



## **Kerion variety of Tinea capitis**

**It is a boggy, inflammatory mass mainly caused by zoophilic & geophilic dermatophytes.**



## **Scaly or "gray patch" of Tinea capitis**

Hair over the lesion is broken above the surface of the scalp leaving short stubble with presence of scales. The lesion is circular, single or multiple. Many lesion may coalesced with each other give atypical circular lesion.



## **Tinea barbae**

**It is an infection of the hairs and skin of the beard and mustache area, and is usually seen in men.**



## **Tinea corporis**

It is a dermatophyte infection of the glabrous skin "All the body except face, hand, groins, and foot". Characterized by development of circular lesion at the site of infection. The lesion has sharply demarcated margin with presence or absence of scales.



## **Tinea cruris**

Is an infection of the groin, usually caused by anthropophilic dermatophytes. The lesion is not typically circular as multiple lesions may coalesce with each other.



## **An interdigital type of Tinea pedis**

**An infection of the feet". It is usually caused by anthropophilic dermatophytes. It is characterized by macerated, scaly plaques in toe web spaces. Mmainly occurs between 4<sup>th</sup> & 5<sup>th</sup> toes.**





## **Black dot variety of Tinea capitis**

The hair in the affected area is broken below the surface of the scalp leaving black dots with absence of scales. Is not characterized by circular lesion.



## **Tinea favosa "favus"**

It is a chronic infection of the scalp of the head caused mainly by *T. schoenleini*. Hair in the affected area is protruded from a yellow cone – shape structure called "Scutula" Which composed of the multiplied fungus, metabolic byproducts, debris & dust suspended in air.





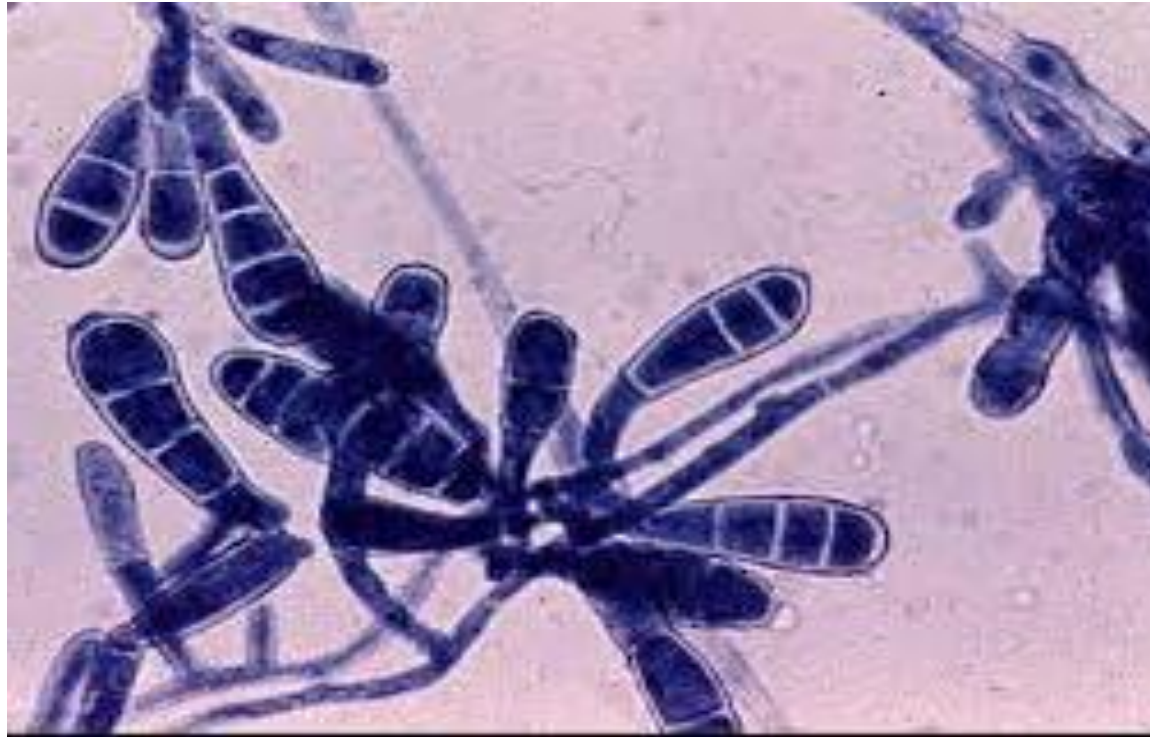
## **Tinea manuum**

**It is an infection of the dorsum of the hand**



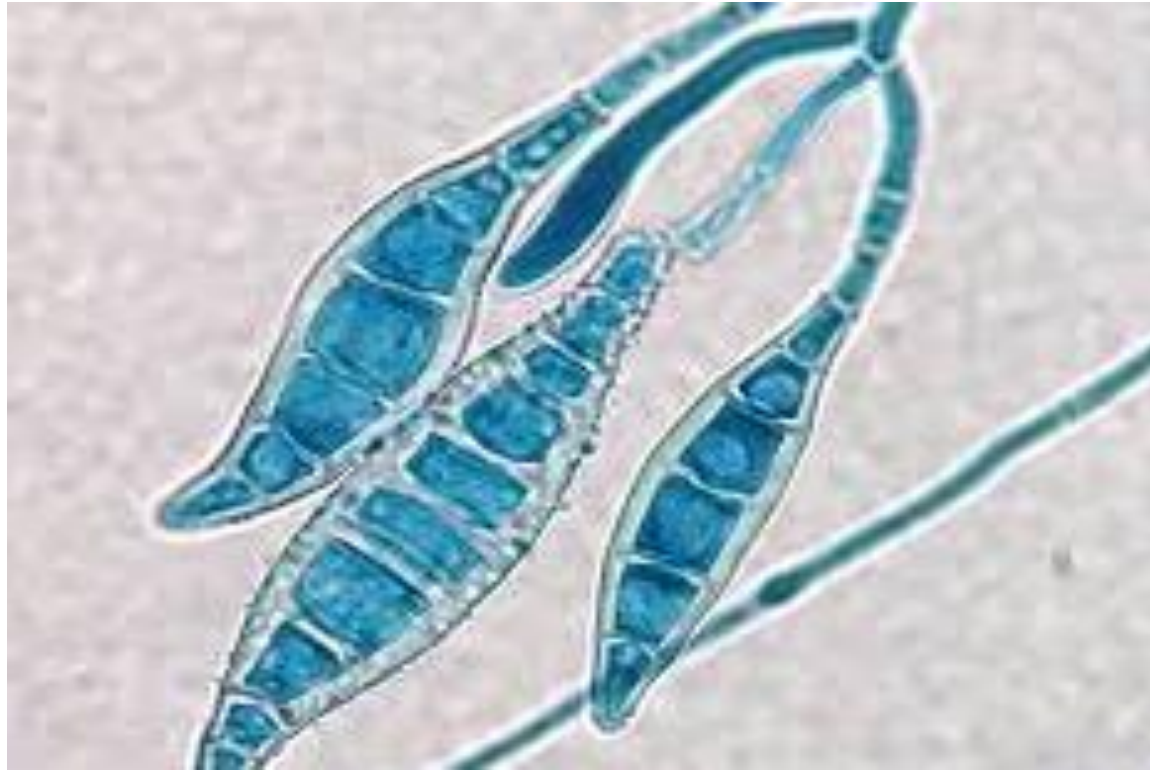
## **Tinea unguium (Onychomycosis)''**

**It is a dermatophyte infection of the nail. The affected nail becomes wrinkled, lusterless with presence of chalky material under the nail bed.**



## Macroconidia of *Epidermophyton* spp

Appear up on examination of dermatophytes culture on SDA.  
It has paddle or snow shoe shape and septated into 3-4 cells.  
E.g. *E. floccosum*



## **Macroconidia of Microsporum spp**

Appear up on examination of dermatophytes culture on SDA. It is spindle in shape, septated into 5-9 cells, and has rough surface. E.g. *M. canis* and *M. gypseum*.



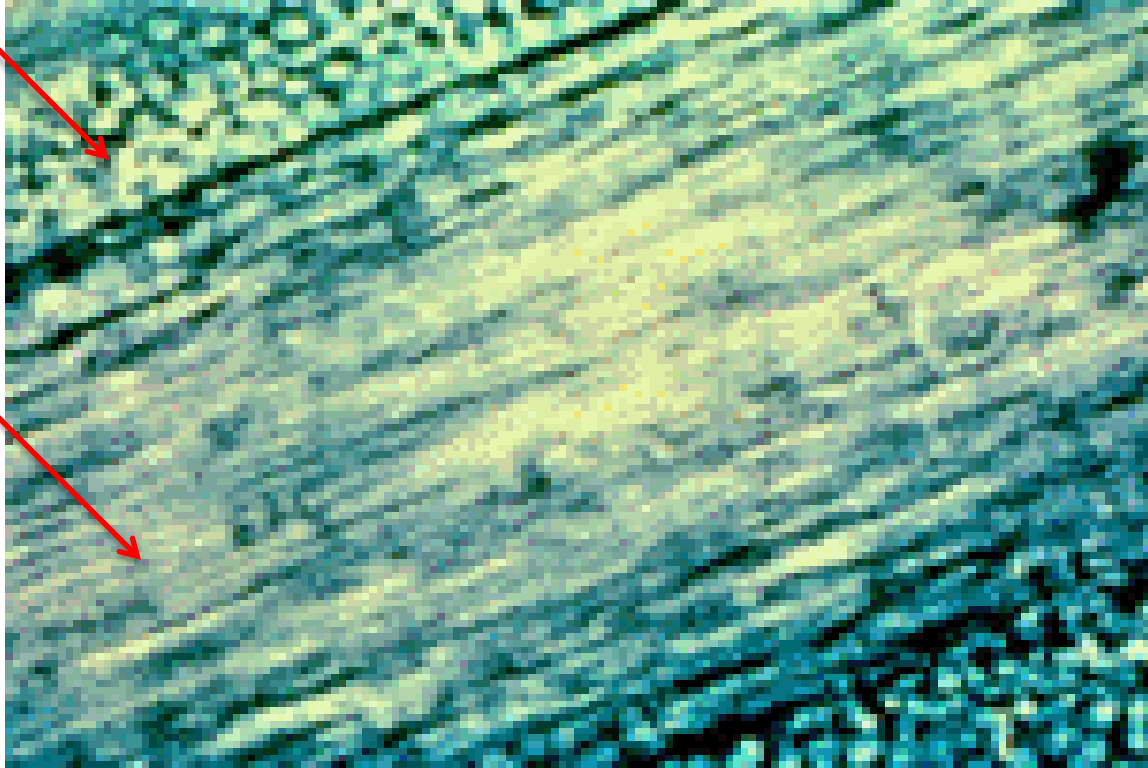
## **Macroconidia of Trichophyton spp.**

Appear up on examination of dermatophytes culture on SDA. It has cigar shape, septated into 10-12 cells, and has smooth surface.  
E.g. *T. violaceum* and *T. verrucosum*



**Arthrospores**

**Hair shaft**



## **Ectothrix arthrospores of dermatophytes**

Appear up on direct examination of hair samples using 10% KOH.  
The arthrospores appear outside the hair shaft.



## **Endothrix arthrospores of dermatophytes**

**Appear up on direct examination of hair samples using 10% KOH. The arthrospores appear inside the hair shaft.**



## Cachexia due to Tuberculosis

The affected patient with *Mycobacterium tuberculosis* loses his appetite, loses weight and finally become cachectic.



## **Skin tuberculosis (Lupus vulgaris)**

**This form is characterized by ulceration at the site of penetration, associated with yellowish brown nodule. It may develop at the site of vaccination. Mainly affects those contact with the carcasses of infected animal as butchers, meat inspectors and pathologist.**



## Cutaneous anthrax “Malignant pustules”

The skin lesion starts with itching then formation of papule at the site of invasion. The papules changed into vesicle filled with dark bluish or black fluid occupies a central position in the vesicle. Ulceration gradually development with formation of **black eschar** in the center.





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## Scrofula

Tuberculus cervical lymphadenitis caused by *Mycobacterium tuberculosis* and mainly affected children.



## **McFadyean's reaction**

The slide was prepared from blood samples. The smear was stained with poly-chrome methylene blue which demonstrated blue colored bacillary body and light pink colored capsule.



## **Cutaneo-lymphatic form of sporotrichosis**

Characterized by development of nodule at the site of entry of the fungus (Wounded skin). The nodule may remain localized then converted to ulcer. Sometimes, the lymph vessel draining the affected area is affected and become cord – like.





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## **Localized cutaneous form of human erysipeloid “erysipeloid of Rosenbach”**

It is an acute localized cutaneous infection, described as a local cellulitis. Erysipeloid usually occurs on the hand or fingers. The infection consists of a well-demarcated, slightly elevated violaceous lesion. The peripheral edge spreads slowly as the center fades.



## **Oculoglandular form of Tularemia**

**This form results from contamination of the conjunctiva from either splash of infected blood or rubbing the eyes after contact with infectious materials such as blood from infected rabbits. Ulcerated papules, which are usually located on the lower eyelid are seen as well as lymphadenopathy**



## Ulceroglandular form of Tularemia

*Francisella tularensis* enters the body through a scratch, abrasion, tick or insect bite and spread via the lymphatic system. Ulcer develops and progresses to necrosis at the site of entry and Lymph nodes may suppurate and ulcerate.





## Tetanus neonatorum

Infection of the umbilical wound of the new borne with *Clostridium tetani*.



## **Tetanus in adults**

Occurs as a result of wound contamination with *Clostridium tetani*. There are painful tonic and spasms of the masseter muscle with difficulty in opening the mouth. In severe cases spasm of the back muscles produces opisthotonus (extreme arching of the back)



## **Cervicofacial actinomycosis**

It begins with a hard swelling under the mucous membrane of the mouth, beneath the periosteum of the mandible or in the skin of the neck. At a later stage, softened areas, depression and opening to the exterior with a purulent discharge are evident. These secretions usually contain the characteristic “sulphur granules” which are *Actinomyces* colonies



## **Rat flea “ *Xenopsylla cheopis* ”**

**which is considered as a biological vector for bubonic plague.  
Yersinia pestis cause blocking of Rat flea’s gut.**



## Septicemic plague

Bacterial endotoxins cause disseminated intravascular coagulation (DIC), that cause tiny clots throughout the body and possibly ischemic necrosis.



## **Bubonic plague**

**This form is characterized by swelling of lymph nodes. The femoral and inguinal groups of lymph nodes are most commonly involved.**





## Scarlet fever

Skin rash caused by *S. pyogene* strains due to production of erythrogenic toxin.



## **Septic sore throat**

**Pyogenic infection of the tonsils caused by *Streptococcus pyogens* that causes a variety of suppurative infection.**



## **Scarlet fever**

**Strawberry tongue characteristic for scarlet fever**



## **Mycotic stomatitis "oral thrush"**

**One of the most common forms, characterized by white plaques lightly adhering to the oral mucosa, pharynx and esophagus. Oral thrush is more frequent in nursing infants than in adults.**



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## **Angular stomatitis**

**Inflammation & maceration of the commissures of the mouth,  
caused by candida albicans**



## **Candida leukoplakia**

**White plaques firmly adherent to oral mucosa and difficult to be removed and their manual removal cause oozing of blood and caused by *Candida albicans*.**



## Diaper dermatitis

Erythema and exudates may be also seen in the large damped folds especially in babies using pampers & caused mainly by *Candida albicans*.



## **Diphtheria**

Infection occurs most commonly on the tonsils where the toxin diffuses through the mucous membrane and causes necrosis of the mucosal cells. This gives rise to a thick grey "pseudomembrane" composed of fibrin, epithelial cells, bacteria and polymorph neutrophils



## **Corynebacterium Diphtheriae**

**Appear up on microscopeical examination of the culture as Chinese letter appearance**





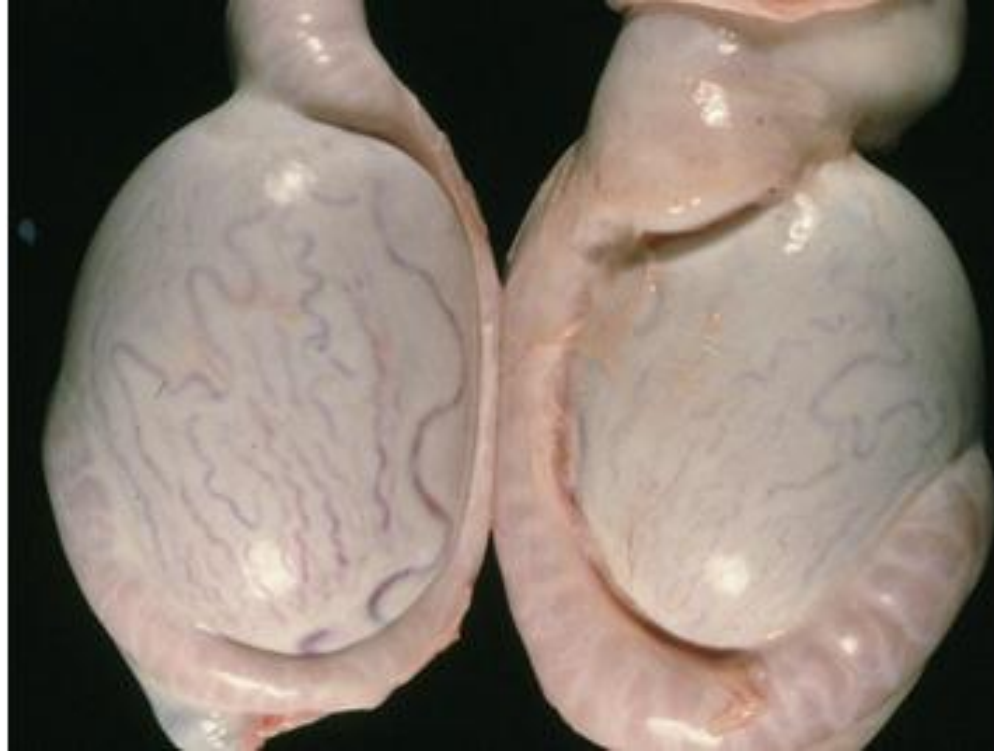
## Transmission cycle of Leptospirosis

After a week of leptospiremia, domestic animals and rats shed the m.o. in their urine. The main portal of entry of the m.o. to human is through abraded skin or mucous membrane. Occupational groups (Veterinarians & farmers) are liable to be splashed by the urine of infected animals through direct contact, where *Leptospira* get entry through abraded skin or through mucous membrane. Recreational groups acquire the infection up on walking through swampy areas contaminated with urine of infected rats.



## **Icteric type (Hepatoephritic type) or Weil's disease**

Characterized by sudden onset of fever, headache, myalgia, conjunctivitis and nausea, vomiting, diarrhea and constipation and prostration may be severe. Haemorrhagic spots on skin, mucous membrane and gastrointestinal tracts, hepatomegaly, **jaundice** (haemorrhagic jaundice or Icteric).



## **Chronic epididymitis in a ram with ovine brucellosis**

**Characterized by enlargement and an increased consistency of the affected parts. As a result of fibrous adhesions, the mobility of the affected testis in the scrotum is often reduced. epididymo-orchitis is also one of the most common complications are in human infected with brucella.**

## ارشادات الامتحان

١. سيكون هناك عدد ٦ امتحانات مختلفة لمنع الغش.
٢. يوجد صور للأمراض فى الأمتحان عددها ٥ صور لكل مجموعة
٣. سيدخل كل طالب على مجموعة محددة مكتوبة على ورقة الاجابة.
٤. يدخل الطالب أولا على الصور و يكتب رقم الصورة و اسمها.
٥. يقوم المراقبين بتحديد مكان جلوس الطالب و ليس للطالب الحرية فى تحديد مكانه بنفسه.
٦. يقوم الطالب أولا بكتابة تعليق على كل صورة.
٧. كل صورة عليها نصف درجة (ربع على اسم الصورة و ربع على التعليق). يرجى الحل على هيئة جدول.

رقم الصورة	التعليق

٨. سيحتوى كل إمتحان أيضا على تجربة عليها **درجتان و نصف**. هذه التجارب هى:

1. Mantoux tuberculin skin test.
2. Rosebengal test
3. Widal test
4. Dip stick test for *E. Coli*
5. *Coagulase test*
6. *Antistreptolysin O test*

1. Prevention & control.
2. Rodents control
3. Global distribution of diseases

الطالب معرض لأي نقطة فيها و سيكون السؤال غالبا على هيئة أكمل أو أكتب ما تعرفه عن.  
١٠. باقى السكاشن مثل الـ

1. Technical meanings of terms used in zoonoses.
2. Diphtheria
3. Laboratory Safety
4. Diagnosis of fungal infection

سيكون السؤال غالبا على هيئة عرف أو اكتب المصطلح العلمى لأي تعريف أو اختبار فيها أو صح أم خطأ.

١١. سيأتى أسئلة من تلك الموجودة نهاية بعض السكاشن مثل الـ

1. Laboratory safety
2. Diagnosis of fungal infection.
3. Technical meanings of terms used in zoonoses.

١٢. توزيع الدرجات: ٢.٥ على الصور، ٢.٥ على التجربة، ٥ على باقى الأسئلة، ٥ درجات على حل اسئلة الكتاب العملى و حضور السكاشن ليكون إجمالى درجات العملى ١٥ درجة.

المسئول عن وضع الإمتحان

- *The oral examiner committee have the rights to ask you about:*
  - Tuberculin test
  - BCG vaccine
- *Do not memorize zoonoses but try to understand it; it is interesting when you do that.*
- *All of us at your service until the day of exam and after your graduation.*
- *We don't want a formal relationship between students and the lecturers.*
- *We feel that we are your sisters and brothers so we ask you for the same feelings.*
- *Don't hesitate to ask for our help even in non scientific issues. You will find us very helpful.*

**With my best wishes**

***Dr. Maysa Abdelbadie Awadallah***

***The responsible person for putting the practical exam &  
Collecting the written exam***

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