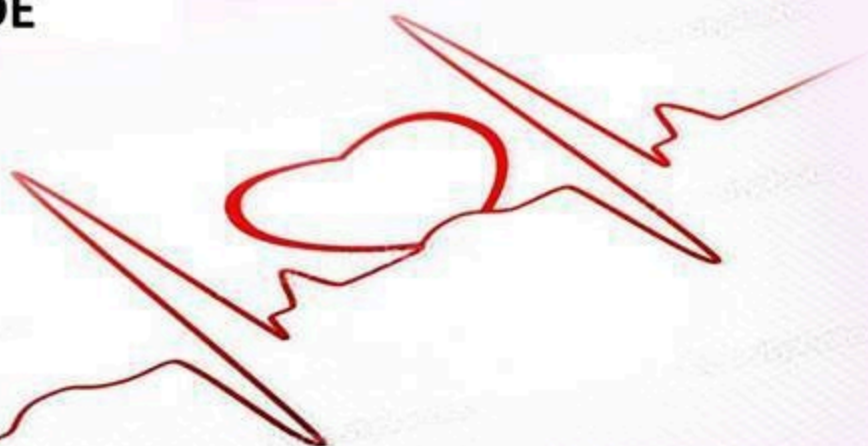


SHEET



SLIDE



Slide : 10



Doctor: Heyam Awad



INFLAMMATION LECTURE 6

DR HEYAM AWAD

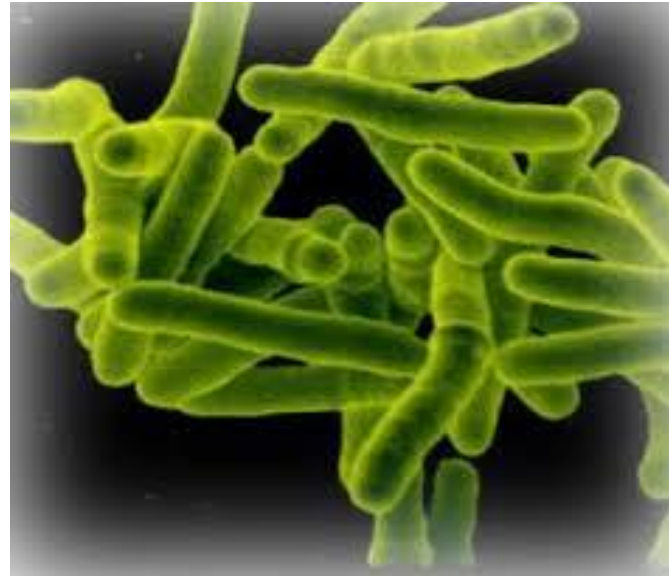
CHRONIC INFLAMMATION

- WEEKS OR MONTHS.
- COEXISTENT MONONUCLEAR INFLAMMATION
- TISSUE DAMAGE
- ATTEMPTED REPAIR

CAUSES OF CHRONIC INFLAMMATION

- PERSISTENT INFECTION....DIFFICULT TO ERADICATE OR UNRESOLVED INFECTION.
- HYPERSENSITIVITY DISEASES.
- PROLONGED EXPOSURE TO TOXIC AGENTS.

MYCOBACTERIA



FUNGUS



*ADAM

VIRUSES

Hepatitis B Virus



CDC
U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

CHRONIC LUNG ABSCESS



ALLERGIC AND AUTOIMMUNE DISEASES

- ASTHMA.
- CRHON'S DISEASE.
- RHEUMATOID ARTHRITIS.

EXPOSURE TO TOXIX AGENTS



CELLS IN CHRONIC INFLAMMATION

- MACROPHAGES
- LYMPHOCYTES
- OTHERS: EOSINOPHILS
- MAST CELLS
- NEUTROPHILS

MACROPHAGES

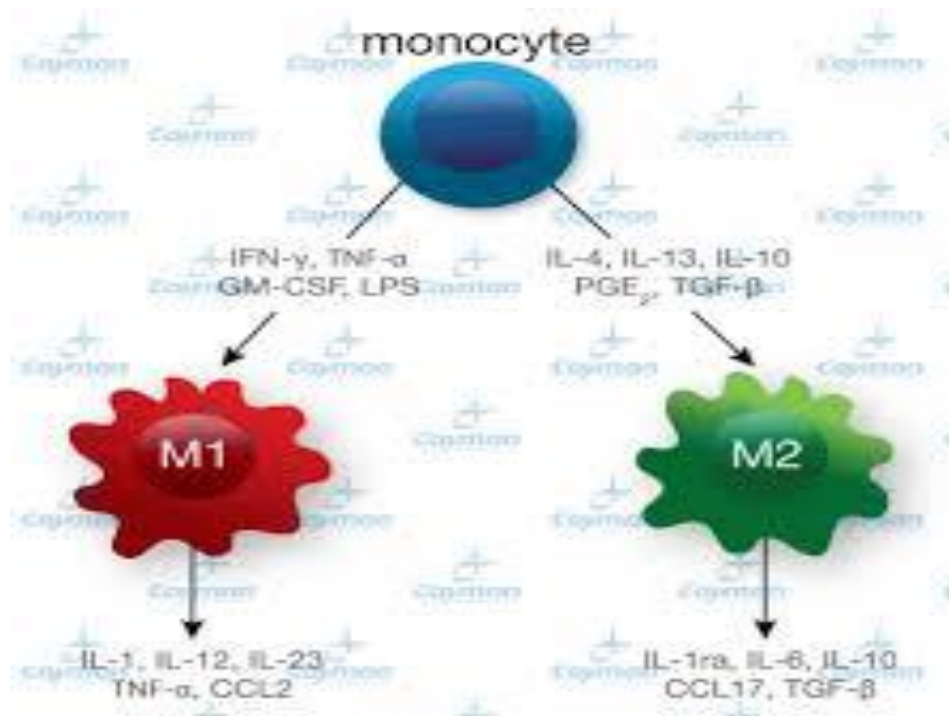
- THE DOMINANT CELL IN MOST CHRONIC INFLAMMATORY REACTIONS.
- FUNCTIONS: PHAGOCYTOSIS
SECRETING CYTOKINES
ACTIVATE LYMPHOCYTES

MACROPHAGE

- BLOOD: MONOCYTE.
- TISSUE: MACROPHAGE.
- LIVER: KUPFFER CELL.
- SPLEEN AND LYMPH NODES: HISTIOCYTE.
- CNS: MICROGLIAL CELLS.
- LUNG: ALVEOLAR MACROPHAGES.

- ALL: MONONUCLEAR PHAGOCYtic SYSTEM/

MACROPHAGE ACTIVATION



MACROPHAGE ACTIVATION

CLASSICAL OPATHWAY	ALTERNATIVE PATHWAY
M1	M2
IFN, MICROBES	IL13, IL4
INFLAMMATION (CYTOKINES AND CHEMOKINES) (MICROBIL KILLING (ENZYMES, FREE RADICALS))	TISSUE REPAIR AND FIBROSIS (TGF BETA, GROWTH FACTOR). ANTI-INFLAMMATORY EFFECT (IL10 &TGF BETA)

LYMPHOCYTES

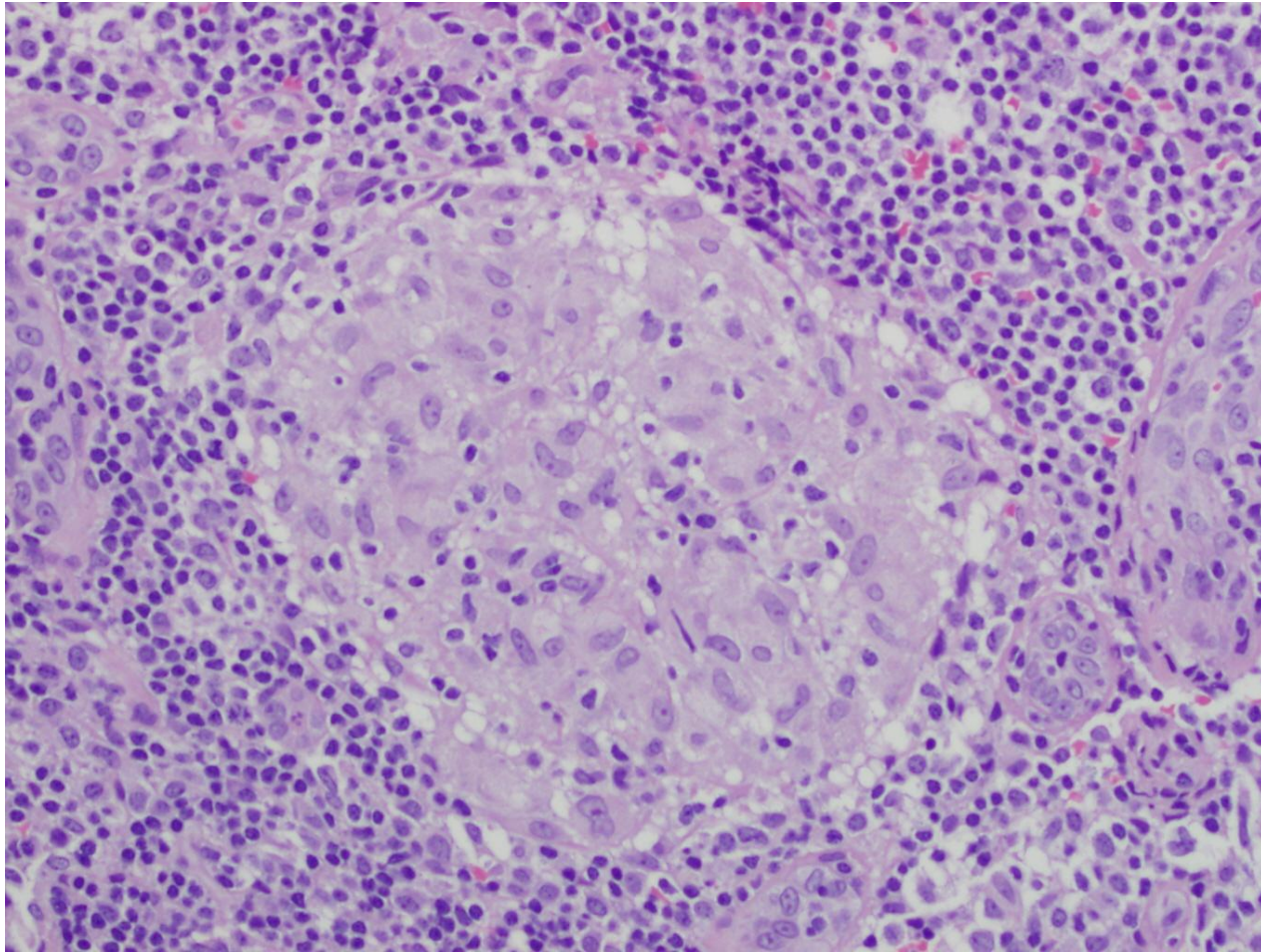
- T LYMPHOCYTES SECRETE CYTOKINES.
- CD4 T LYMPHOCYTES: PRODUCE CYTOKINES....BIDIRECTIONAL STIMULATION WITH MACROPHAGES
- B LYMPHOCYTES AND PLASMA CELLS.

OTHER CELLS

- EOSINOPHIL: PARASITES AND ALLERGY.
- MAST CELLS: HYPERSENSITIVITY REACTIONS.
SECRETES CYTOKINES

NEUTROPHILS ARE ALSO PRESENT IN CHRONIC
INFLAMMATION

GRANULOMATOUS INFLAMMATION

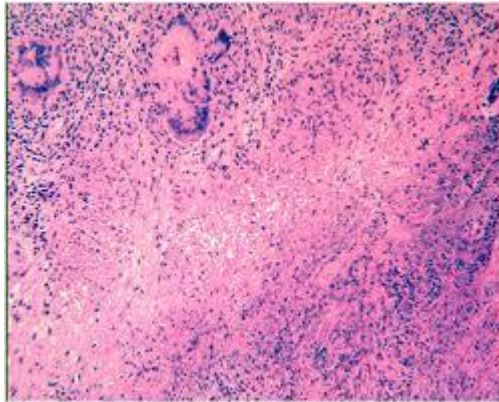


- FOREIGN BODY GRANULOMA.
- IMMUNE GRANULOMAS.

- EPITHELOID CELLS

CASEATION

- TB
- NECROSIS DUE TO HYPOXIA AND FREE RADICALS.



CASEATION

