# Granulomatous infection Practical

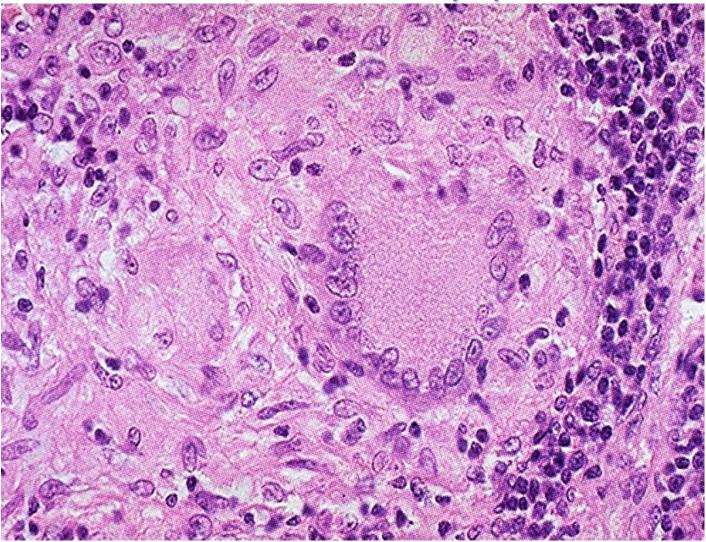
2018

#### Granulomatous/Tuberculous Lymphadenitis



**Figure A.** Enlargement of the upper deep cervical lymph glands caused by tuberculosis.

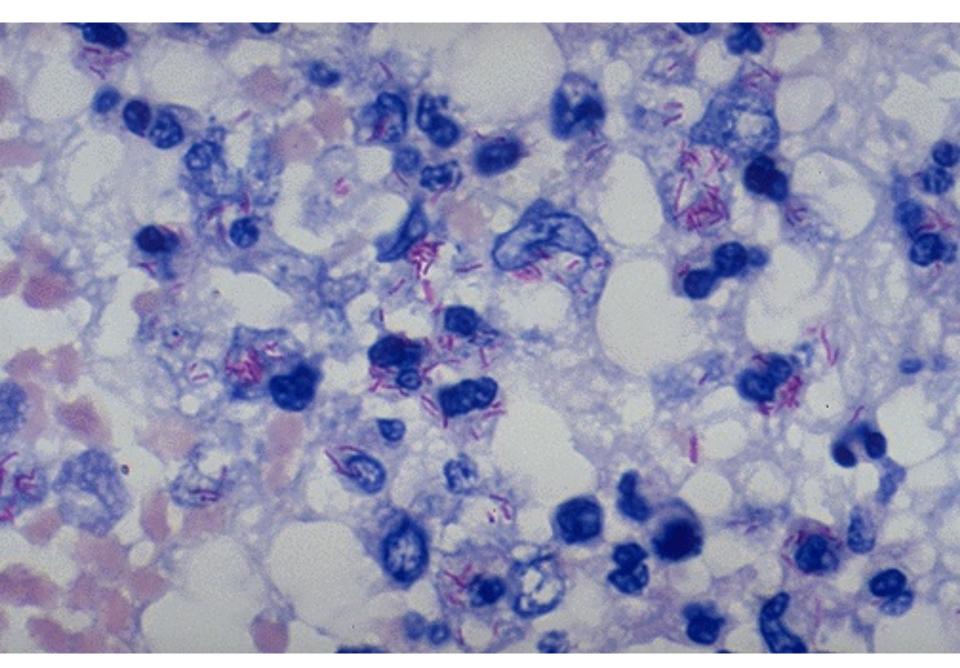
#### Granulomatous/Tuberculous Lymphadenitis



### Non-caseating giant cell granuloma.

#### Granulomatous/Tuberculous Lymphadenitis

- A granulomatous inflammatory response to tuberculosis includes mainly epithelioid cells, lymphocytes and fibroblasts.
- The granuloma shows that the <u>epithelioid -histiocytes</u> are elongated with long, pale nuclei and pink cytoplasm.
- The macrophages join together and form multinucleated cells called giant cells.
- The typical giant cell for infectious granulomas is called a Langhans giant cell and has the nuclei lined up along one edge of the cell in a horse-shoe pattern



Ziehl-Neelsen stain to highlight/identify AFB

## Leishmaniasis

### **Mucocutaneous** Leishmaniasis



Cutaneous Leishamaniasis presenting as a non-healing ulcerated and crusted lesion over the mandible in a 22-year-old Saudi female patient. Note the presence of a scarred area adjacent to the crusted lesion.



Mucocutaneous Leishmaniasis affecting both upper and lower lips of this patient. Note the presence of ulcerated lesions.

### **Mucocutaneous** Leishmaniasis

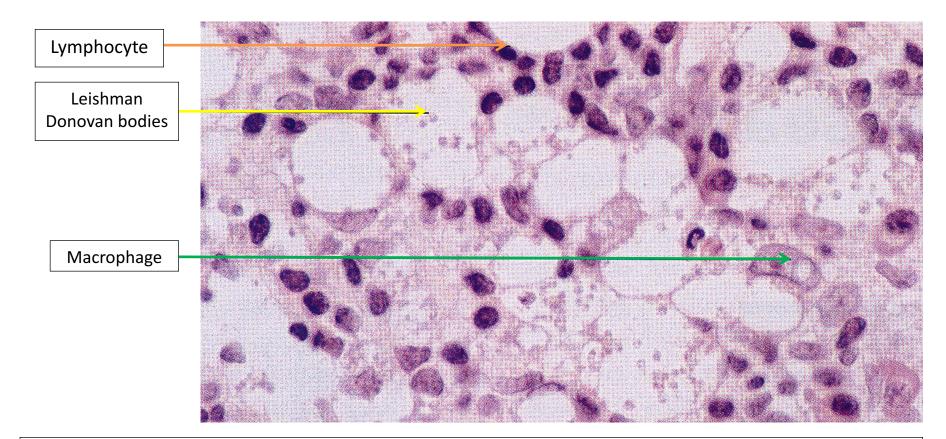
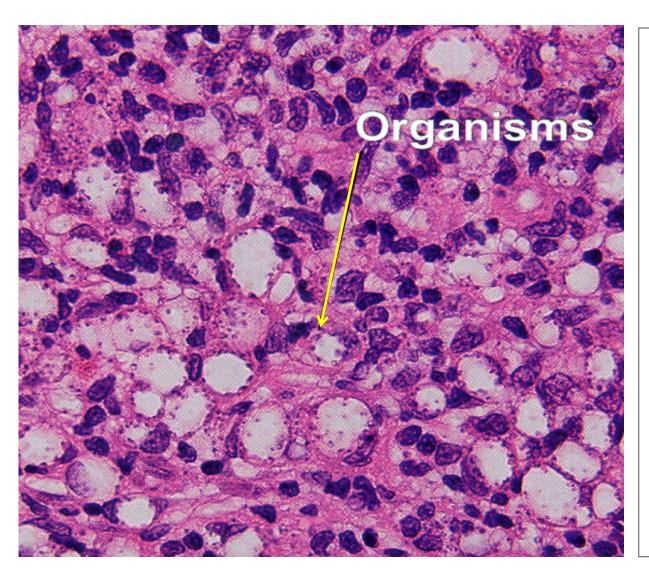


Figure C. Histopathological features of Cutaneous Leishmaniasis (high mag.).

Note the presence of numerous Leishman-Donovan bodies within the foamy macrophages.

### **Mucocutaneous** Leishmaniasis



#### Figure D. Leishmaniasis.

Numerous macrophages containing Leishman-Donovan bodies. Note the presence of many lymphocytes.

## Actinomycosis

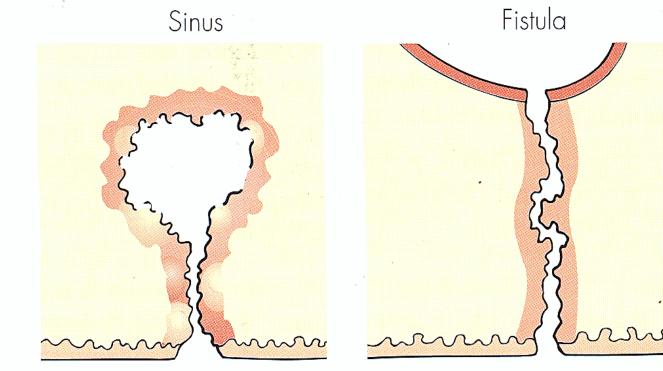
### **Cervical Actinomycosis**



Figure A. An infected sinus in the axilla of a patient with actinomycosis.

He had similar lesions on the lateral side of his neck. Note the presence of silver yellowish granules near the opening of the sinus and adjacent ulcerated area.

## **Cervical Actinomycosis**



A sinus is a connection between a cavity lined with granulation tissue and an epithelial surface.

A fistula is a connection between two epitheliallined surfaces.

THE DIFFERENCE BETWEEN A SINUS AND A FISTULA.

## **Cervical Actinomycosis**

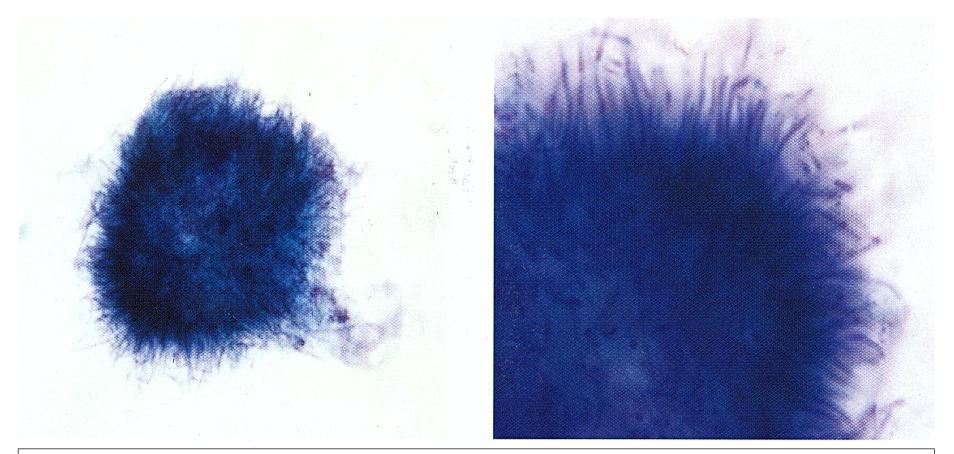


Figure C. Actinomycosis organism stained with gram stain.

Note the filamentous structures at the periphery of the actinomycosis organisms.