

# Micrology final

## 1- Fungal infections of the skin :

- Superficial mycoses - painless - no symptoms - Normal biota but increased in number- **non-infectious** - caused by *M. furfur* - hypo or high pigmentation = Pityriasis versicolor - cosmetic azole - high recurrence - used for treatment of (Seborrheic dermatitis) (قشرة الشعر) and red and covered with greasy scales .
- Cutaneous Mycoses - keratinized tissue - **infectious** - Anthrophilic = from Man to man (chronic & )- Zoophilic (acute & severe )- Tinea corporis is common (Body & groin area) - Tinea capitis (black dots with hair loss) - Tinea unguinum (painless white or yellow nails )- miconazole or oral terbinafine - (Trich= pencil)& (micro=spin)&(epi=club) .
- Candidiasis - yeast which produce pseudo hyphae (septation)- low immunity- worm moist = Pseudo diaper rash - white patches in the mouth=esophagitis, gastritis - Vulvovaginitis (cotton &cheese discharge)- inflammation in nail bed (painful = nail loss) - oval budding gram +ve with germ tube - treatment (caspo & ampho = systemic IV ) .
- Subcutaneous mycoses= Sporotrichosis= Dimorphic = drain in lymph nodules .

## 2- Osteomyelitis :

chronic= dead bone (sequestrum) -Adherence & intracellularly survive *Staphylococcus aureus* -vertebral osteomyelitis = >50= TB = mycobacteremia - acute dull pain without symptoms - elevated inflammatory markers- radiographic imaging should prompt bone biopsy .

## 3- Septic arthritis :

infection in a joint - monomicrobial. *S. aureus*- single swollen and painful joint- synovial fluid analysis and culture - staph+step+gonorrhoe+ brucella+ spiro(borellia) - +ive =vancomycin - -ive *Pseudomonas* infection .

## 4-Animal bites :

dog more common - cats more deep infected - pts hemodynamically stable- *Bartonella* (-ive)- *B. henselae* =cat-scratch disease - swollen lymph nodes - **Pasteurella** - *Capnocytophaga*

canimorsus(fatal sepsis ).

## 5- Necrotizing fasciitis

diffuse inflammatory process - (vancomycin, piperacillin–tazobactam, and clindamycin) - extensive soft tissue necrosis - tissue culture was positive for group A  $\beta$ -hemolytic Streptococcus .

## 6- Pressure ulcers:

breaks in the integrity of the skin barrier, pressure-induced changes, and contamination from contiguous dirty areas - enterobacteria, followed by staphylococci and streptococci - CT is not necessary - superficial or deep .

## 7- Burn wound :

TBSA burn >20 percent - (staph + strep + respiratory - pseudomonas + fungal= candida + unexpectedly rapid separation of the eschar ) - >10\*5 bacteria per gram of tissue - weekly surveillance swabs - noninvasive = just in burn skin - Invasive = unburn + systemic signs .

## 8- Surgical site infection :

prevention : avoiding elective surgery in patients with active infection , timely administration of prophylactic antibiotics, proper skin preparation, and maintenance of sterile conditions - clean = uninfected , contaminated = breaks in sterile condition , dirty = contaminated before surgery .

- **Staphylococcal scalded skin syndrome developed 3 days after his being scalded , Only burn wound swabs revealed exfoliative toxinpositive Staphylococcus aureus , All wounds are mostly epithelized (Day 10).**

link : [https://quizlet.com/\\_d1sbp2?x=1jq&i=4golfd](https://quizlet.com/_d1sbp2?x=1jq&i=4golfd)