What's New in Psoriasis

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Psoriasis statistics

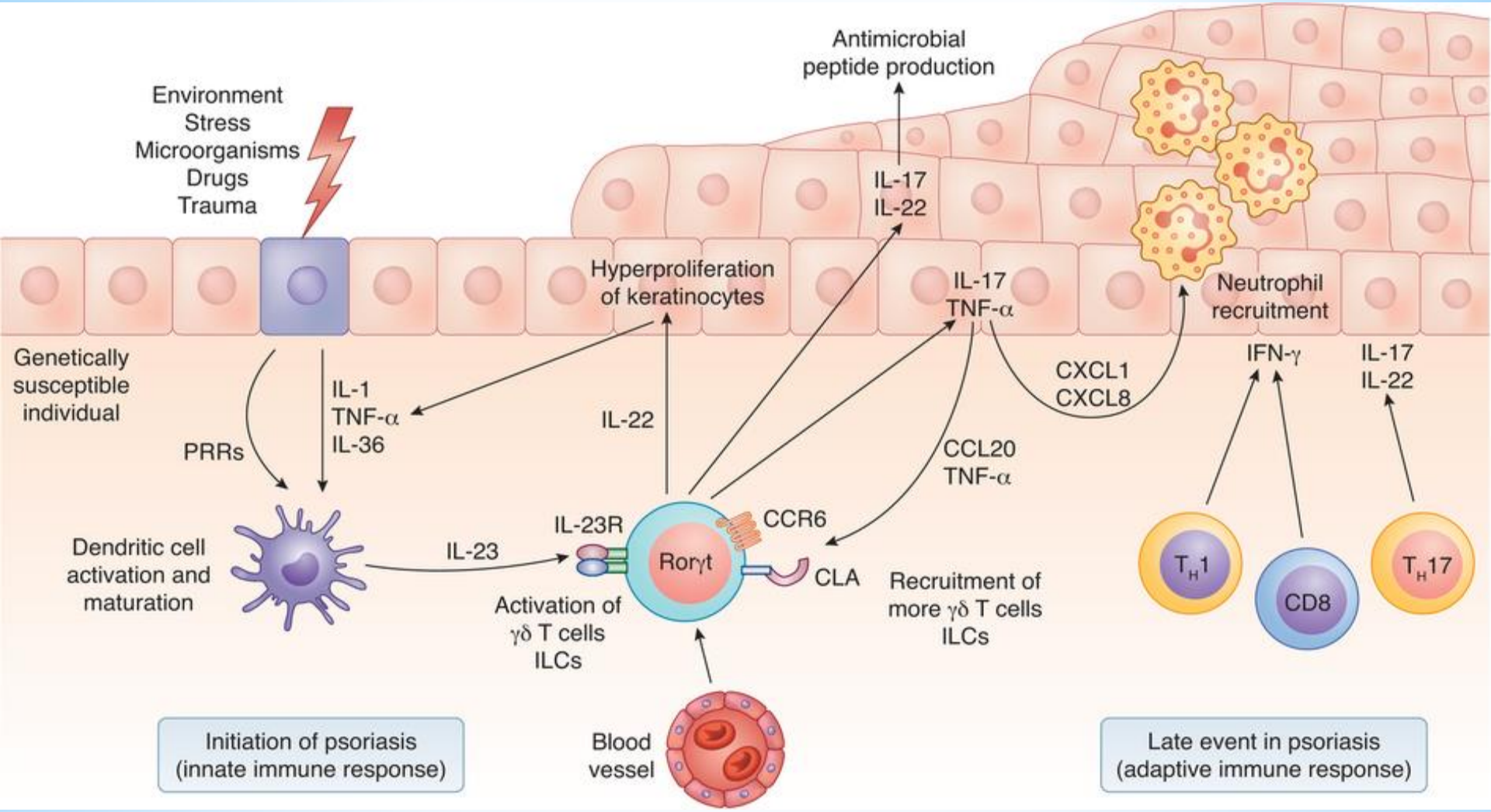
- 7 million people in the US have psoriasis
- About 30 percent of patients experience joint pains called psoriatic arthritis
- It occurs in all age groups but it peaks at 20's and 40's
- There are several subtypes: plaque, inverse, erythrodermic, pustular, guttate, scalp and nail disease

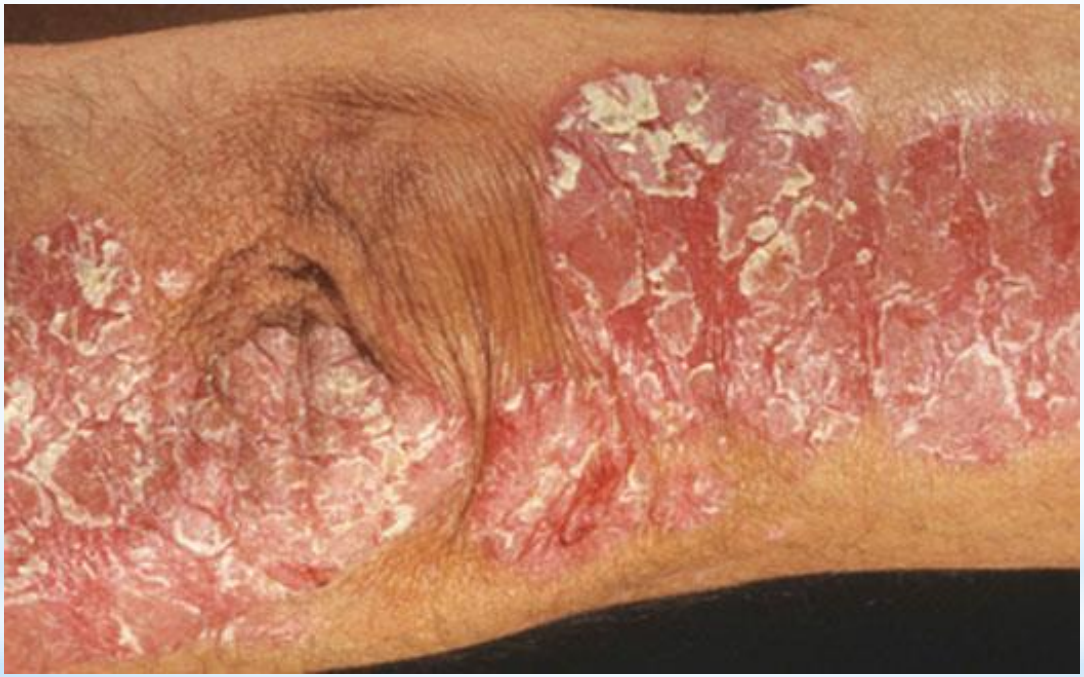
Co-morbid conditions

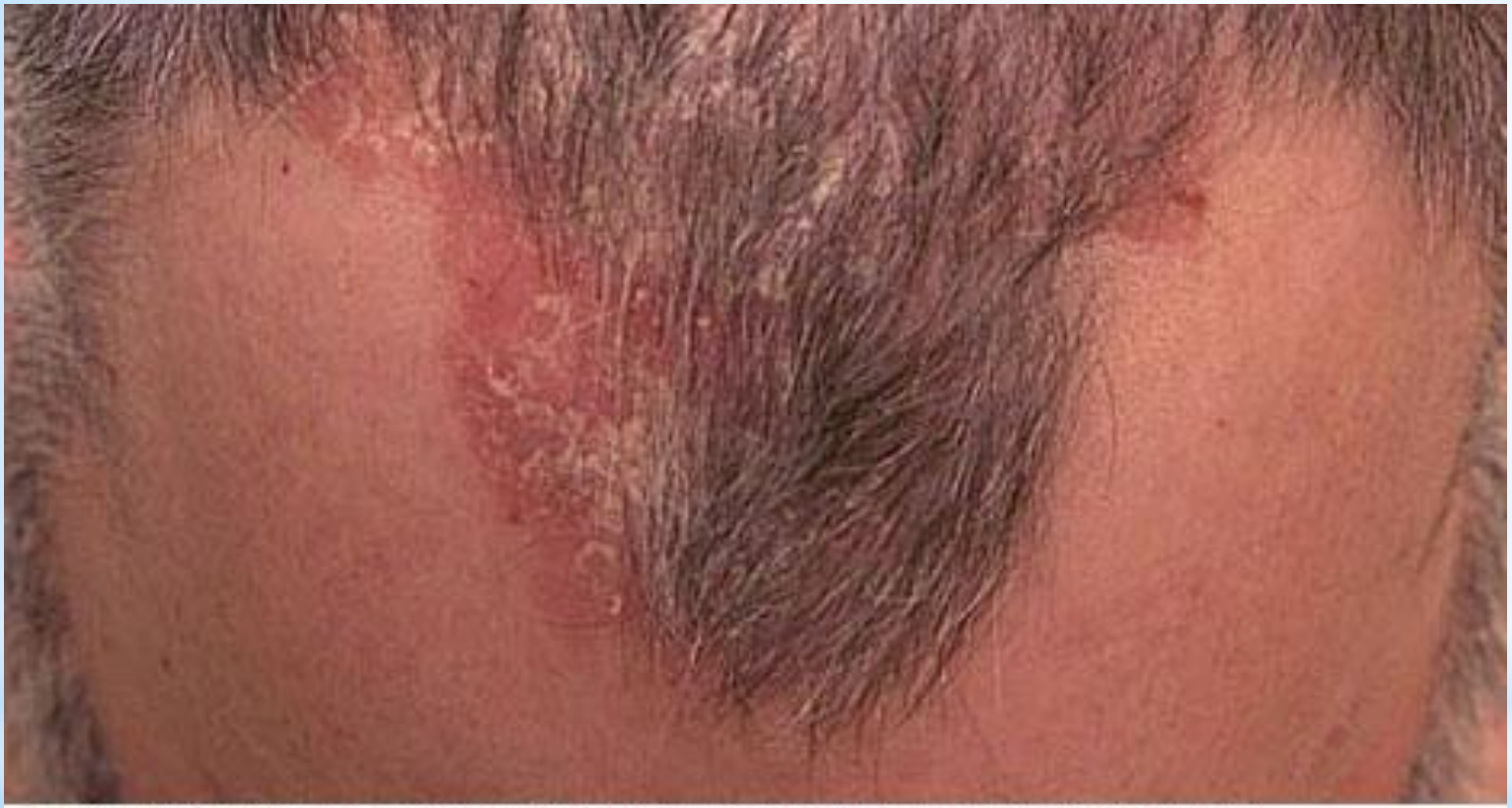
* Other diseases that psoriasis patients are more likely to get include: Inflammatory bowel disease, diabetes, lymphoma, heart disease and depression
* The incidence of Crohn's disease and UC is 4-7.5 times greater than general population

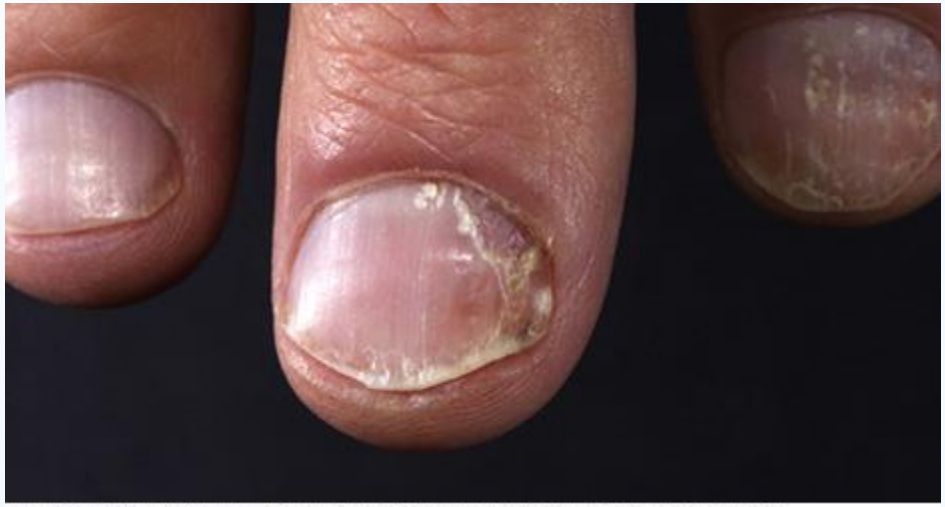
Risk Factors

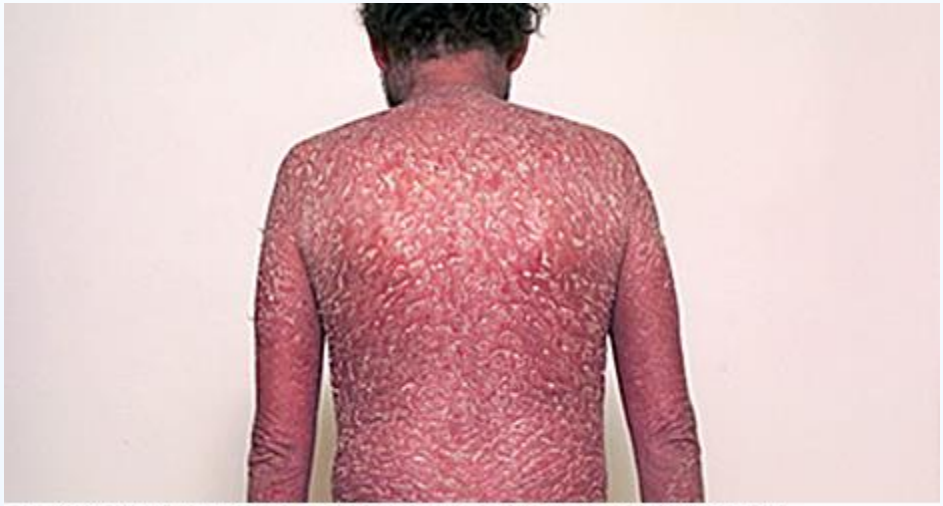
- Family history
- Viral bacterial infection
- Stress
- Obesity
- Smoking

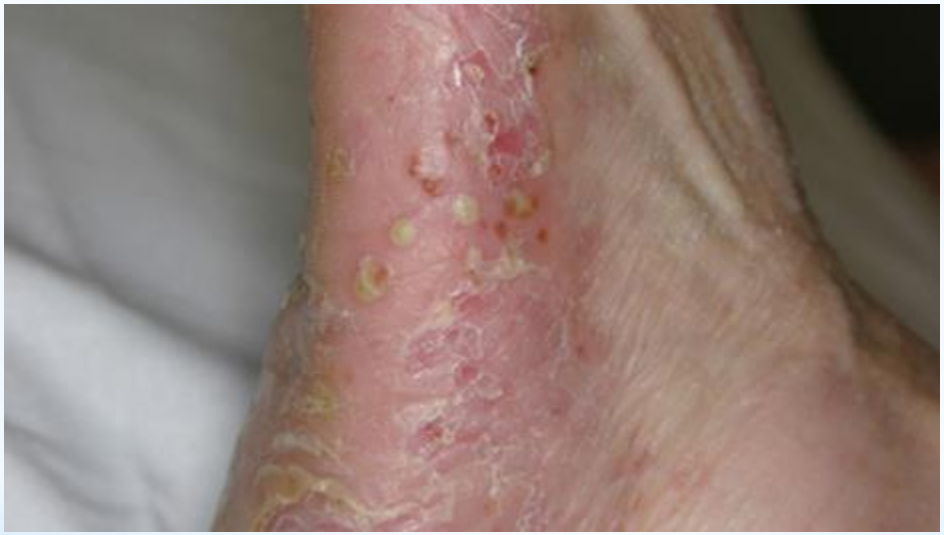

Antimicrobial peptide production
Environment
Stress
Microorganisms
Drugs
Trauma
IL-17
IL-22
Hyperproliferation of keratinocytes
IL-17
TNF-α
Neutrophil recruitment
Genetically susceptible individual
IL-1
TNF-α
IL-36
IL-22
CXCL1
CXCL8
IFN-γ
IL-17
IL-22
PRRs
CCL20
TNF-α
IL-23R
CCR6
Dendritic cell activation and maturation
IL-23
Rorγt
CLA
Activation of γδ T cells ILCs
Recruitment of more γδ T cells ILCs
TH1
CD8
TH17
Blood vessel
Initiation of psoriasis (innate immune response)
Late event in psoriasis (adaptive immune response)

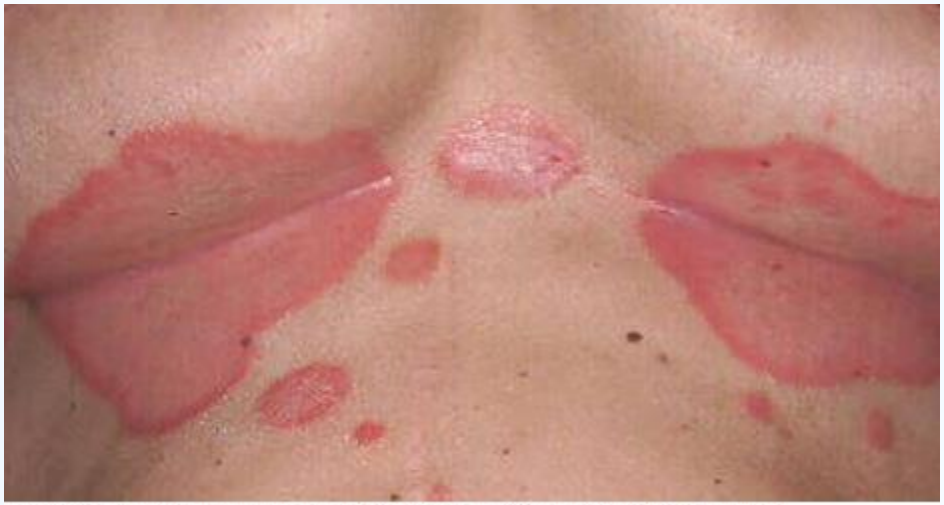


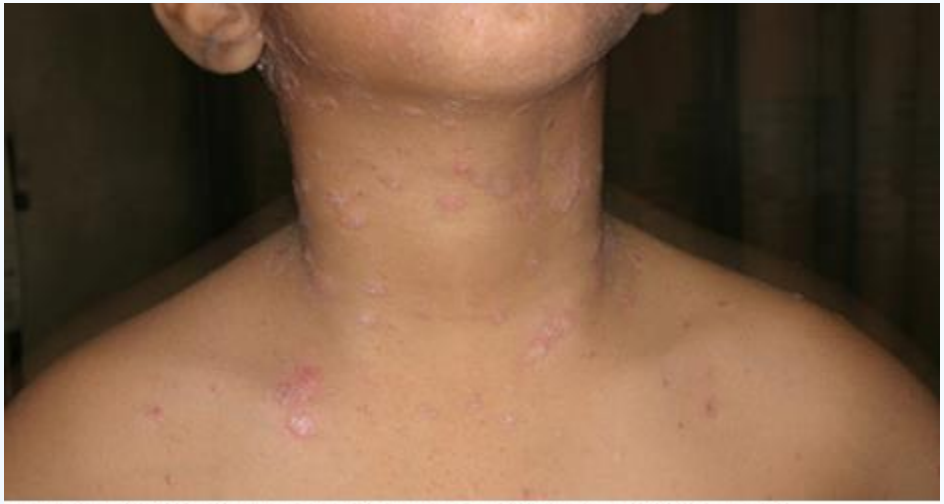












Treatment options:

- Topicals:
  - Topical steroids: creams, ointments, foams, lotions, sprays
  - Topical Vitamin D products
  - Tar, salicyclic acid
  - Topical Vitamin A: Tazorac
  - Topical emollients/moisturizers

Oral treatments

* Methotrexate
  * Pros: oral drug that is taken once weekly, cheap, easy to fill at pharmacy, been around a long time in dermatology world, works on skin and joints
  * Cons: Category X medication, requires a lot of bloodwork to check Liver function and WBC count, cannot take for prolonged periods of time (greater than 2 years without taking a break), GI side effects, slow to work

Soriatane

- Pros: oral drug, generic now so cost is better than was before, great for thick plaques on scalps, palms, and soles
- Cons: Category X medication-cannot donate blood for 3 years or longer, very slow to work, requires bloodwork to check Liver function and raises Triglycerides, dries out lips and skin; doesn't help joint pain/arthritis

Otezla

* Pros:Newest oral on market, Category C medication, comes as starter pack that you titrate up to twice daily, works on skin and joints, requires no bloodwork monitoring, no risk of cancer or infections
* Cons: Expensive, some insurances require “failing” other drugs before you can take, GI side effects at beginning

Biologics

- Enbrel: a TNF alpha receptor blocker, good long term safety data; requires PPD to check for TB, Hepatitis B and C infections, self injections twice a week for 3 months then once a week to maintain
- Humira: TNF alpha antibody inhibitor, same workup as Enbrel, Shots are only twice a month, good long term safety data
- Stelera: IL 12/23 blocker: injection that is given at the doctors office every 3 months

Biologics

* Cosentyx: Newest drug for psoriasis on the market. It is an IL 17 A antibody blocker; injections are once weekly x 5 weeks then once a month; same monitoring as Enbrel and Humira; expensive and some have to fail other biologics before can get medication

Light therapy

* PUVA-old treatment, was effective but long term use has caused skin cancers in patients
* Narrow band UVB therapy: much better targeted for psoriasis with little side effects- used to treat vitiligo and atopic dermatitis too

Can do in doctors office 3 times a week of get home unit with National Biological-fill out insurance paperwork to see if can get it