

#### SBIMC-BVIKM SYMPOSIUM ATYPICAL SKIN LESIONS IN A PREGNANT WOMAN: A DIAGNOSTIC AND THERAPEUTIC CHALLENGE

Simar J, Wieers G, Vogeleer M-N, Roussel G, Verbelen V



# CASE REPORT

#### 22-year-old woman

- 32 weeks of gestation
- Annular erythemato-squamous itchy plaques (shoulder, back, thigh and pubis)
- Similar lesions in the patient's husband
- Own guinea pig with skin lesions on the nose
- Poor hygiene
- No history of trauma, shaving, depilation or unsafe sexual behaviour

### WHAT WOULD YOU HAVE DONE?

- A. Treatment with antibiotics and/or steroids
- B. Follow-up until delivery and treatment after delivery if necessary
- C. Skin biopsy
- D. Topical antifungal treatment
- E. Oral antifungal treatment

#### WHAT WE DID

Testing for IST: negative

Treatment with topical steroids

Extension of the pre-existing lesions

Inflammatory and extremely painful mass on the pubis suggesting an abcess

Amoxicilline-clavulanate and local application of fusidic acid

No improvement

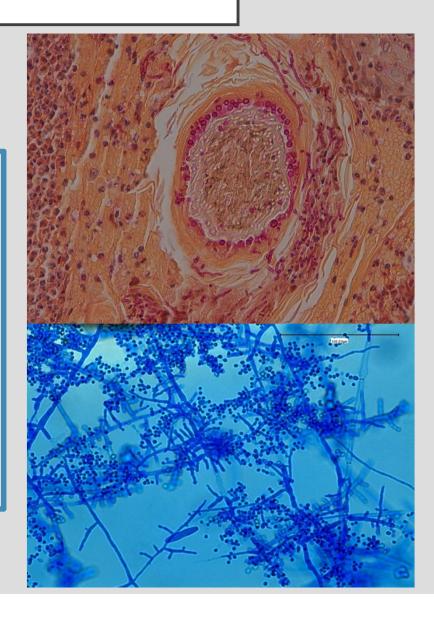
Skin biopsy



#### SKIN BIOPSY



- Inoculation on Sabouraud and Takashio (diluted Sabouraud)
- Histopathologic examination (P.A.S staining)
- Microscopic examination



### MYCOLOGICAL DIAGNOSIS

• Trichophyton interdigitale/mentagrophytes

 e dermatophytes: prevailing causes of fungal infection of the skin, hair and nails (tinea pedis, corporis, ...)

	Trichophyton interdigitale	Trichophyton mentagrophytes
Macroscopic (surface)	Powdery to floccose Cream-coloured to yellowish-buff	
Macroscopic (reverse)	Brownish (colorless, yellow, red)	
Microconidia	Round, arranged in dense, grape-like clusters or along the hyphae	
Macroconidia	Not always present,1-6 cells, cigar shaped, thin walled (4-8 x 20-50 $\mu\text{m})$	
Reservoir	Anthropophilic	Zoophilic (rodents ++)

### PCR

- CNR (CHU Liège, Belgium)
- PCR DermaGenius<sup>®</sup> (PathoNostics): multiplex real-time PCR (highly specific)
- Result: Trichophyton interdigitale
- ightarrow The guinea pig is not guilty

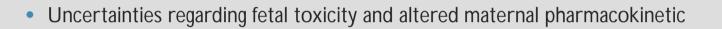
Diagnosis: Majocchi granuloma



## MAJOCCHI GRANULOMA

- Deep folliculitis due to a cutaneous dermatophyte infection
- Commonly occurs as a result of the use of topical steroids on unsuspected tinea
- Almost always the result of immunodeficiency and trauma (shaving)
- In our case:
  - Pregnancy = relative altered immune state
  - Use of topical steroids

### ANTIFUNGAL TREATMENT IN PREGNANT WOMEN: A CHALLENGE



- **Topical antifungals** (azoles and allylamines) are ineffective in case of Majocchi granuloma but are recommended during pregnancy and breast-feeding followed by systemic antifungal therapy in case of recurrence or persistence of the lesions
- **Systemic treatment** should be avoided in absence of life-threatening condition:
  - If indicated: terbinafine and itraconazole are the most effective for the treatment of dermatophytes infection BUT
    - Itraconazole (FDA category C): teratogenic in rodents. No increased risk detected in clinical studies but should still be avoided, especially during the first trimester
    - Terbinafine (FDA category B): not toxic in animal pregnancies but lack of data in human  $\rightarrow$  avoid its systemic use in pregnancy
  - → Cautious multidisciplinary evaluation of the maternal-fetal risks
  - → Regular ultrasound monitoring of the fetus (report any abnormality)

### DIAGNOSTIC AND THERAPEUTIC CHALLENGE IN OUR PATIENT

- **Diagnostic challenge** < uncommon pubic localization + incomplete medical history
  - Diagnosis delay
    - Inaccurate corticosteroids treatement → local immunosuppression and development of invasive dermatophyte infection (Majocchi granuloma)
- Therapeutic challenge
  - Higher risk of vertical transmission to the neonate < public localization
  - Absence of life-threatening condition;
    - Local application of terbinafine  $\rightarrow$  rapid improvement of the lesions
    - Treatment of the patient's husband and guinea pig as well as cleaning of the house

### FOLLOW-UP

- Lesions were healing at the time of delivery
- Six months after delivery: reccurence as tinea pedis + pubis
  - Treatment with oral terbinafine (250mg/day) for a 14-days period
  - No recurrence up till now





# THANK YOU FOR YOU ATTENTION!

QUESTIONS?