بسم اسحاء الرحمن الرحيم
Erythrasma
&
Trichomycosis

Dr. Roshanak Daie
Superficial Mycoses

- Tinea versicolor
- Tinea nigra
- Piedra
- Otomycosis
- Erythrasma
- Trichomycosis
Question

Inspite of the fact that erythrasma and trichomycosis are bacterial infections, but why have been classified among Superficial mycoses?
* These both infections cause the similar status with fungal infections in the same sites.

*Etiologic agents are branching filamentous organisms just like fungi
Also.
*Antifungal agents (azoles) are used to eradicate *corynebacterium* diphteroids.
Definition:

A chronic Superficial infection of The intertriginous of the Skin, Such as:
- Axillae
- Groin
- Inframammary
- Toe webs spaces (frequently fourth interdigital space)
- Scrotum
- Abdominal folds
The causal organisms and their habitat

-Corynebacterium minutissimum, a lipophilic, Gram-positive, non-spore forming, aerobic and catalase-positive diphteroid

-Corynebacterium afermentase (1 case in 1996)

-Up to 50% of the normal flora of the skin

* The disease was considered as a superficial fungal infection but, it was recognized as a bacterial disease by “Lagana” in 1960.
Epidemiology and risk factors

- Infection is observed all over the world.
- More common is in tropical and subtropical areas
- Both sexes are equally affected.
- Crural form is more common in men.
- Most common site of affection is toe-clefts
- Inframammary, abdominal folds and perineum involvements are common in obese middle-aged women.
- Rare in children.
- Black people are high risk
Risk factors including

- Excessive Sweating / hyperhydrosis
- Delicate Cutaneous barrier
- Obesity
- Diabetes mellitus
- Warm climate
- Poor hygiene
- Advanced age
- Other immunocompromised states
Clinical presentation

- Red - brownish, Slightly scaly macular patches with sharp borders in intertriginous areas of the skin
- Patches may itch slightly
- Lichenification and hyperpigmentation are common
- The signs in toe web spaces as the most common interdigital infection of the foot are include:
  • Fissuring
  • Scaling
  • Maceration
Differential diagnosis

- Candidiasis
- Intertrigo
- Psoriasis
- Seborrheic dermatitis
- Pityriasis versicolor
- Contact dermatitis
- Dermatophytosis
  - Tinea corporis
  - Tinea cruris
  - Tinea Pedis
Laboratory diagnosis

- Physical examination
- Direct examination
- Culture
Physical examination

- Wood light examination reveals coral-red fluorescence
Direct examination

-Gram–staining reveals Gram-positive filamentous rods
-Using from 10% KOH on scrapping scales of lesions presents branching filamentous bacteria along with small coccoid forms
-Using methylene blue stain is applied for observing of mycelial forms
Culture

- Culture typically not recommended for diagnosis
- Isolation of organisms by growing in 20% fetal bovine serum, 2% agar, 78% tissue culture medium # 199 and 0.05% tris
- Mueller-Hinton agar is simple medium for pigment production by erythrasma diphtheroids
Treatment

- **Erythromycin** 250 mg four times daily for 14 days (choice)
- Topical and systemic antibacterial and antifungal agents are also used
- Topical antimicrobial ointments are not ideal because of lack cosmetic elegance
- Generally, creams are not ideal for using in skin folds and interdigital spaces
- Relapse may be occurred, so the areas should be kept clean and dry
Prevention

- Maintaining good hygiene
- Keeping the skin dry
- Wearing clean, absorbent clothing
- Avoiding excessive heat or moisture
- Maintaining healthy body weight
Definition

A superficial infection of the axillary or pubic hair, characterized by the formation of yellow (flava), red (rubra) or black (nigra) nodules or Cylindrical sheaths around the hair shaft.
The causal organisms and their habitat

-Corynebacterium tenuis
-Causative organism was thought to be a Nocordia species
-It is colonized on the hair shafts in sweat glandbearing areas such as the armpits and the pubic area
Epidemiology and risk factors

- Widespread in the tropical and subtropical areas
- Incidence of the disease varies from 27% to 30% of adult males
- Prevalence of trichomycosis axillaris is more than pubis
- The disease is not limited by race or sex
- Age groups from puberty through adulthood

* Risk factors including:
- High humidity and warmth in tropical areas
- Poor hygiene
Clinical presentation

- Complaints of discolored, Sweat-stained clothes
- It is characterized by yellow, black or red granular or Cylindrical nodules or concretions that stick to the hair shaft.
- Usually the condition is symptomless and there are Sweaty, smelly armpits
- Hair shafts expand appearing more noticeable after bathing
Differential diagnosis

- Pediculosis
- Monilethrix (beaded hair)
- Trichorrhexis nodosa
- White piedra
- Ringworm
* Direct examination

- Observation of cylindrical or granular sheaths around the hair shafts (yellow, black or red) (magnification ×10)
Culture

- Culture typically not recommended for diagnosis
- Culture on sheep blood agar and brain heart infusion agar in 25°C
Treatment and prevention

- **Shaving** the affected hairs is the fastest method of treatment
- Application of gel or wash formulation of benzoyl peroxide
- Using topical erythromycin or clindamycin
- Drying powders may assist treatment
- Use of antiperspirants helps in prevention