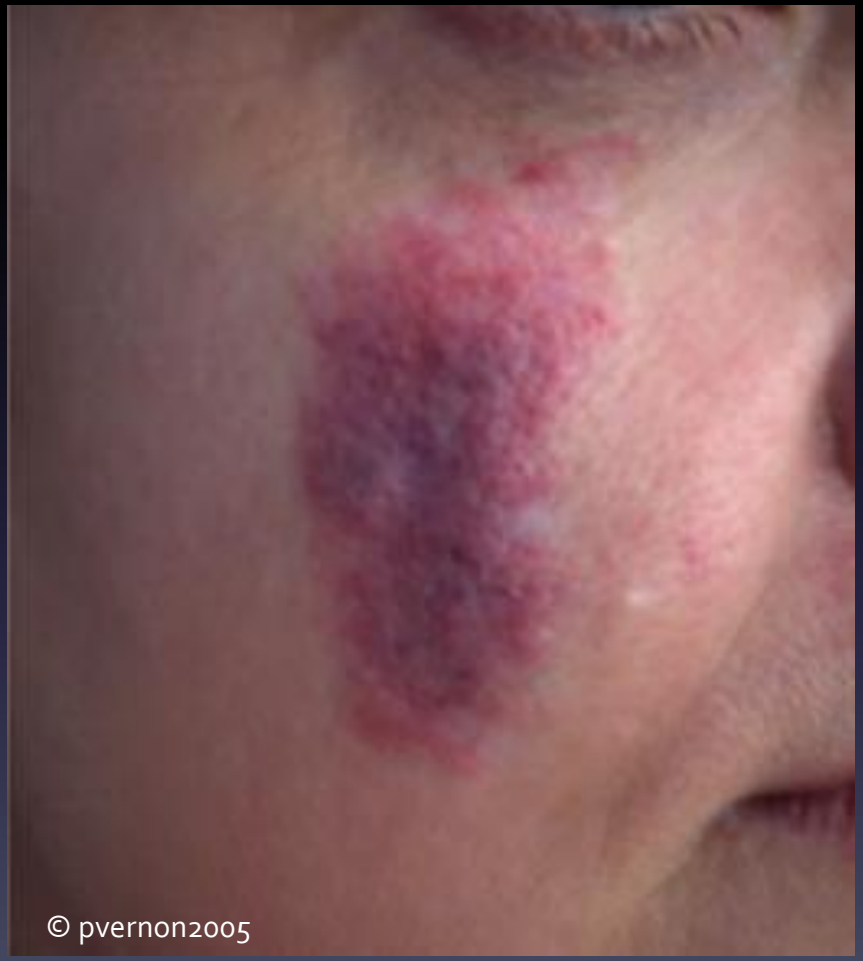
Treatment

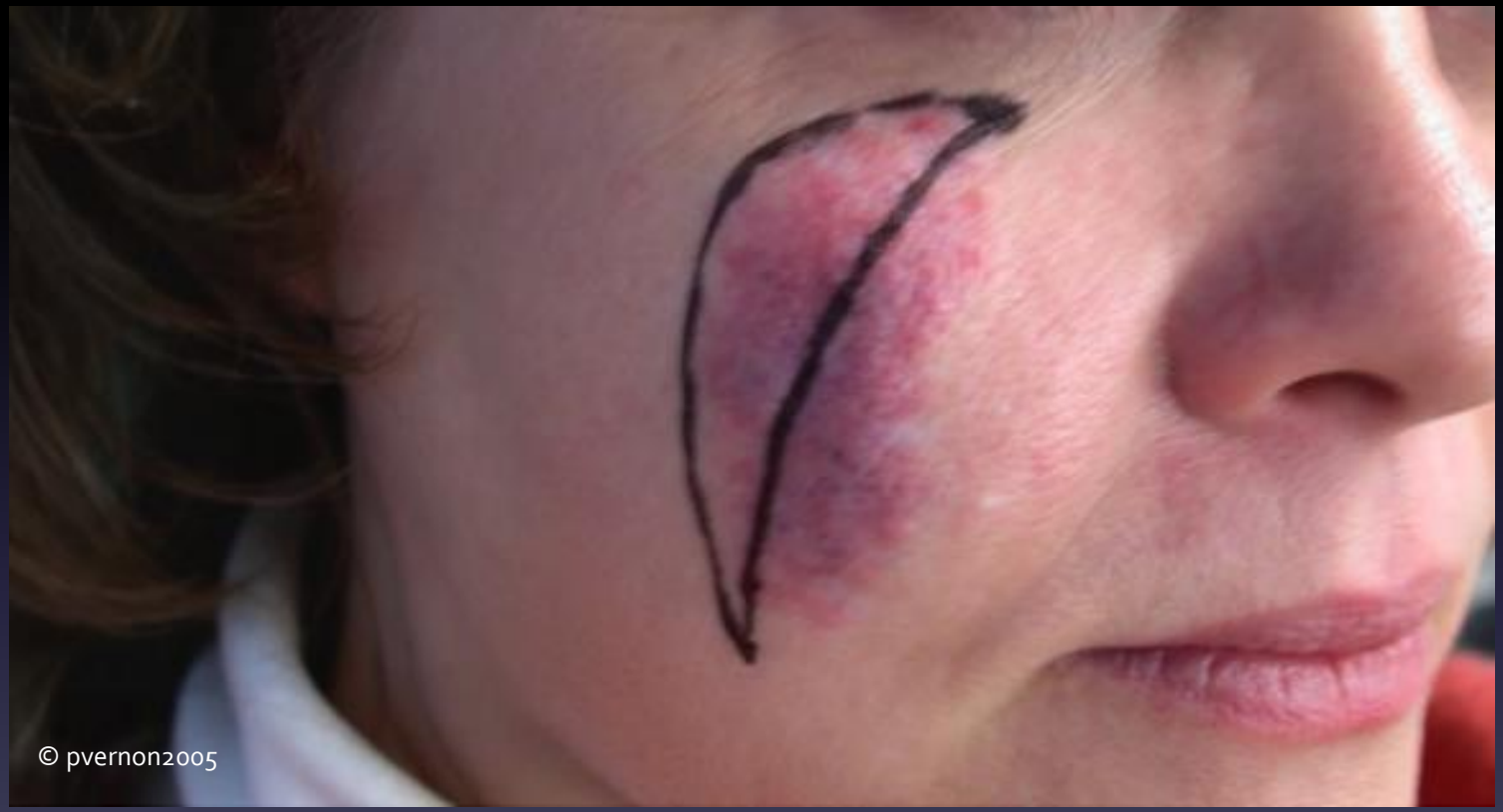
- Scratching causes intense itching and swelling
- Prompt removal of swim clothing while wet
- Warm sea-water shower
- Diphenhydramine, topical corticosteroids

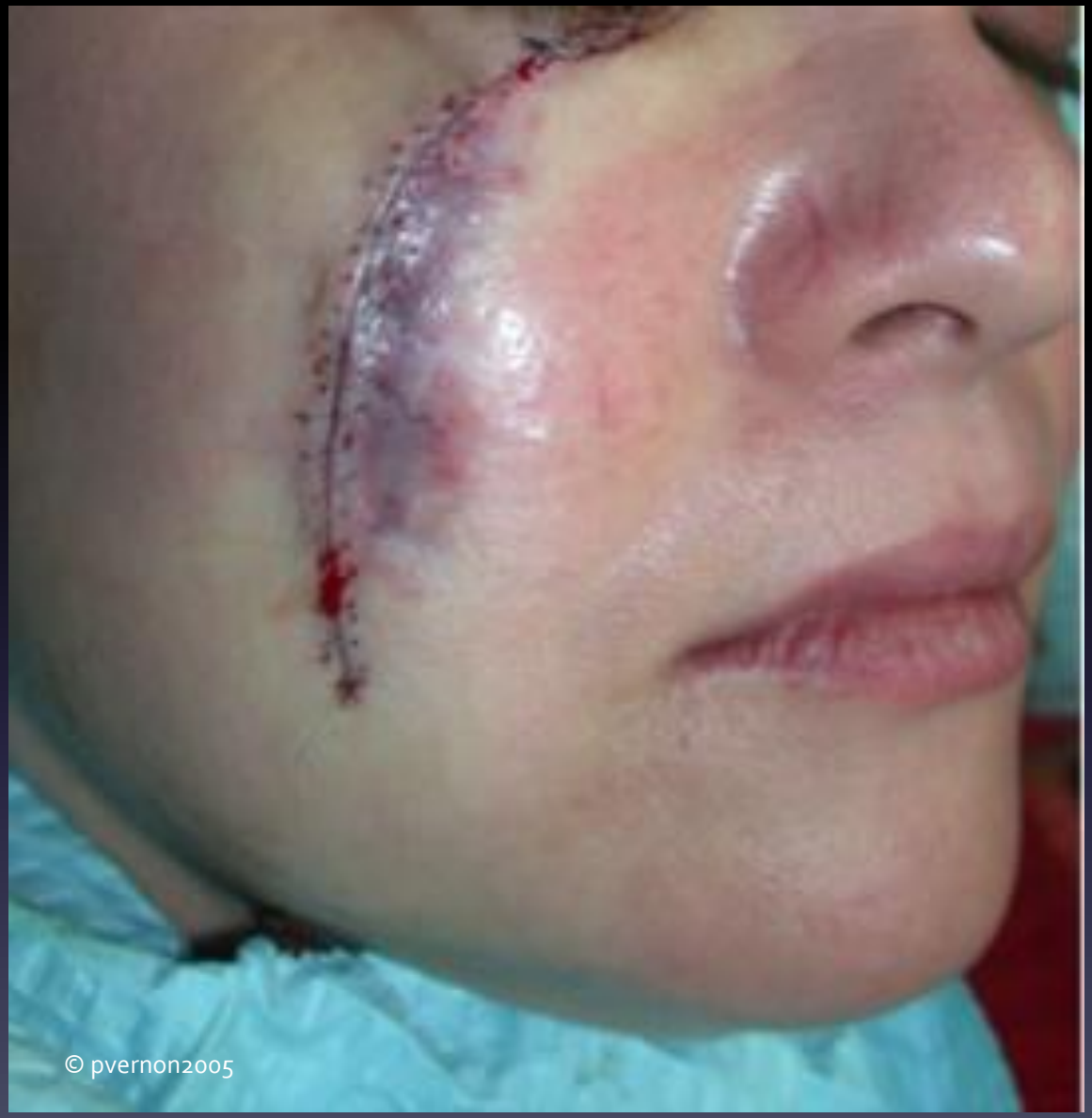


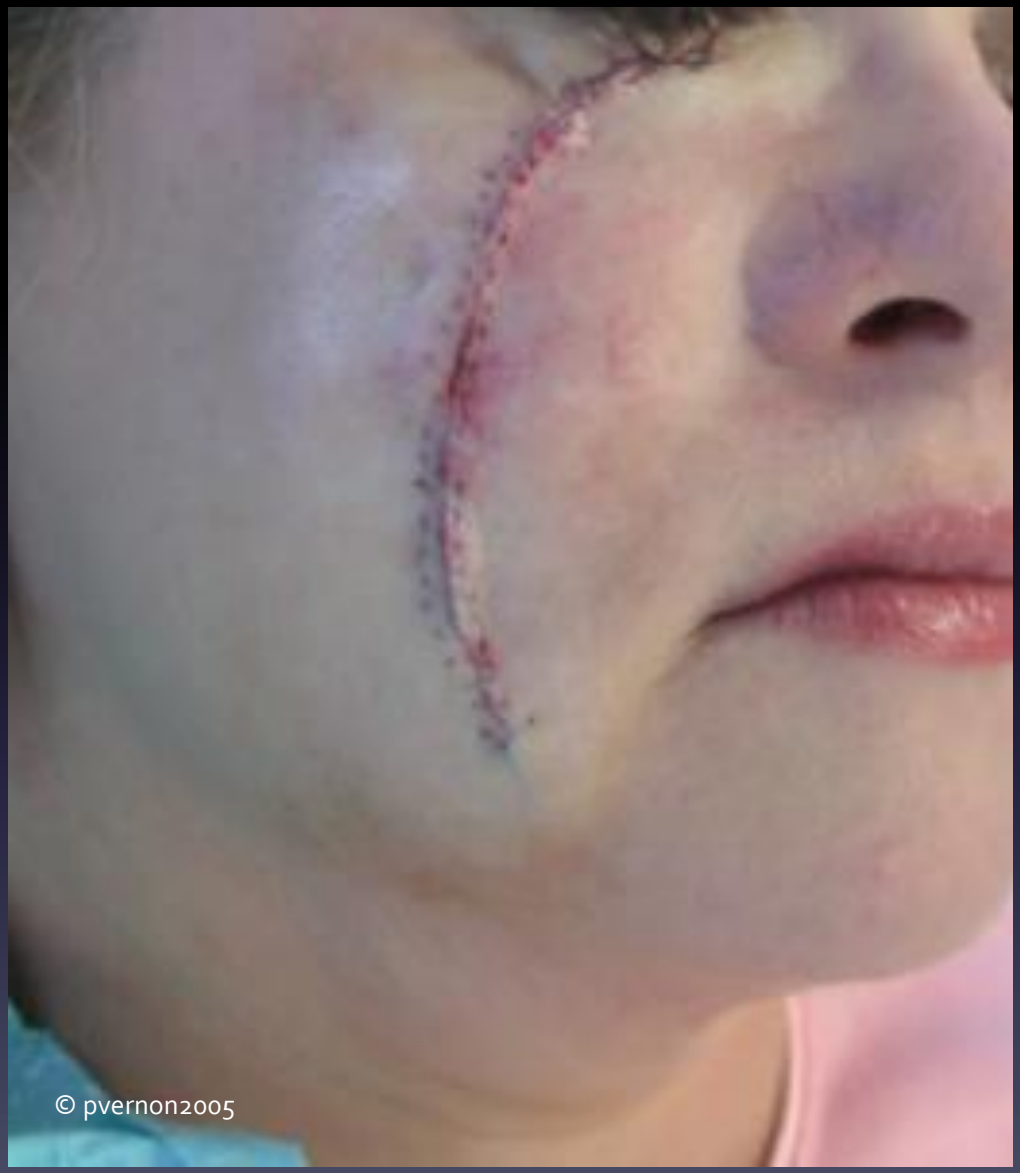
54 Year Old Female

- Congenital lesion on right cheek
- Multiple laser treatments in past 18 months with minimal results



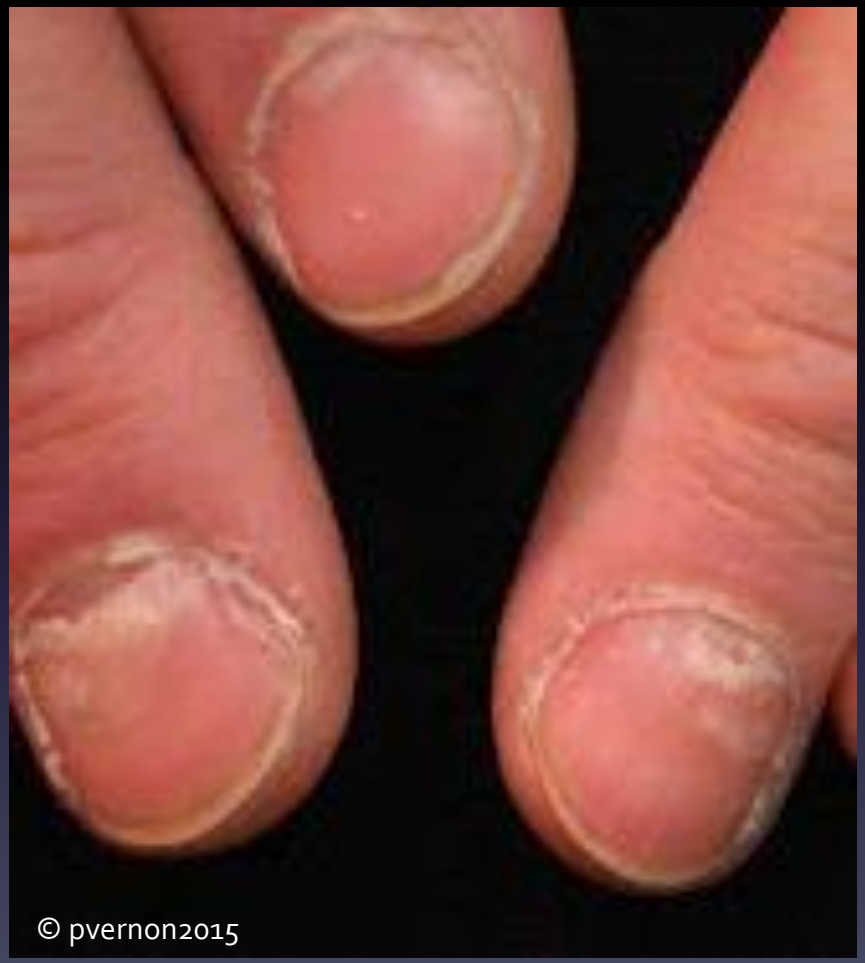






43 Year Old Male

- Separation of proximal nail plate on several fingernails
- Toe nails not involved
- Painless
- Cosmetically bothersome

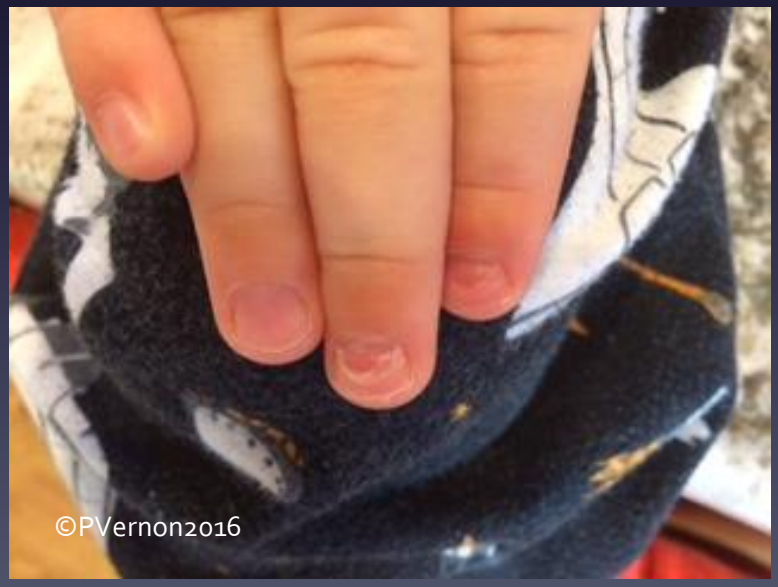


Onychomadesis

- Painless spontaneous separation of proximal nail plate

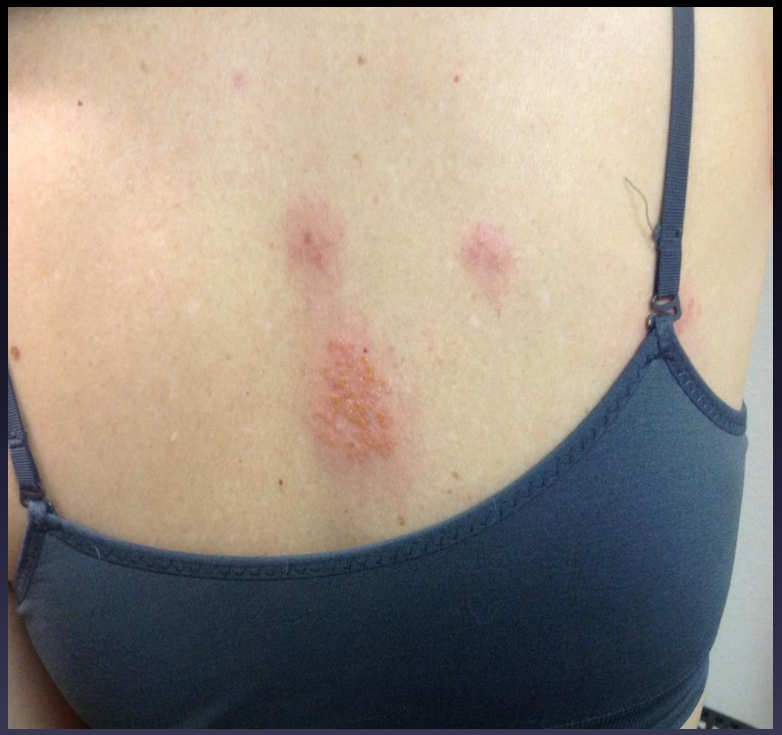
Onychomadesis

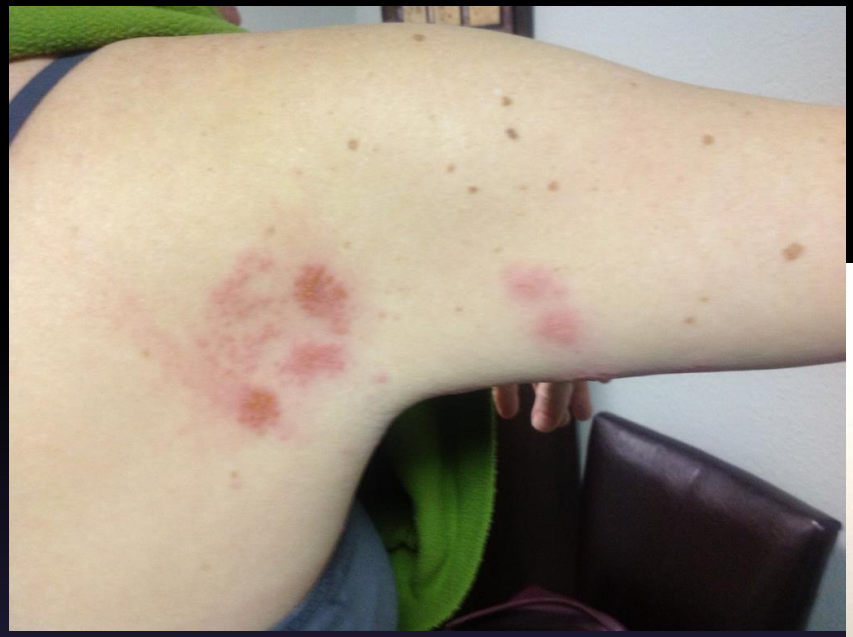
- Trauma (e.g. subungual haematoma)
- Inflammation or infection (fever, HFM disease)
- Peripheral vascular disease
- Raynaud's
- Familial trait

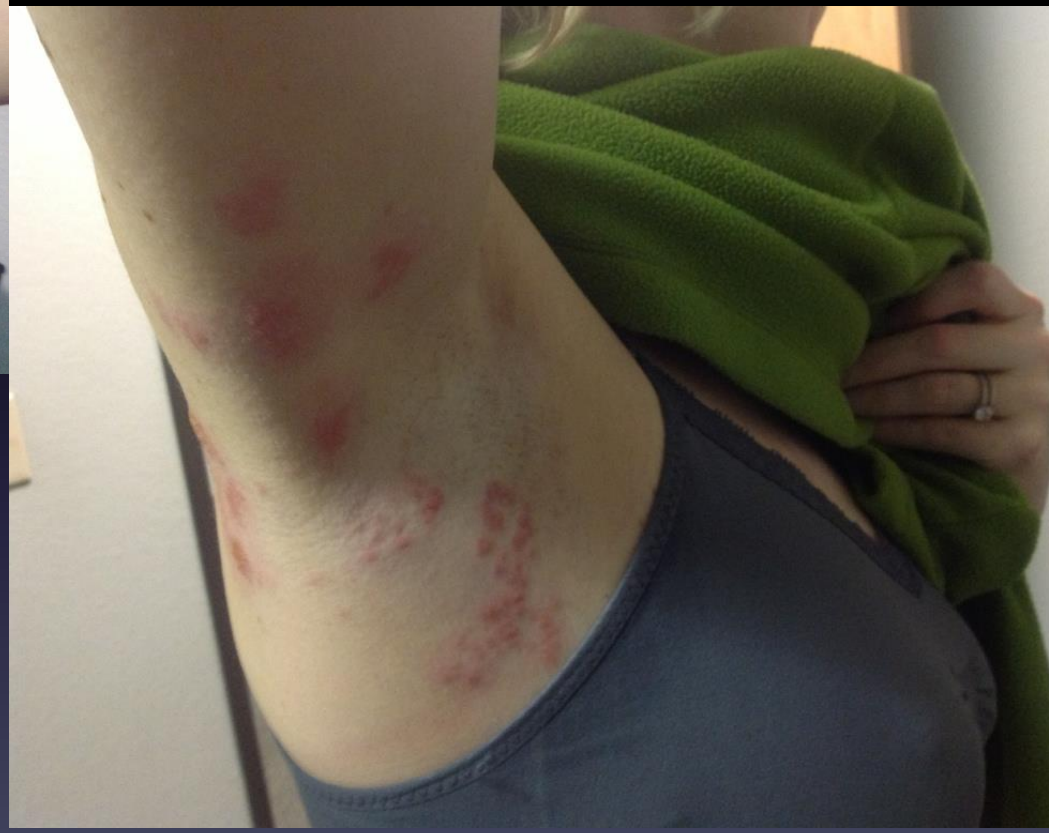


37 YEAR OLD FEMALE

- Tender area on right scapula x 2 weeks
- Developed red blisters 3 days ago after working in yard
- Rapidly developed blisters to axilla and chest
- Very tender to touch and with movement





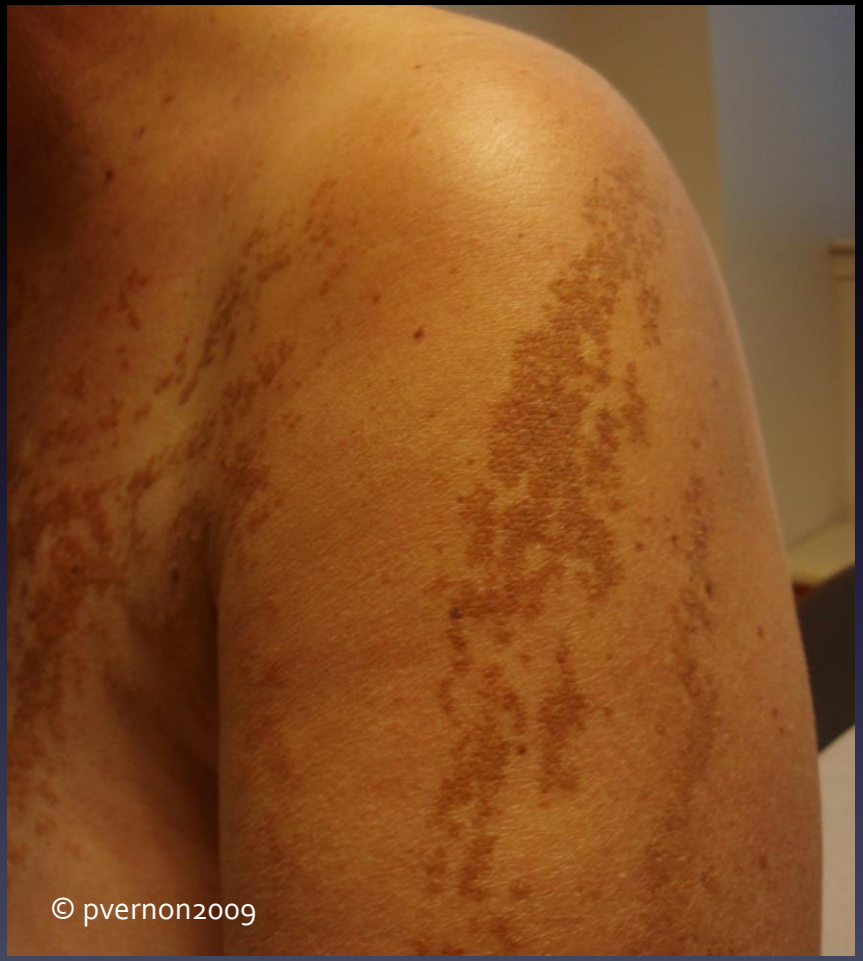


HERPES ZOSTER

- Pre-eruptive phase
  - Sensory phenomena along dermatome: itching, tingling, burning, pain
  - 1-10 days
- Acute eruptive phase
  - Grouped vesicles on erythematous base along a dermatome
  - Pain, often severe; itching
  - 10-15 days
- Chronic phase
  - Persistent or recurring pain lasting 30 days or more, weeks to years

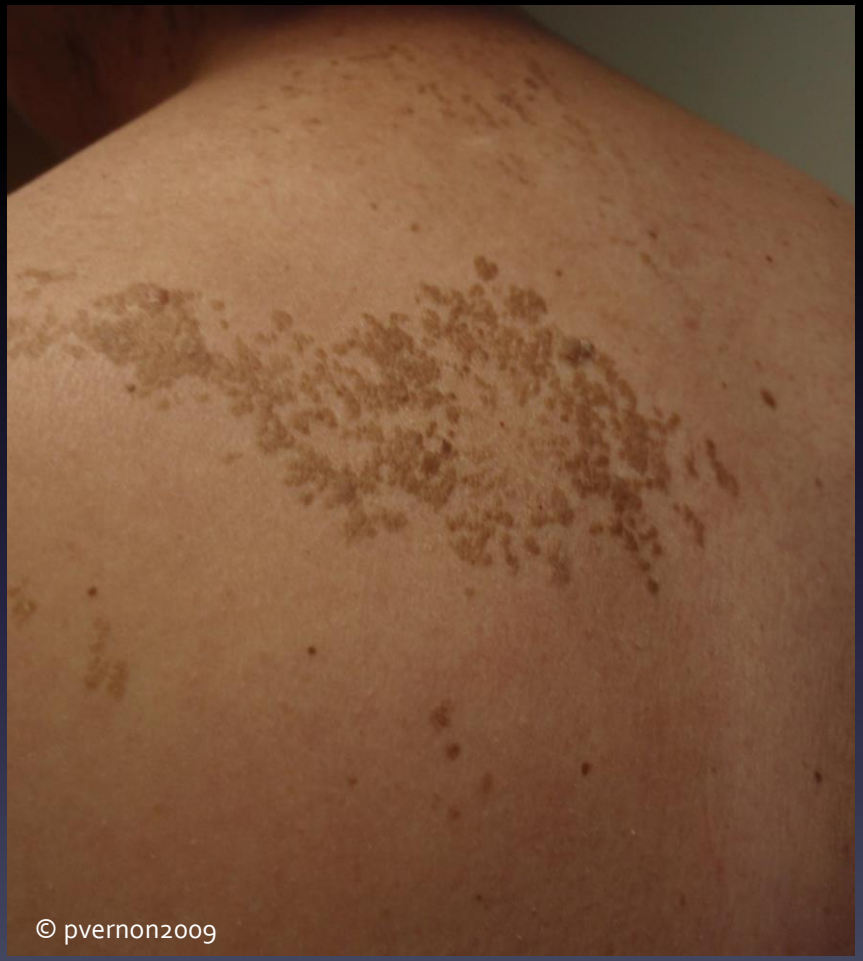
58 Year Old Female

- Annual Skin Exam
- Lesion on posterior L shoulder, scapula, axilla, neck, extending to anterior L upper chest and L upper arm
- Present since early childhood
- Increased slightly in size during teen years
- No problems with lesion



Linear Epidermal Nevus

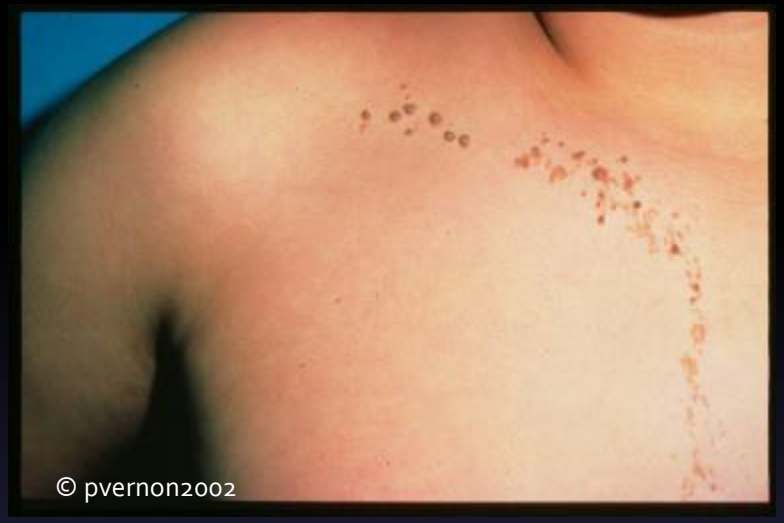
- Definition:
  - # of mature epidermal cells, hair follicles, or sebaceous glands
  - Appear at birth or develop in adolescence

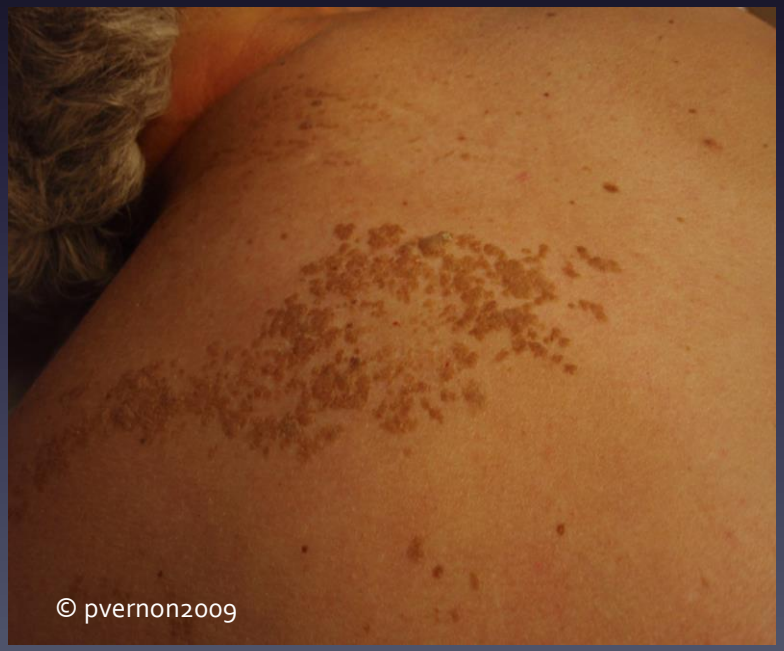


Linear Epidermal Nevus

Epidermal Nevi

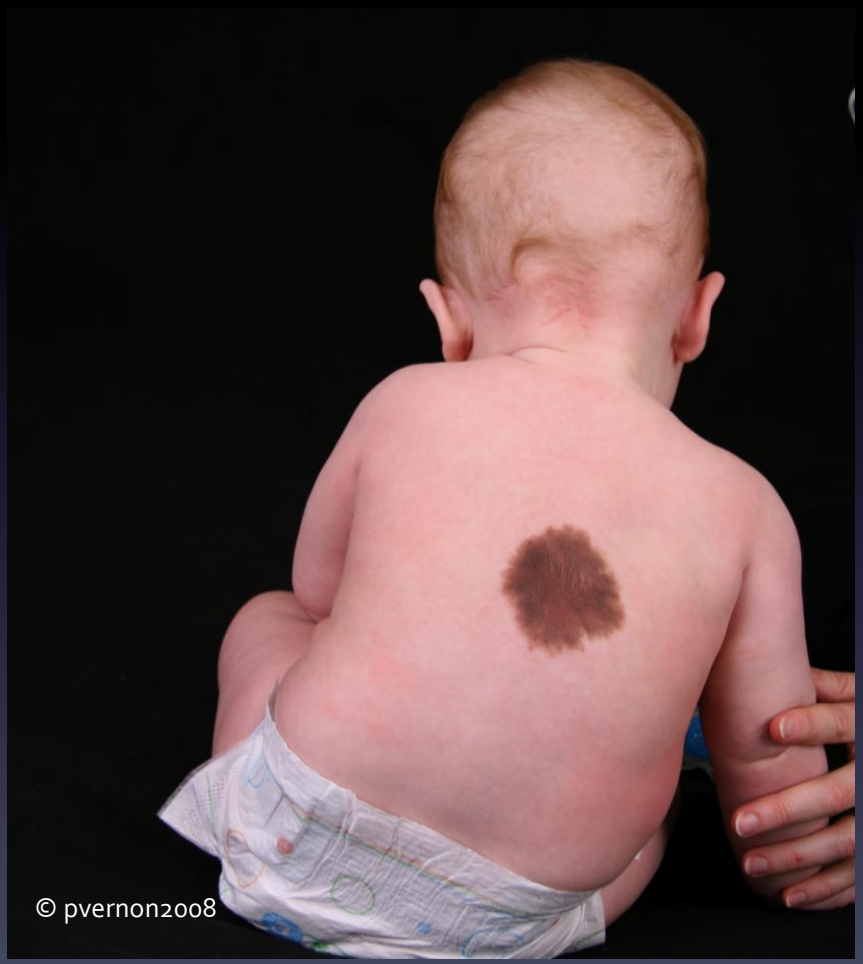
- Appear anywhere on the body
- Often linear or oval
- Warty surface
- Majority lesions present at birth
- *DDx*: Warts, ichthyosis, dermatitis, lichen striatus
- *Treatment*: Excision, keratolytics, patient education





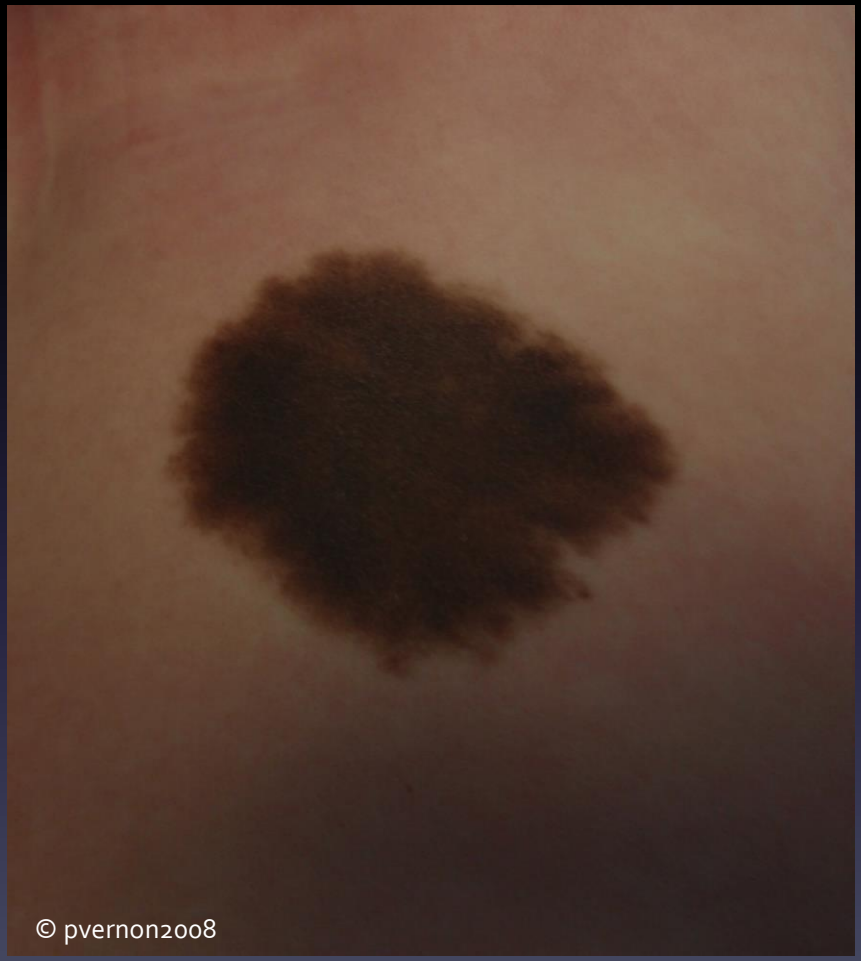
6 month old male

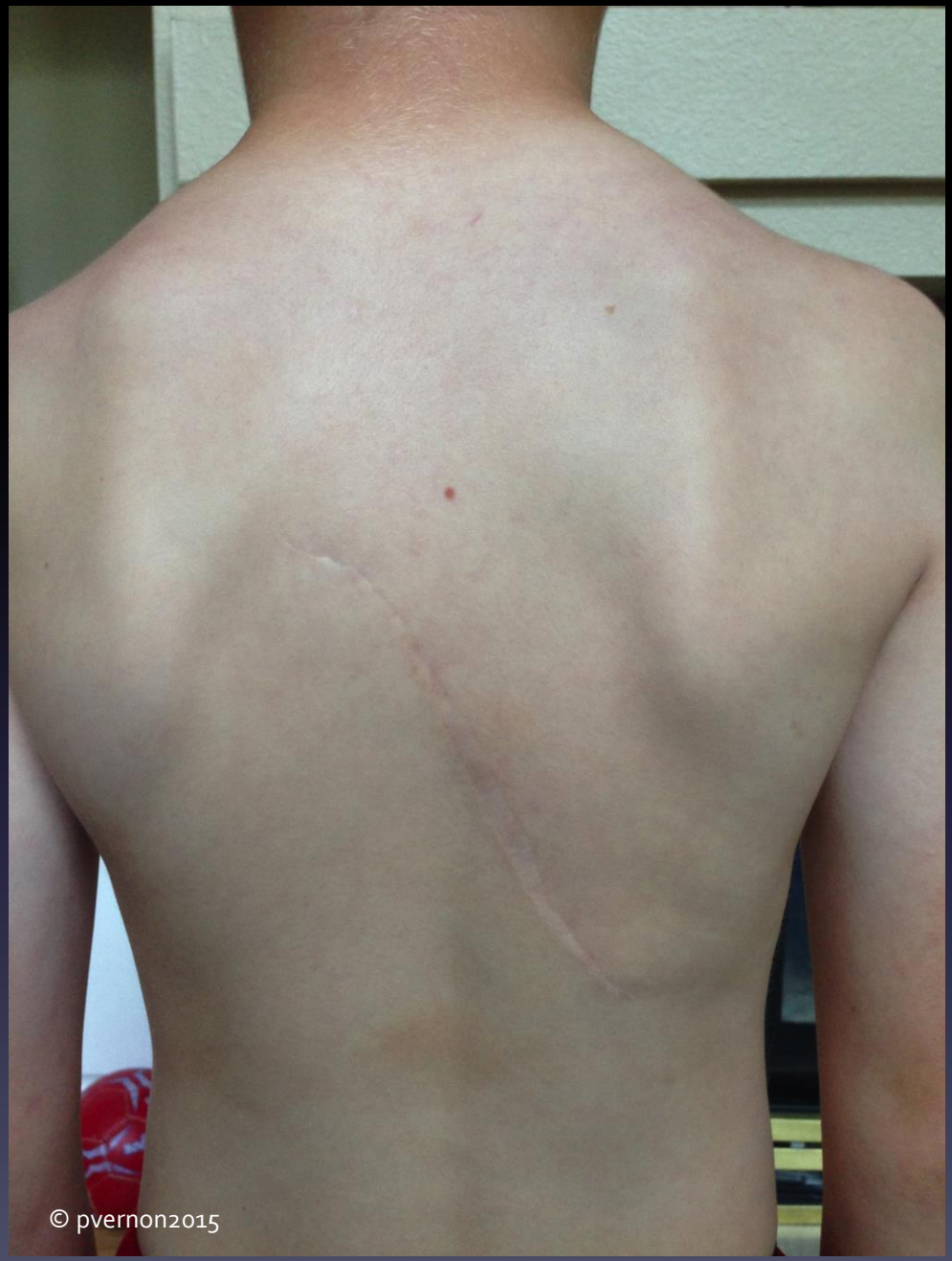
- Large congenital lesion
- Increasing in size with growth
- Lesion crosses mid-line



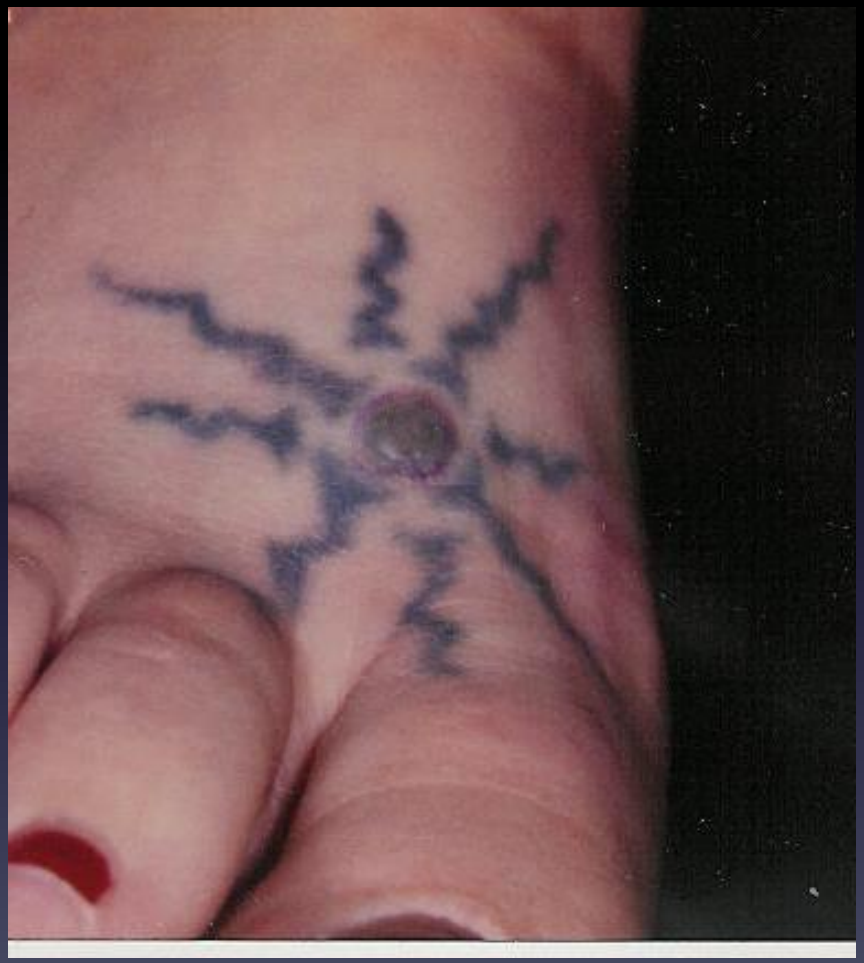
Congenital Hairy Nevus

- Lie in the distribution of a dermatome
- Vary in size to cover large areas
- Uneven pigment brown→black
- 95% have hairy component
- Numerous pigmented nevi co-exist in lesion
- Consult neurology if lesion is large or crosses the midline



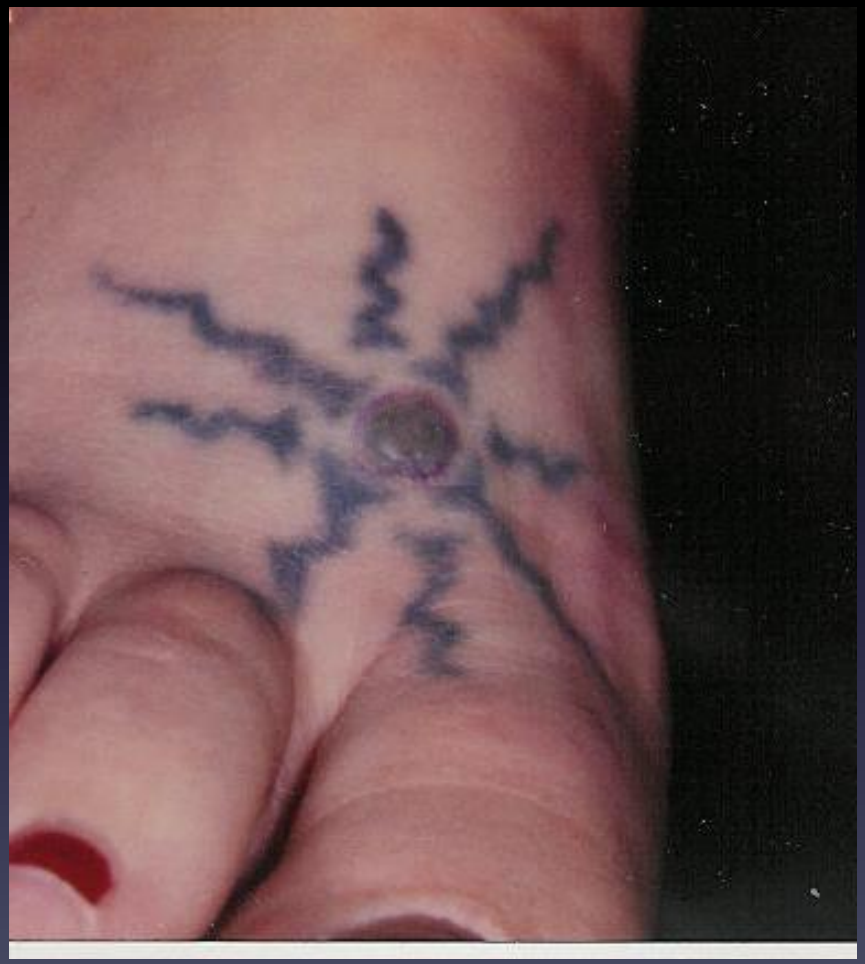


21 Year old Female



- Nevus on dorsal foot
- Present since childhood
- Recently increasing in size
- Developing red ring around lesion

- Tattoo in and around lesion 5 years ago
- Lesion has always been cosmetically bothersome; patient thought tattoo would help

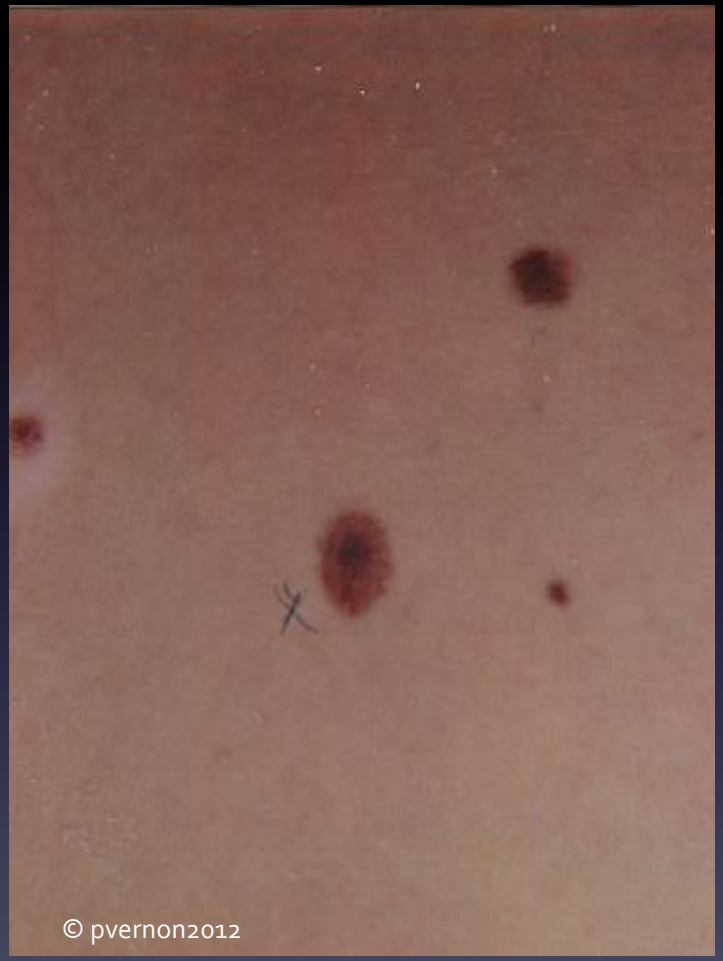


Dysplastic Nevi

- 2-5% Of Caucasian population
- Type A: no family member with dysplastic nevi or melanoma: lifetime risk of developing melanoma ~6%
- Type B: Dysplastic Nevus Syndrome:
  - 100/more moles
  - 1/more moles 8 mm
  - 1/more atypical moles
  - FAMMM (familial atypical multiple mole melanoma syndrome): 1/more first or second degree relatives with melanoma
  - lifetime risk of melanoma 500 x general population

Dysplastic Nevi

- Continue to appear throughout adult life
- Variegated color: shades of dark brown to tan and pink
- Irregular borders
- Often larger 6-15 mm
- Appear a young as 5 years
- Cobblestone appearance, or small dark central papule surrounded by lighter brown macule (fried egg)
- Higher incidence with sunburns before 20 years of age



Dysplastic Nevi Treatment

- Grading:
  - Mild: Observe, annual exam
  - Moderate: Conservative excision, annual exam
  - Severe: Excision 5 mm margins, annual exam
- Biopsy of changing nevi
- Annual Skin Exam
- Self Exams
- Sunscreen
- Protective clothing

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