## Corynebacterial skin infection

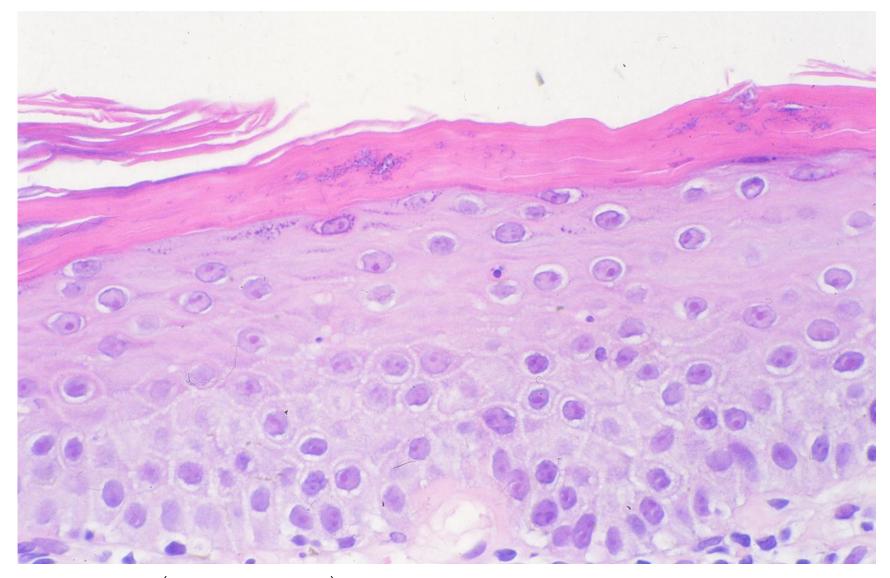
Three kinds of corynebacterial skin infections are demonstrated as PDF materials. 1) erythrasma on the axillary skin (*Corynebacterium minutissimum* infection), 2) pitted keratolysis on the sole, and 3) trichomycosis axillaris on the underarm hair (*Corynebacterium tenuis* infection).



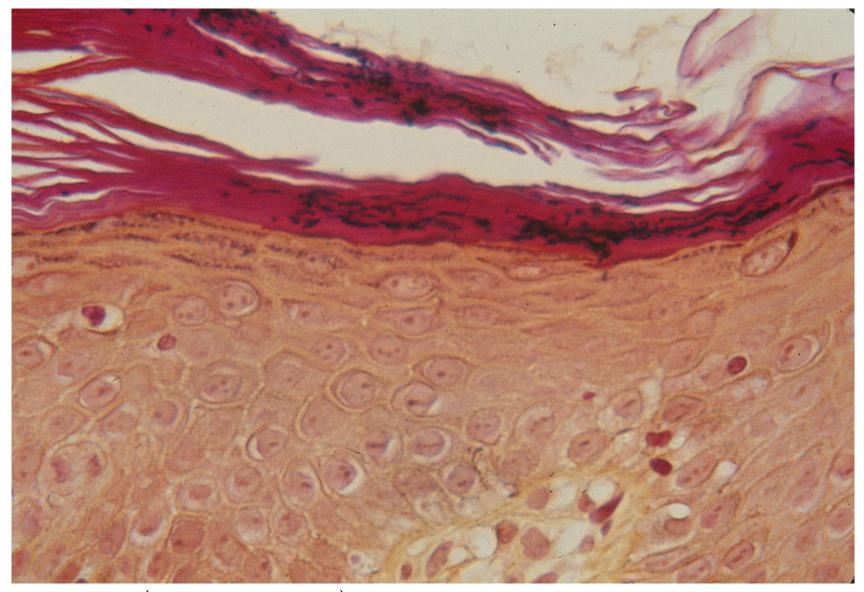
Erythrasma in the armpit (adult male): *Corynebacterium minutissimum* skin infection. Erythrasma presents as well-defined pink or brown patches with fine scaling and superficial fissures. Mild itching may be present.



Erythrasma in the armpit (adult male): *Corynebacterium minutissimum* skin infection. With Wood lamp examination, long wavelength ultraviolet radiation causes erythrasma to fluoresce a coral-pink color due to coproporphyrin III released by the bacteria.



Erythrasma in the armpit (adult male, HE): *Corynebacterium minutissimum* skin infection Small rods are colonized in the hyperkeratotic cornified layer.



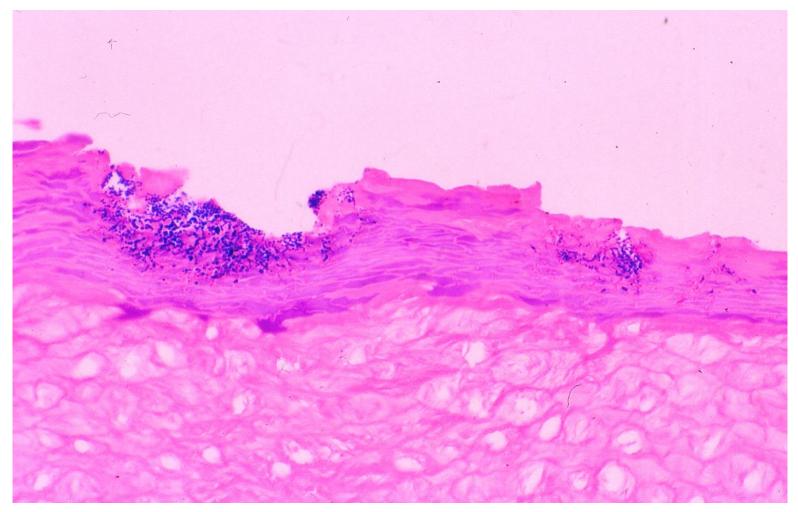
Erythrasma in the armpit (adult male, Gram): *Corynebacterium minutissimum* skin infection Small rods in the hyperkeratotic cornified layer are Gram-positive.

Corynebacterial skin infection-II Pitted keratolysis-1



Pitted keratolysis (keratolysis plantare sulcatum or ringed keratolysis) (adult M): Pitted keratolysis is superficial corynebacterial skin infection, characterized by crater-like pits and malodor. It typically affects pressure-bearing areas on the sole. In addition to *Corynebacteria*, *Dermatophilus congolensis*, *Kytococcus sedentarius*, *Actinomyces* or *Streptomyces* may also cause pitted keratolysis.

Corynebacterial skin infection-II Pitted keratolysis-2



Pitted keratolysis (Gram stain): Pits are formed in the cornified layer. Gram stain visualizes Gram-positive coccoid or Filamentous bacilli in the eroded (pitted) cornified layer.

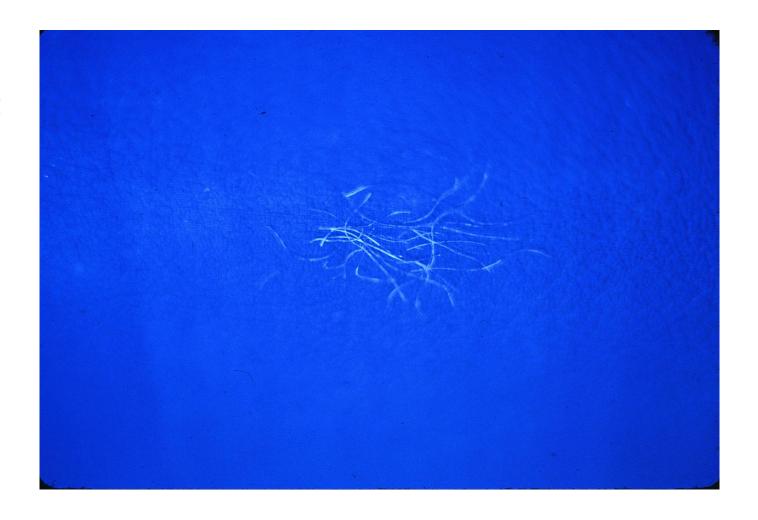
Corynebacterial skin infection-III Trichomycosis axillaris-1



Trichomycosis axillaris:

Trichomycosis axillaris is superficial corynebacterial infection of underarm hair. The disease is characterized by concretions sticking to the hair shaft.

Corynebacterial skin infection-III
Trichomycosis axillaris-2



Trichomycosis axillaris: Wood lamp examination shows pale-yellow fluorescence on the axillary hair.

Corynebacterial skin infection-III Trichomycosis axillaris-3



Trichomycosis axillaris: Scanning microscopy identifies long rods colonizing the surface of the axillary hair, forming a concretion.

Corynebacterial skin infection-III
Trichomycosis axillaris-4



Trichomycosis axillaris:

Gram staining visualizes the concretion where long rods colonize the surface of the axillary hair. *Corynebacterium tenuis*, *C. propinguum* or *C. flavescens* are the causative bacteria. *Serratia marcescens* may also be a pathogen.