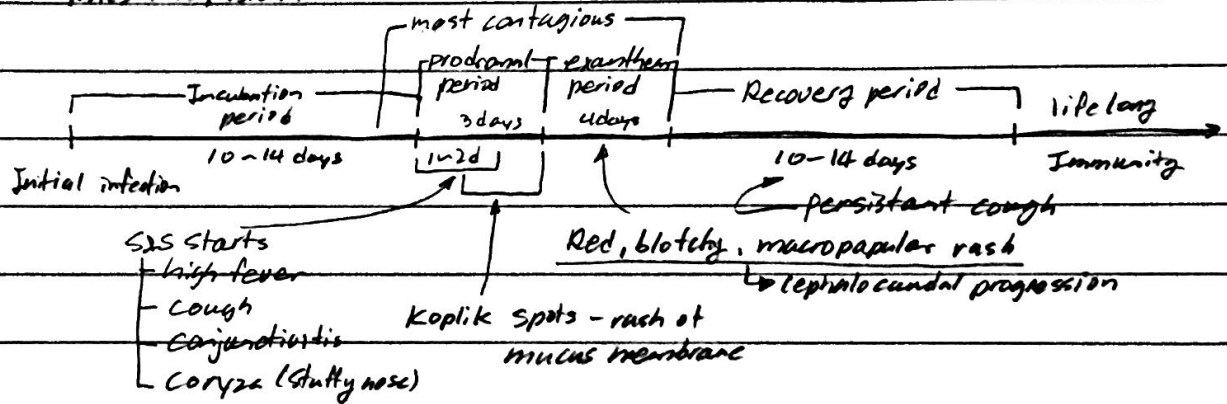


Dermatologic disorders

1. Rubella (Measles)

- Highly contagious virus spread by respiratory droplets
- Leading cause of death among children but ↓ by vaccination. Asses travel out of U.S.
- Initially affects trachea/bronchi then spreads to lung → lymph node → blood → more lung tissue, intestines, brain

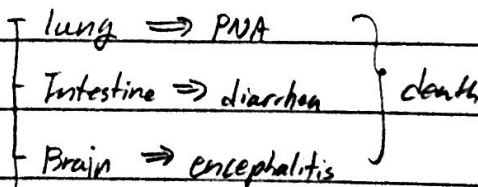


- S&S: high fever, red mucosal membrane, conjunctivitis, nasal congestion, red/purple macules & papular rash starts from head to toe

• DDX: drug reaction, toxic shock syndrome, viral exanthems

• Dx test: blood work (RT-PCR), IgG, IgM

• Complication



Suppress immune system for 6 weeks

↳ ↑ risk for bacterial superinfection

for otitis media, bacterial PNA

• Tx: Symptomatic care, pain relief, refrain from contact outside ± 4 days of infection

- RT-PCR - reverse transcriptase polymerase chain reaction
- Report to CDC.

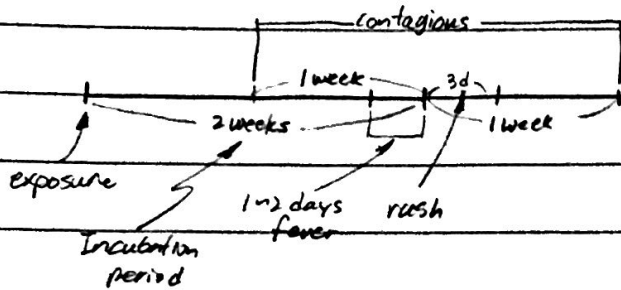
- Immunocompromised + measles - may not develop S&S + no Koplik spots, no rash - also these pts have ↑ PNA & encephalitis

• Pregnant to → risk for miscarriage

• No specific tx

2. Rubella (German measles / 3 day measles)

- \Rightarrow by rubella virus, rash starts 2 week after exposure



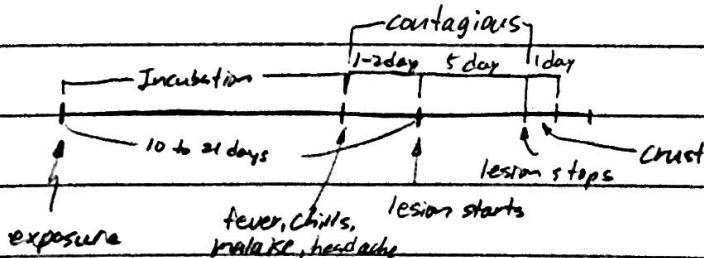
- Spread by respiratory droplets
- S&S: low grade fever, headache, sore throat, rhinorrhea, malaise, eye pain, myalgia 2-5 days before rash
"Rose pink" rash macule/papules start from head to down, rash fade 1-2 days
- DDX: hypersensitivity reaction, contact dermatitis, scarlet fever.

- Tx: Symptomatic care w/ acetaminophen, NSAIDs, rest

• Vaccination = prevention

3. Varicella (chicken pox)

- \Rightarrow by varicella zoster virus, transmitted by direct contact, droplet,



- S&S: fever, chill, headache, arthralgia $\xrightarrow{1-2 \text{ day}}$ itchy / erythematous

macules/pustules \rightarrow pustules/vesicles

Rash starts from face to chest \rightarrow entire body

• lesions cure in 1 week

- Tx: symptomatic care, w/ oral antihistamines, NSAIDs,

cool compress, oatmeal baths

◦ DDX: bug bites, drug reaction, measles, other virus

varicella

vs

measles

S&S Fever, headache, fatigue

Fever, conjunctivitis

1st red spot on chest, face, back

1st red/blotchy rash on forehead

↓ appetite

Runny nose

Spots turn into itchy blister

Koplik spots in mouth

Hacking cough & sore throat

4. Roseola (6th disease)

◦ → by human herpes virus

◦ common among < 2yr old, spread via saliva

◦ lasts 3-5 days

◦ S&S: high fever, irritability, diarrhea, cough,

cervical lymphadenopathy

→ enlargement of cervical lymph nodes

light pink/erythematous macules/papules on face,

neck, extremities, rash resolve in 1-3 days

◦ DDX: measles, dry eruption, viral rashes

◦ Dx by - hx, clinical presentation

◦ Tx: Symptomatic tx, contagious 1-2 days before fever,

5. Erythema infectiosum or human parvovirus (5th disease)

◦ Spread by respiratory droplets & blood products

◦ S&S: starts w/ headache, fever, chills, cough

Stage I: slapped cheek (bilateral bright red)

" II: Pink lace erythematous macules on all extremities

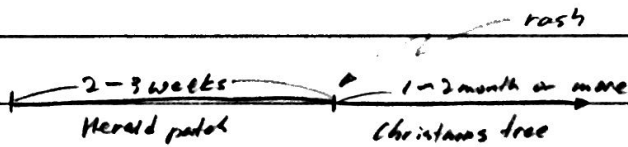
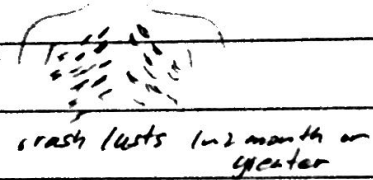
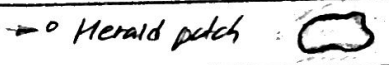
w/o trunk, palm, soles

" III: 2-3 week of body rash

- DDX: phototoxic reaction, SLE, drug eruption, viral
- Dx test: blood test (result takes 3 week) → no use.
- Tx: symptomatic care, avoid heat (↑ rash), contagious up to rash

6. Pityriasis rosea

- Age 10-35 among ↑ < to during spring
- S&S: 2-4 patches on trunk → 2-3 week after general rash, pink to erythematous rash, round to oval plaques and papules "Christmas tree" pattern, low grade fever, headache, fatigue.
- DDX: tinea versicolor, drug eruption, psoriasis



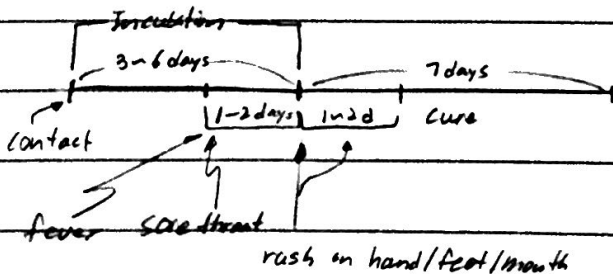
• Contagious?

- Dx by - hx & PE
- Tx: antihistamines, sun exposure, 1 week acyclovir.

7. HFMD (hand, foot, mouth disease)

- Contagious virus among children

• Virus: coxsackievirus A16, enterovirus



- S&S: low grade fever, fatigue, sore throat (1-2 days before rash), vesicles on hands/foot/mouth sore
- DDX: varicella, herpes

• rash also appears on legs, buttocks, face

◦ Dx by - hx & PE

◦ Tx - no specific tx, symptom management

◦ No scarring

8. Molluscum contagiosum

◦ Virus (poxvirus) in a protective sac

◦ S/S: tiny pustules (2-5 mm) w/ slight depression

on center w/ flesh colored dome,

◦ Spread by contact, scratching, autoinoculation,

shaving

◦ DDx: genital warts, hypersensitivity, hypersensitivity reaction, genital folliculitis

◦ Dx by - hx, PE (often mis-dx as genital warts)

◦ Tx: OTC Zymaderm (50% effective), topical retinoids,

oral cimetidine (Tagamet - 400mg/kg/day) for 2

months, cryosurgery (⇒ scar)

⇒ ◦ Doesn't trigger immune system

◦ Children - thighs, arms

◦ Adult - genital area
+ sexual contact

◦ Virus last upto > 8 months

9. Folliculitis

◦ ⇒ by bacteria (Gram⁺ - *S. aureus*), fungus, yeast

◦ S/S: pustules w/ erythema surrounding base of hair follicles

◦ DDx: acne, varicella, papular eczema

◦ Dx by - PE, hx, location, KOH prep

◦ Tx: abx ointment, PO abx (doxycycline 100mg BID,

14 days or Bactrim DS BID for 7-10 days), use

chlorhexidine wash on skin 2x/week to minimize

staph on skin

◦ KOH prep - determination of fungal/yeast or bacteria

* If initial tx doesn't work, then test KOH prep

10. Abscess - sec or pure w/ collection of pus by *S. aureus*

② Furuncle - hair follicle infx on axillae, neck, buttock

⑤ Carbuncle - a cluster of abscess from 1 mass

- S&S: erythematous, tender nodule

- DDx: drug eruption, Group A streptococcus, bug bite

- Tx: clean area, warm compress 3x daily, cover w/ bandage if drainage, I&D, obtain culture for abs tx, give broad spectrum abs until culture results

11. Group A strep

• → by streptococcus ⇒ scarlet fever

• Causes people w/ strep throat

• S&S: red "sand paper" rash, fever, bright red sore throat, lymphadenopathy, bright red skin (under arms, elbows, groin)

• DDx: viral rash, drug rash, contact dermatitis

• Dx by - rapid strep

• Tx: oral abs (penicillin or amoxicillin)

12. Acne

• Manageable but not curable

② Mild - few papules, few pustules

- Tx: diet Δ (no skim milk), good cleanser, retinoid + topical abs

• Cleanser contains
1. Benzoyl peroxide - dryness, avoid bleach
2. Salicylic acid

③ Moderate - papules, pustules, nodules

- Tx: retinoid, topical/oral abs, good cleanser

• Retinoid

1. Adapalene - mild potency

2. Retin-A micro - mid-potency

3. Accutane (isotretinoin) - high potency

④ Severe - papules, multiple pustules, multiple nodules (painful)

- Tx: good cleanser, topical/oral abs, medium to high potency retinoid

* Accutane - derivative of VA, severe acne tx 4-6 months.

Side effect: ↑ triglycerides & liver enzymes, risk of ◦ Check blood lab @ start, midpoint, completion

JED, ↑ ST from depression, chapped lips, dryness of skin, serious birth defects while taken pregnancy

◦ Contraceptive recommended for females

13. Tinea (fungal mtx)

① Tinea pedis (Athlete's foot)

S&S: erythematous, scaly, inflammation, itchy

Tx: fungal cream (Ketoconazole for 4 weeks),

Vinegar soak, Burrow's solution, antifungal spray

in shoes, oral terbinafine (severe case)

◦ ↓ itchy

◦ Terbinafine - hepatotoxic
◦ Check CMP

② Tinea cruris (jock itch)

S&S: rash in inner thigh, buttocks, groin area,

erythematous or tan plaques w/ raised borders

Tx: topical fungal, Zeasorb powder

◦ Cause - clothes irritate skin, moisture, contact w/ affected person

③ Tinea corporis (ringworm)

- fungal infection of extremities or trunk

S&S: erythematous annular lesion w/ scaly

macules/papules w/ well-defined edge, itchy

Tx: antifungal cream, Terbinafine

Flu in 3-4 weeks

◦ Annular - ring like

④ Tinea unguium (onychomycosis)

- fungal infection of fingernails or toenails

S&S: yellow/green/black or white w/ possible

cracking nails

Tx: Ciclopirox nail lacquer daily, Terbinafine

◦ Very slow cure as nail grows slow.

14. Warts

- ⇒ by HPV, hands, feet, genitalia
- S&S: skin colored rough papule w/ gray surface
- Tx: salicylic acid, paring or cryotherapy, duct tape occlusion, cantharidin (blistering agent)
- Genital warts tx: cryotherapy, imiquimod cream
 - Cantharidin - applied by provider, cover 4-6 hr, then wash off
 - * not used for face/genitalia
 - • Applied 3x/week @ bedtime for 16 weeks

15. Scabies

- highly contagious
- S&S: itchy (worst at night), light pink curved or linear burrows on web of the fingers/toes
- Tx: permethrin cream (apply from neck to daan @ bedtime, wash off next day), wash linens/clothes w/ hot water for 1 week, tx all house member, oral ivermectin (200 mg/kg for 1 week)
 - * can make asthma worse

16. Actinic Keratosis

- ⇒ by sun exposure and aging, precancerous lesions (< 25% become squamous cell carcinoma)
 - may not appear years after sun exposure
- S&S: rough texture skin in flash or pink, thick scaly, evolve into plaques, stinging sensation when rubbed, lesions doesn't go away
- Dx: psoriasis, eczema, warts, squamous cell carcinoma
 - biopsy needed
- Tx: cryotherapy (forms blister → scab → fall off → 1-2 weeks later smooth skin) + maybe hypopigmented. imiquimod, 5-Fluorouracil for 2-6 weeks (will cause irritation + scabbing)

17. Vitiligo

- melanocyte malfunction → loss of pigmentation
 - ⇒ by gene or autoimmune
- SxS: well-demarcated, depigmented white macules/patches
- Dx by - clinical observation, blood work (autoimmune)
- Tx: Topical corticosteroids daily for 2 months, phototherapy, refer to dermatologist
- Eda: protect from sun, apply sunscreen, make up.

18. Contact dermatitis

- Allergic reaction to irritant (nickel, abx cream, cosmetics, soaps, perfume, jewelry & plants)
 - not contagious
- SxS: pruritic, erythemic rash
- Tx: topical antihistamine, steroid creams, oral antihistamines (itchy)
 - can lead to secondary infection if scratched
- For severe case (face/eye) - tapering dose of oral steroid

19. Atopic dermatitis (eczema)

- gene affecting skin's ability to retain moisture & protection from irritants
 - Starts < 5 yr old into adulthood
- Often associated w/ asthma or hay fever
- Can be triggered by food or environment
- SxS: patches of itchy, dry skin, red to brownish-gray, small raised vesicles that leak when scratched
- Tx: symptomatic, topical steroids, oral antihistamines, skin moisture 2x/day, avoid triggers (sweat, stress, offending foods, plants)