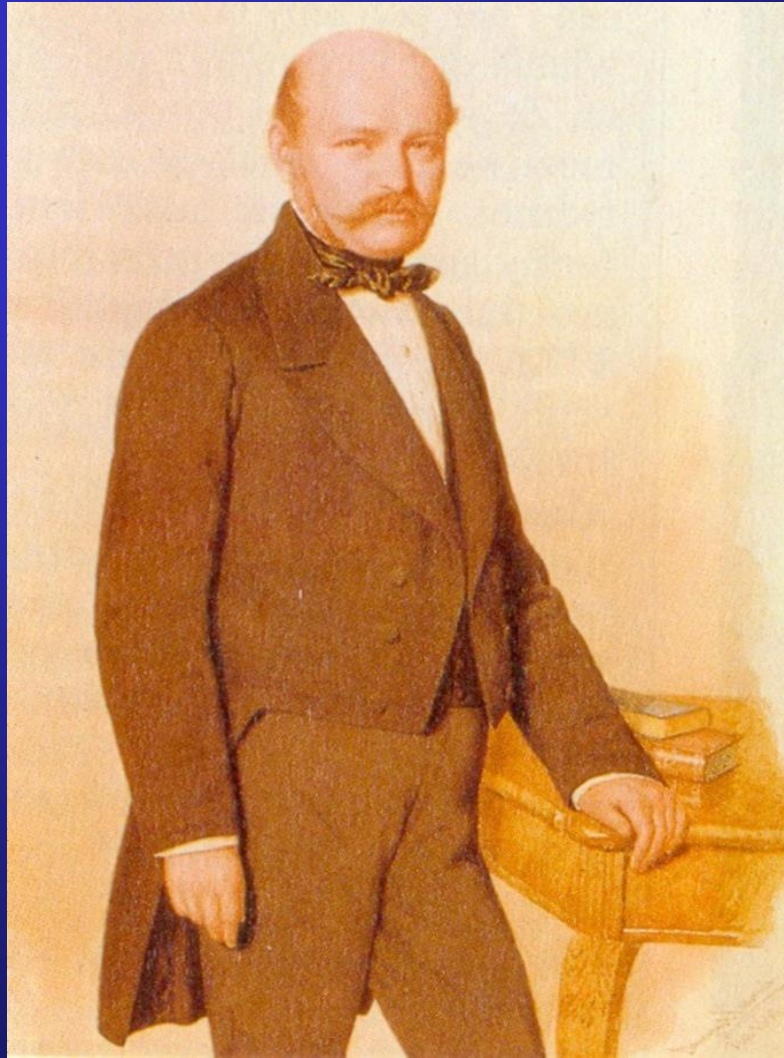


LECTURE 10



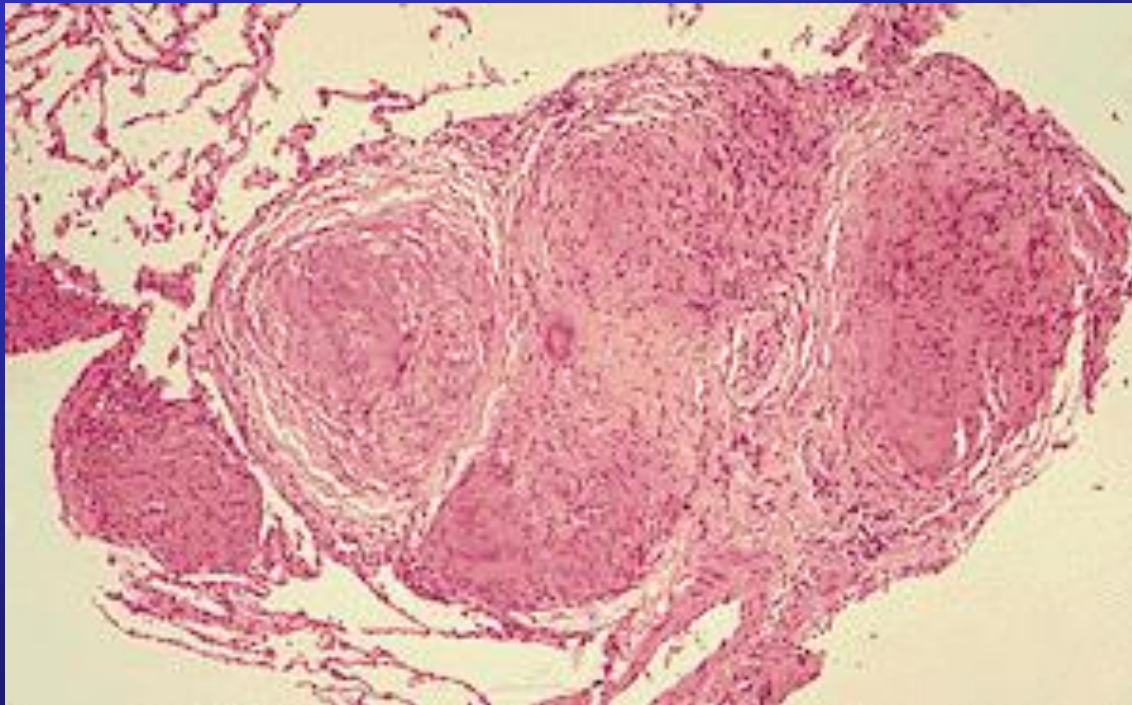
IGNAZ PHILIPP SEMMELWEIS (1818-1865)

PUERPERAL FEVER

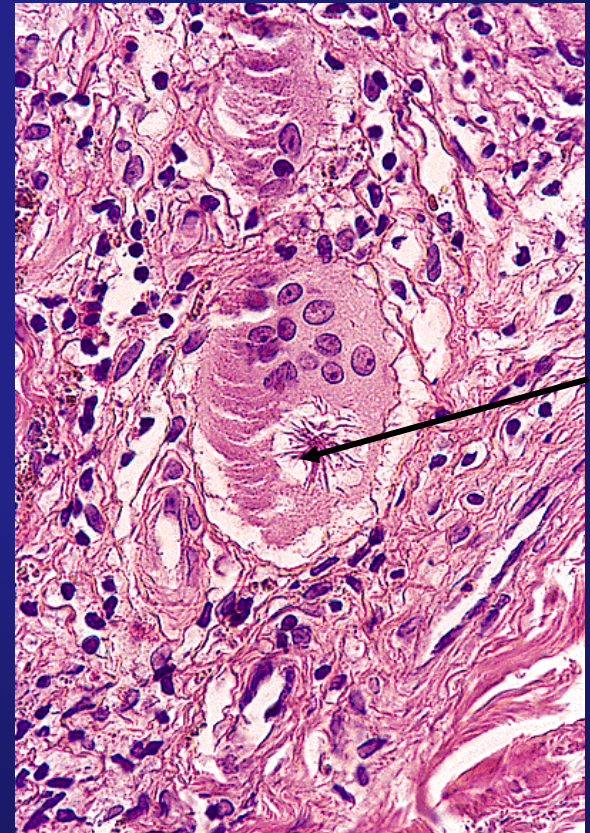
SARCOIDOSIS

DISEASE OF UNKNOWN ETIOLOGY. CHARACTERISTIC IS THE APPEARANCE OF NONCASEIFIED GRANULOMAS IN MANY ORGANS

GRANULOMAS TEND TO UNDERGO FIBROSIS. PULMONARY AND OTHER THORACIC LYMPH NODES ARE THE MOST COMMON LOCATIONS OF THESE CHANGES. CHANGES LOCATED IN THE PAROTID AS WELL AS IN THE EYE (IRIDOCYCLITIS) ARE CALLED MIKULICZ SYNDROME



CHARACTERISTIC, NONCASEIFIED GRANULOMAS WITH GIANT CELLS IN LUNG



CHARACTERISTIC ASTEROID BODY IN A GIANT CELL IN SARCOIDOSIS

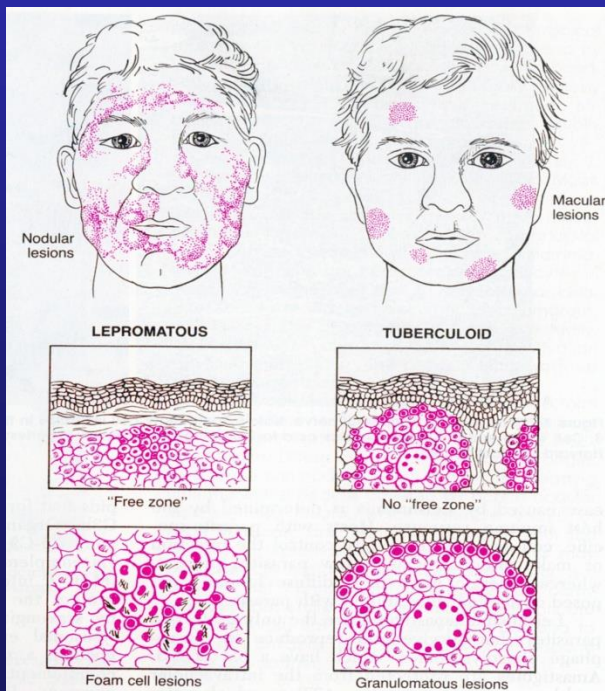
LEPRA (HANSEN DISEASE)

INFECTIOUS DISEASE CAUSED BY *MYCOBACTERIUM LEPRAE*, INVOLVING SKIN AND PERIPHERAL NERVES. TRANSMITTED VIA PULMONARY TRACT.

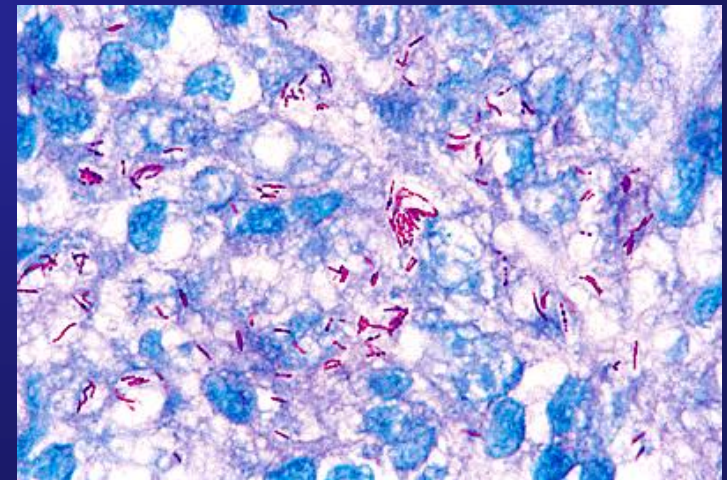
TWO FORMS OF LEPRA ARE DEPENDING ON THE ORGANISM'S IMMUNITY: IN HIGH LEVEL IMMUNITY REACTION MONITORED BY T LYMPHOCYTES - LEPRA TUBERCULOIDES, IN THE CASE OF ANERGY – LEPRA LEPROMATOSA.

IN BOTH CASES OF LEPRA IT REACHES THE PERIPHERAL NERVES → DESTRUCTION OF SENSORY ENDINGS. THERE IS A LACK OF GREATER CHANGES IN THE INTERNAL ORGANS WITH THE EXCEPTION OF THE TESTICLES IN L.LEPROMATOSA

THE LACK OF FEELING RESULTS IN MANY INJURIES WITH NON-HEALING ULCERATION, RECURRENT INFECTIONS, SPASMS, PARALYSIS AND SELF-AMPUTATION



DIFFERENCES
BETWEEN TWO
TYPES OF
LEPRA

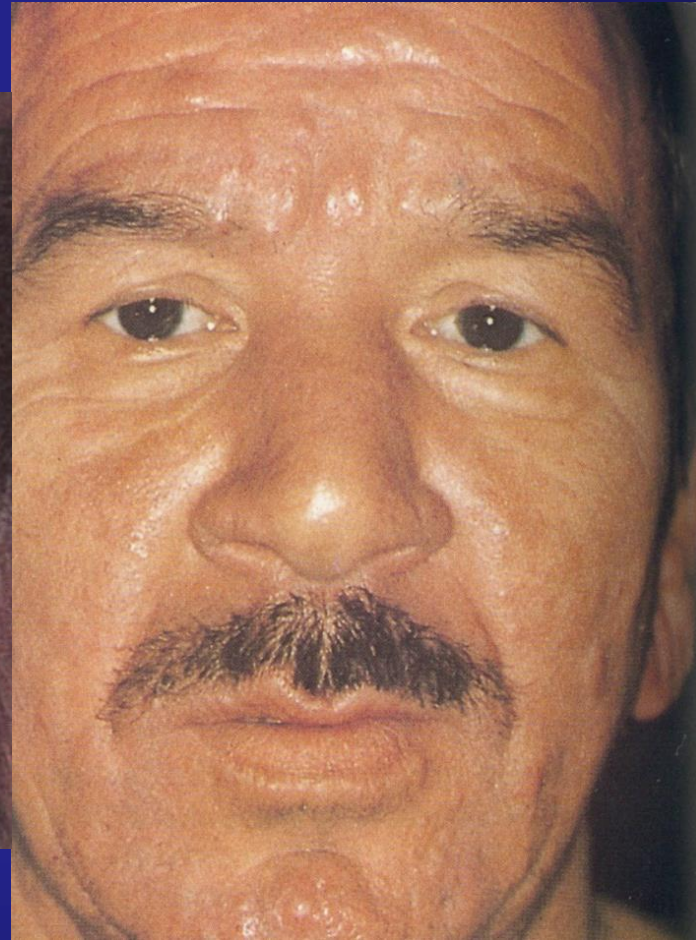


MYCOBACTERIUM IN NERVE

LEPRA

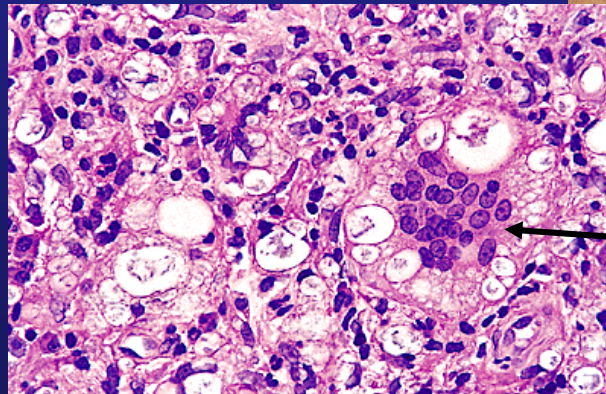


LEPRA TUBERCULOIDES



LEPRA LEPROMATOSA –
FACIES LEONTINA

VIRCHOFF CELLS IN
INFLAMMATORY
INFILTRATION
CONTAINING
MYCOBACTERIUM

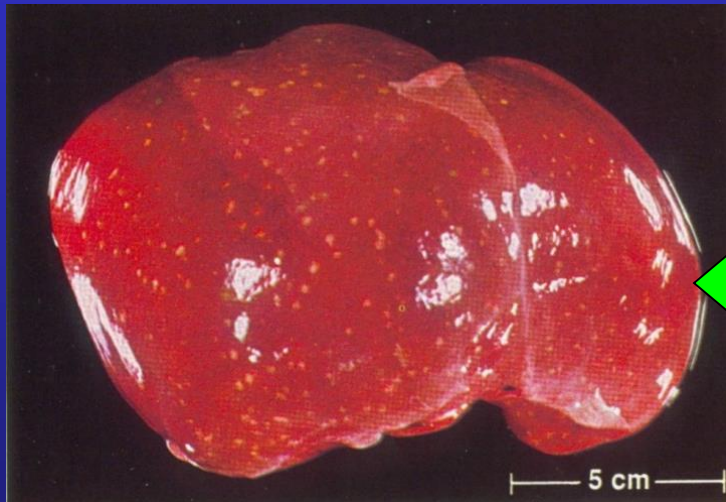


BACTERIAL ZOOONOSIS

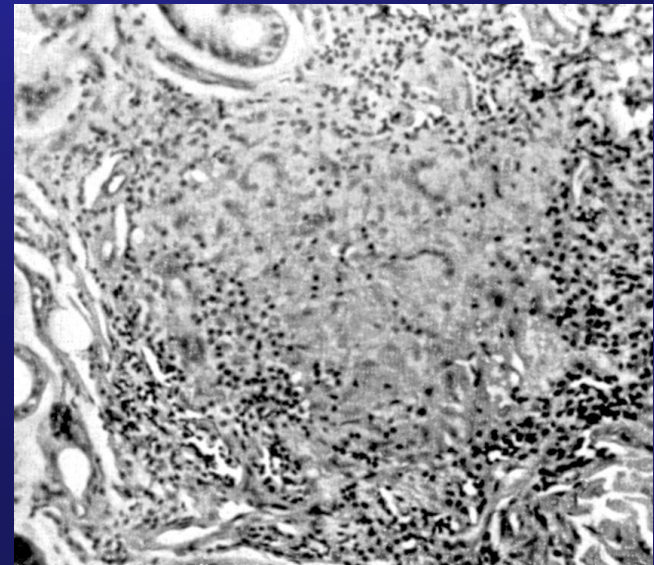
**ANTHRAX, PUSTULA
MALIGNA**
(*BACILLUS ANTHRACIS*)



LISTERIOSIS
(*LISTERIA MONOCYTOGENES*)



TULAREMIA
(*PASTEURELLA TULARENSIS*)



BACTERIAL ZOOONOSIS

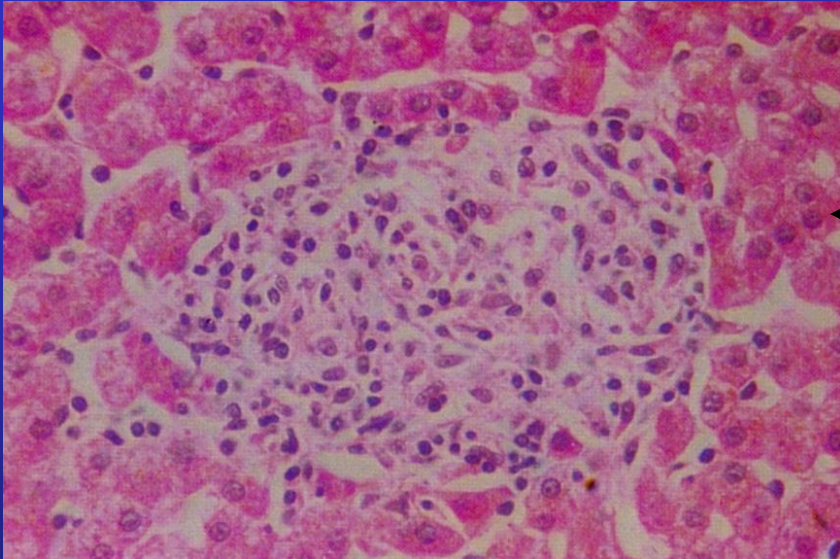
BLACK PLAGUE – PESTIS

(*YERSINIA PESTIS*)

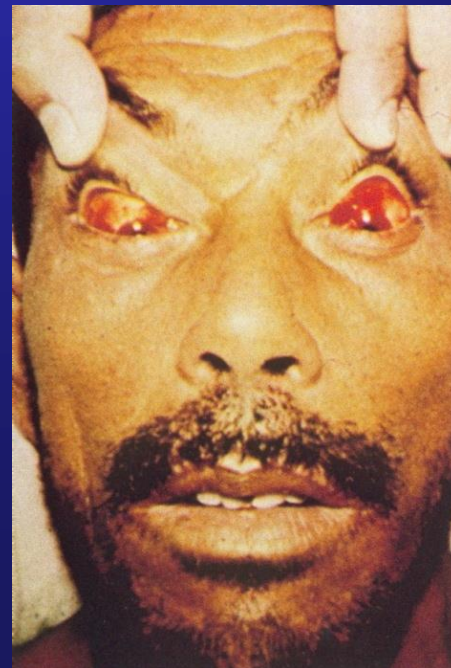
RECOMMENDED „SMOKY” DOCTOR
CLOTHING DURING THE EPIDEMIC



BRUCELLOSIS
(*BRUCELLA MELITENSIS, SUIIS,*
ABORTUS)



– LEPTOSPIROSIS, MORBUS
WEIL
(*LEPTOSPIRA* - MANY TYPES)



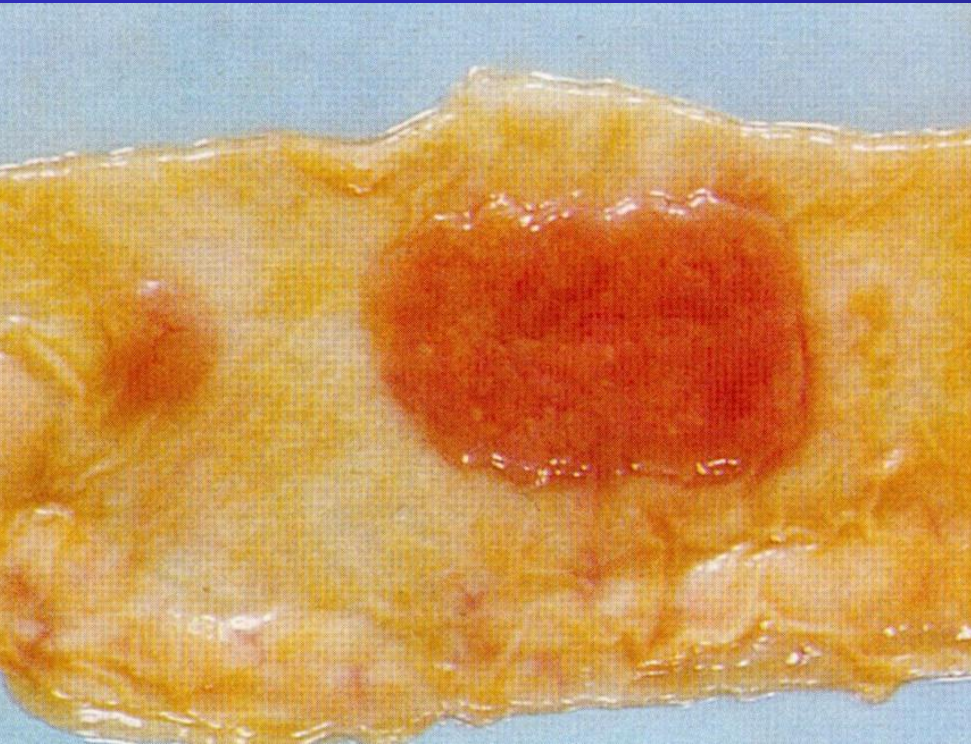
INTESTINAL BACTERIAL INFECTIONS

TYPHOID FEVER - TYPHUS ABDOMINALIS

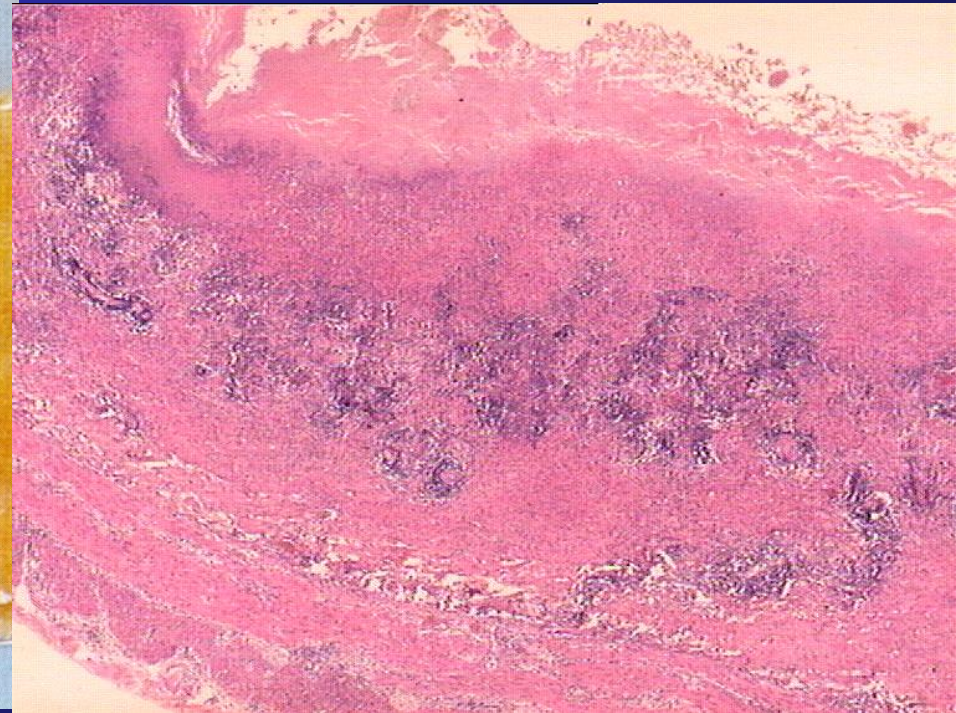
SALMONELLOSIS

(*SALMONELLA TYPHI* ETC.)

FOUR STAGES OF TYPHOID FEVER



STAGE I – INTUMESCENTIAE
MEDULLARIS



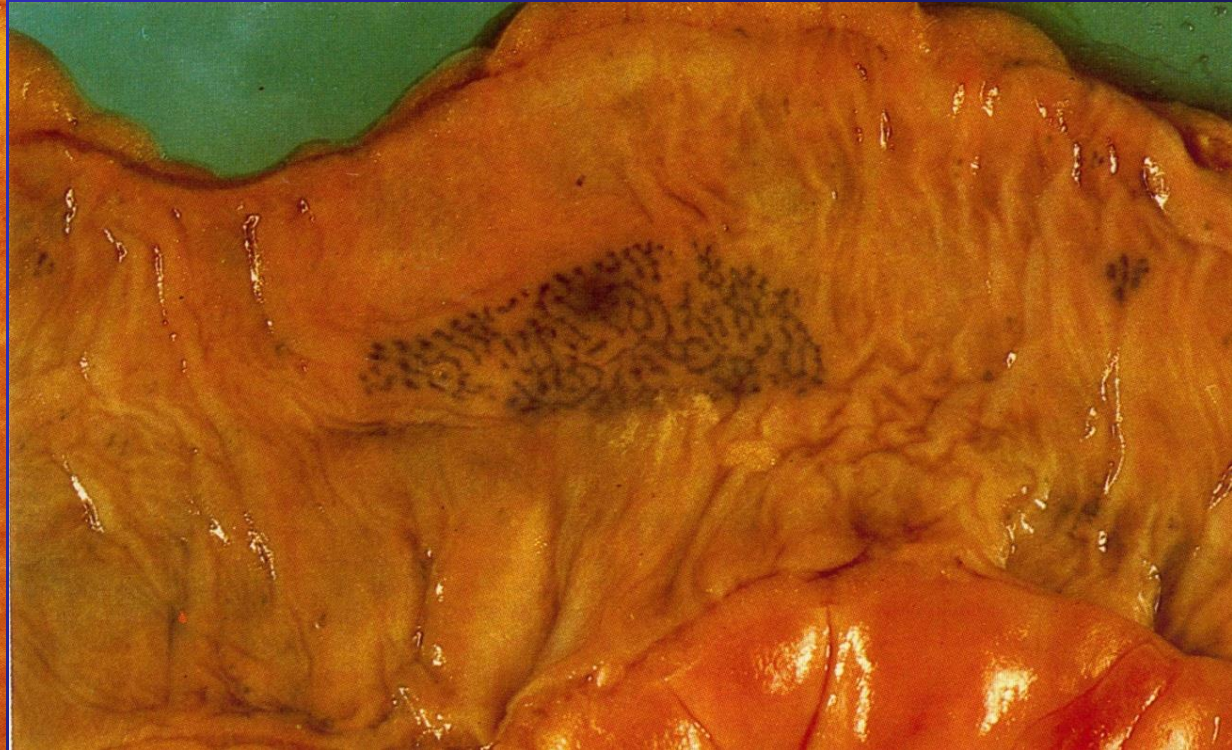
STAGE II – ESCHARISATIONIS

INTESTINAL BACTERIAL INFECTIONS

TYPHOID FEVER, *SALMONELLOSIS*



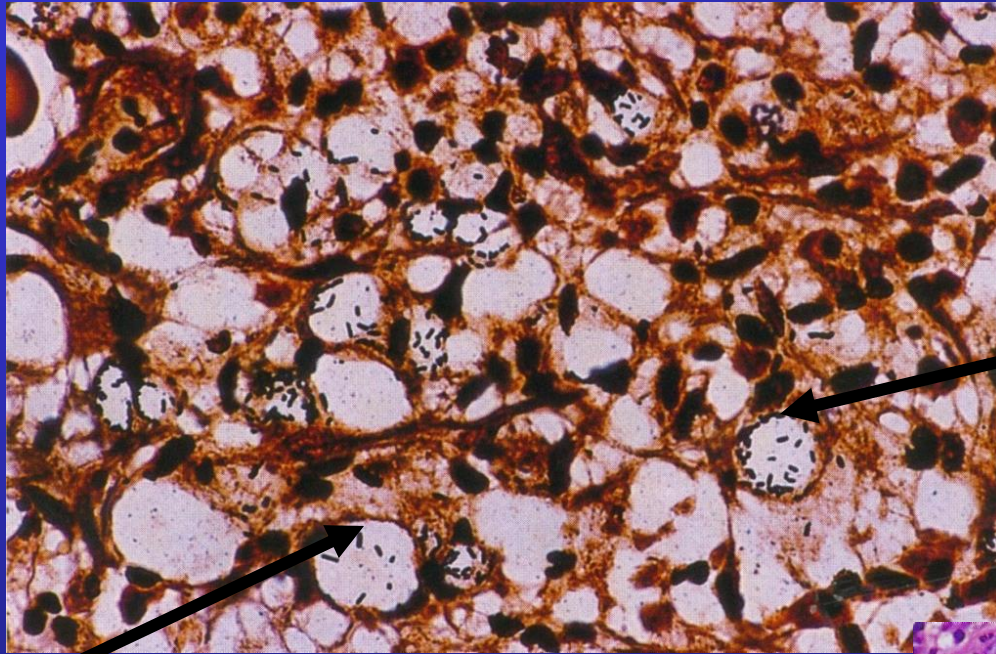
**STAGE III –
ULCERATIONIS**



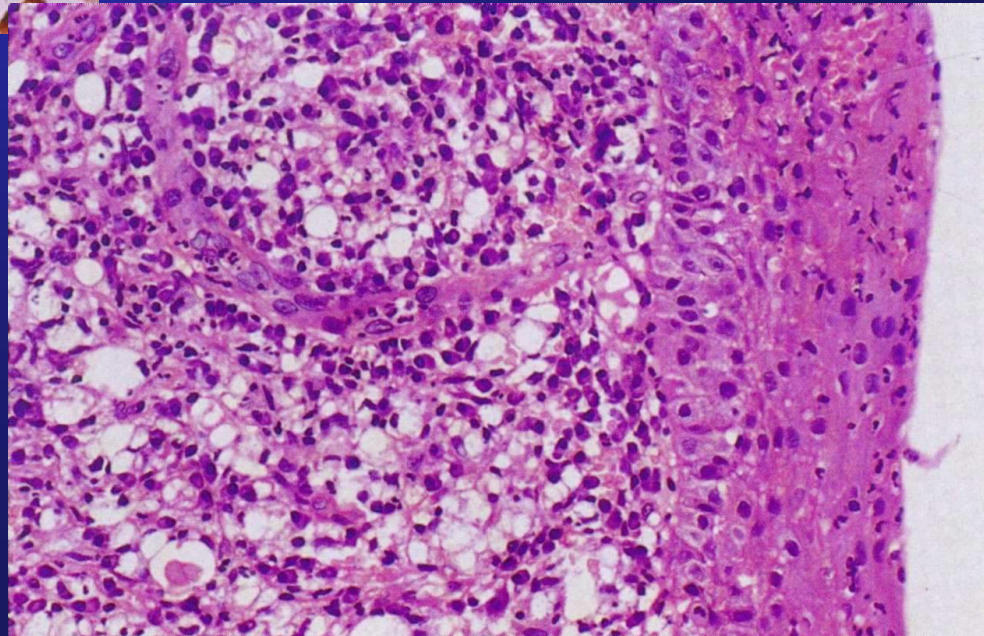
**STAGE IV – DEPURATIONIS
ULCERUM - ULCERATIONS
HEAL WITHOUT SCARRING (!)
BLACK SULPHIDE REMAINS IN
PLACE OF PEYER'S PATCHES
(PICTURE OF: *THE CHIN OF AN
UNSHAVED BROWN-HAIRED MAN*)**

RHINOSCLEROMA

INFLAMMATORY INFILTRATION
CONSISTING OF PLASMA CELLS
AND FOAMY CYTOPLASM
(MIKULICZ CELLS). (*KLEBSIELLA*
RHINOSCLEROMATIS IN
VACUOLES)

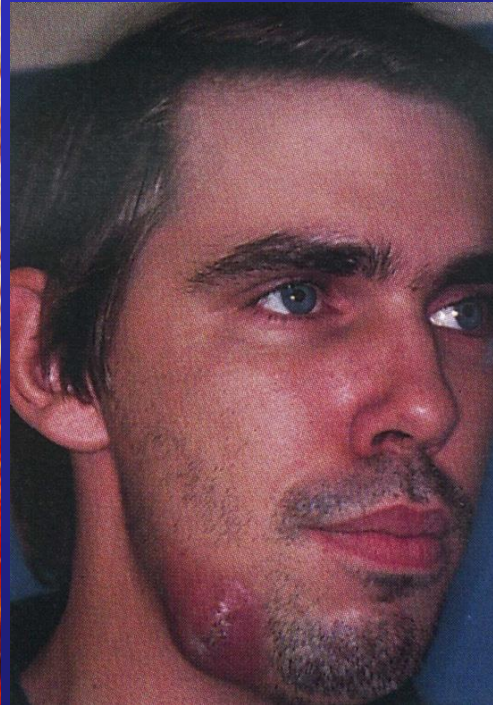
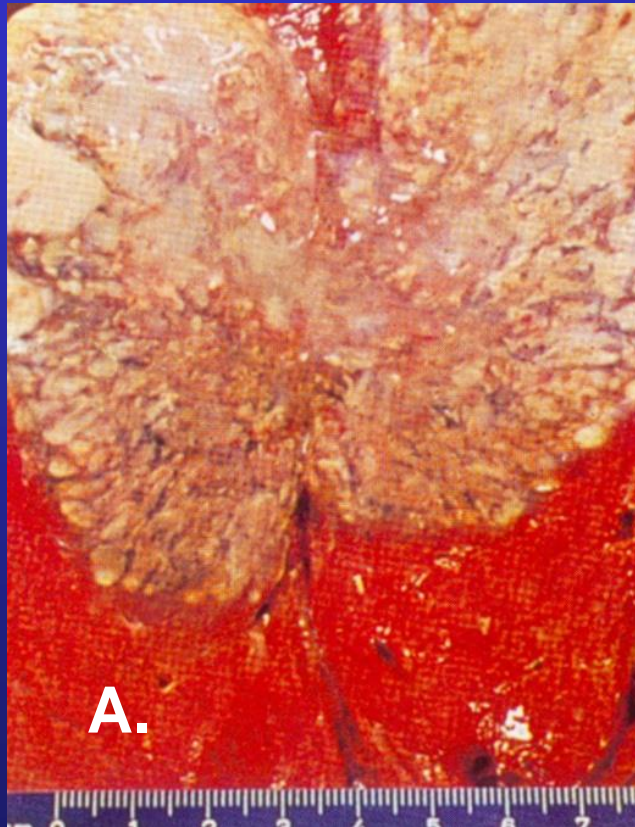


INFLAMMATORY
INFILTRATION CONSISTING
OF MIKULICZ CELLS



ACTINOMYCOSIS

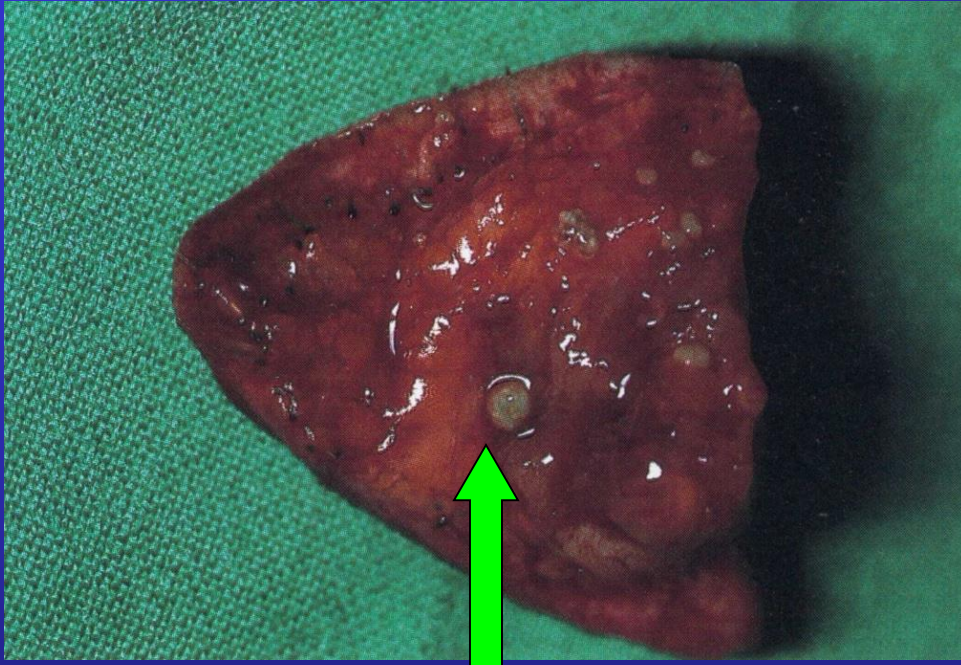
CHRONIC SUPPURATIVE INFLAMMATION WITH STRONG STROMAL FIBROSIS,
PRODUCTION OF FISTULAS CAUSED BY – MAINLY - *ACTINOMYCES BOVIS*.
THE MICROORGANISM PRODUCES LARGE COLONIES OF CHARACTERISTIC
APPEARANCE, LACKING INVASIVENESS



**MOST COMMON
LOCALISATION – HARD-NECK
WITH FISTULA**

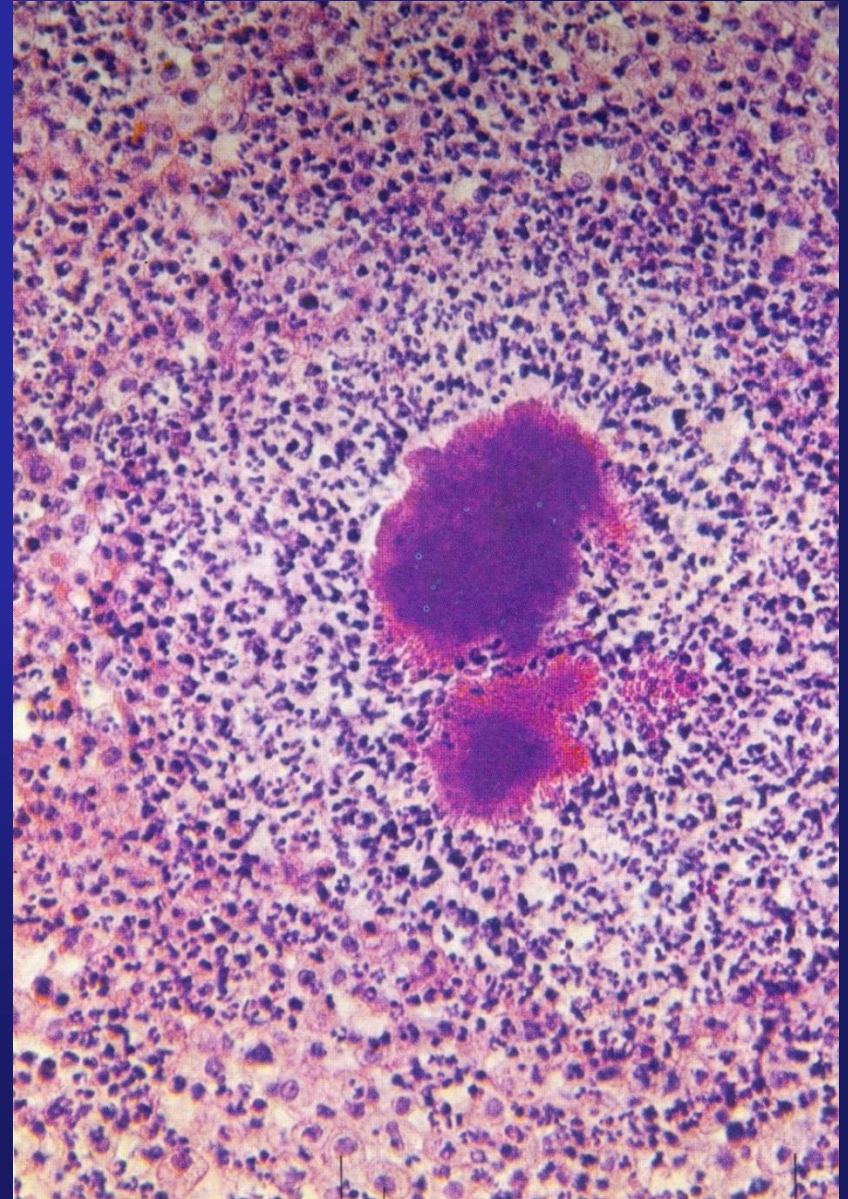
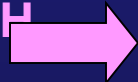
BESIDE THE „HARD-NECK” TYPE, WE CAN ALSO OBSERVE PULMONARY TYPE,
GASTROINTESTINAL TYPE (APPENDIX AND CECUM) AS WELL AS THE GENITAL TYPE
(WOMEN). IN PULMONARY TYPE VERY RARELY METASTATIC ABSCESSES TO THE BRAIN, IN
INTESTINAL TYPE FREQUENT METASTATIC ABSCESES TO THE LIVER. (→ A)

ACTINOMYCOSIS



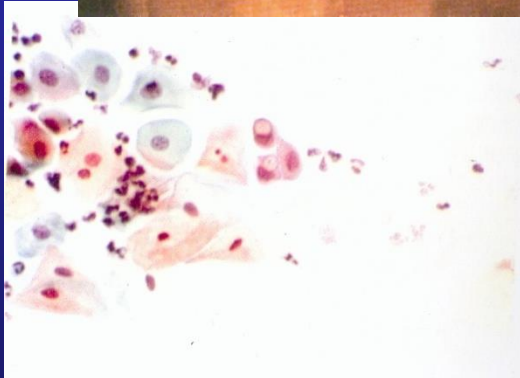
**SURGICAL SPECIMEN WITH
INFLAMMATORY CHANGES AND
ACTINOMYCOTIC ABCESES**

**MICROSCOPIC PICTURE OF
ACTINOMYCOTIC ABCESS WITH
TYPICAL A. COLONY**

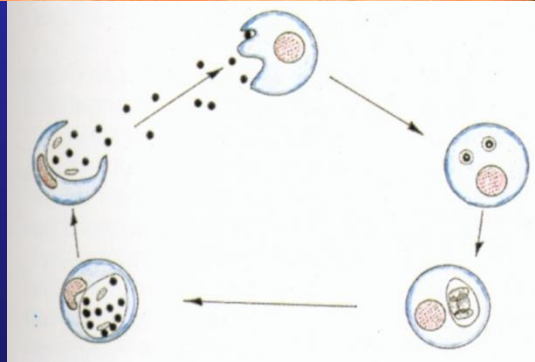


DISEASES CAUSED BY CHLAMYDIA

MANY SPECIES/TYPES *CHLAMYDIA TRACHOMATIS*



TRACHOMATOUS
GRANULOMA -
TRACHOMA

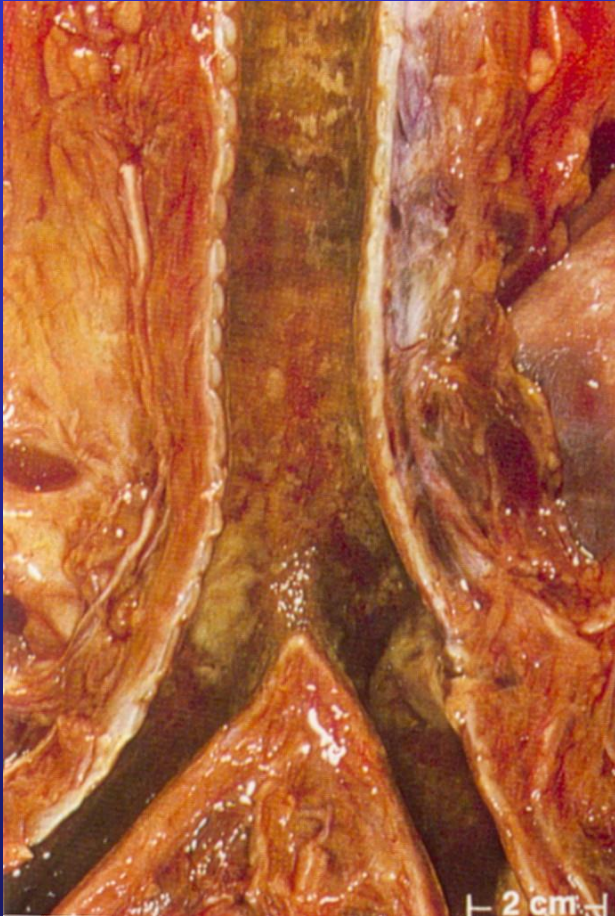


GRANULOMA OF GROIN –
VENEREAL
LYMPHOGRANULOMA

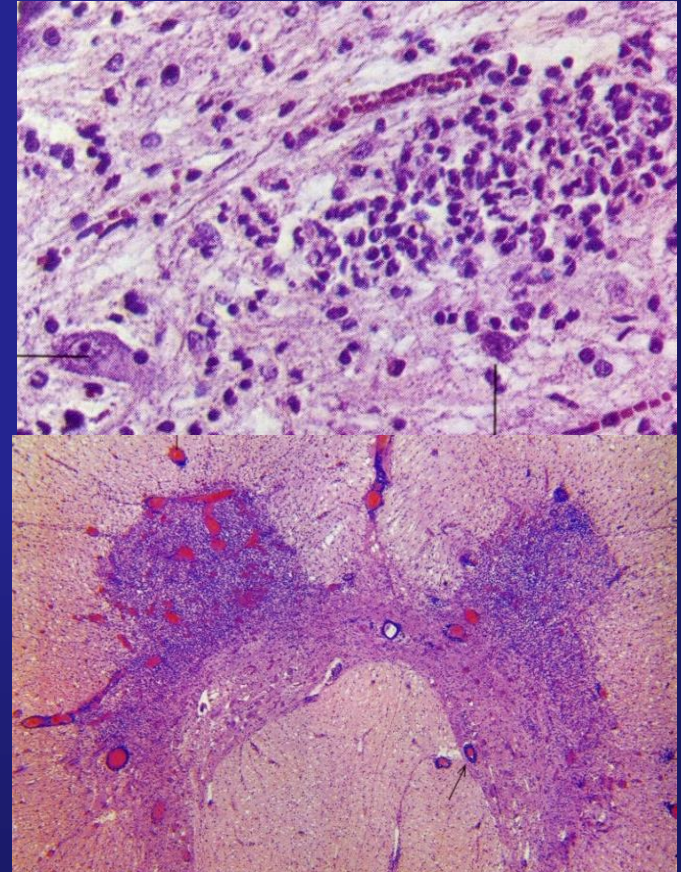


DISEASES CAUSED BY VIRUSES

MOST OF VIRUSES HAVE THE ABILITY TO REPRODUCE IN ONE OR FEW TYPES OF CELLS ONLY. VIRAL INFECTION IS ACCOMPANIED BY THE PRESENCE OF INCLUSION BODIES IN THE CYTOPLASM. THE MAIN COMPONENT OF CELLULAR INFILTRATION IS LYMPHOCYTE

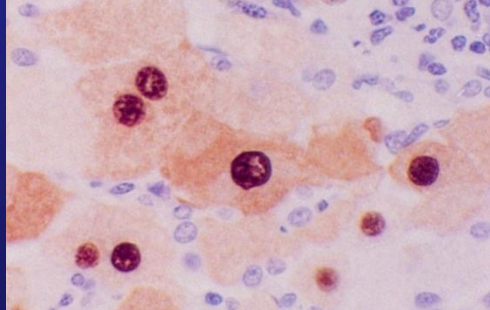
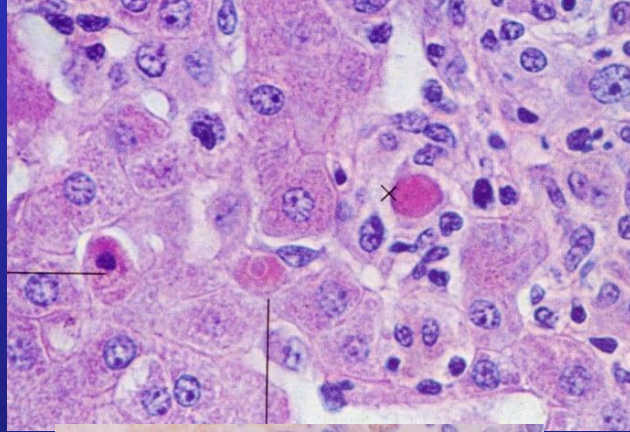
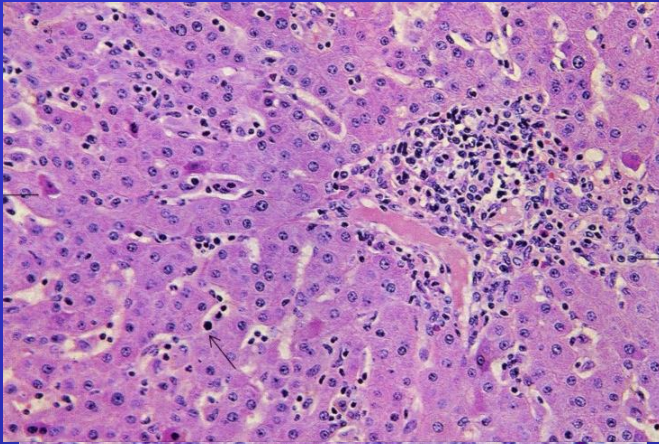


(INFLUENZA)

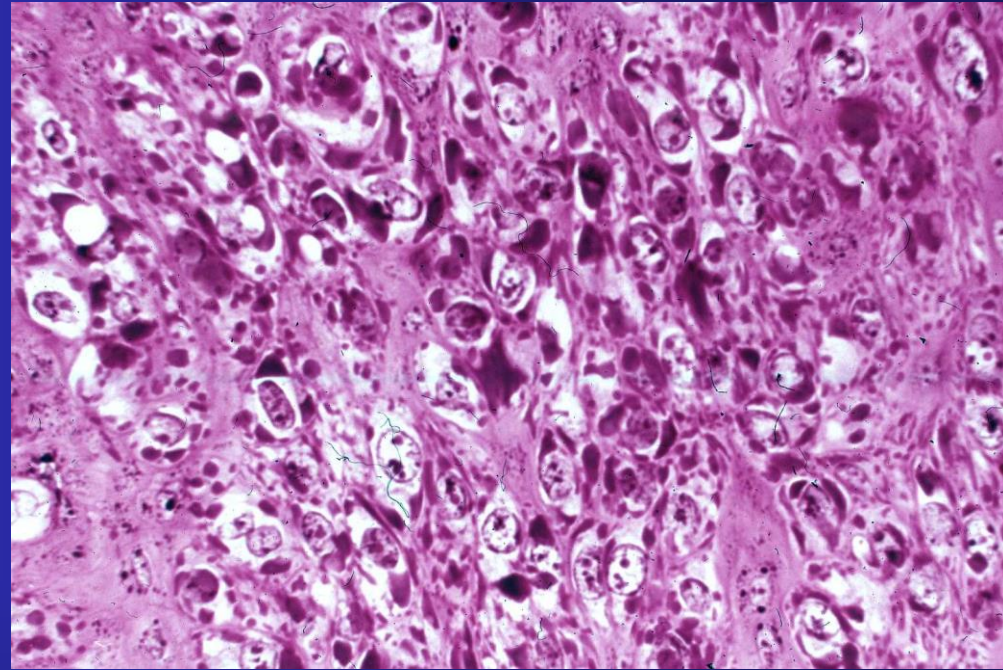


POLIOMYELITIS ANTERIOR ACUTA

DISEASES CAUSED BY VIRUSES



EPIDEMIC HEPATITIS

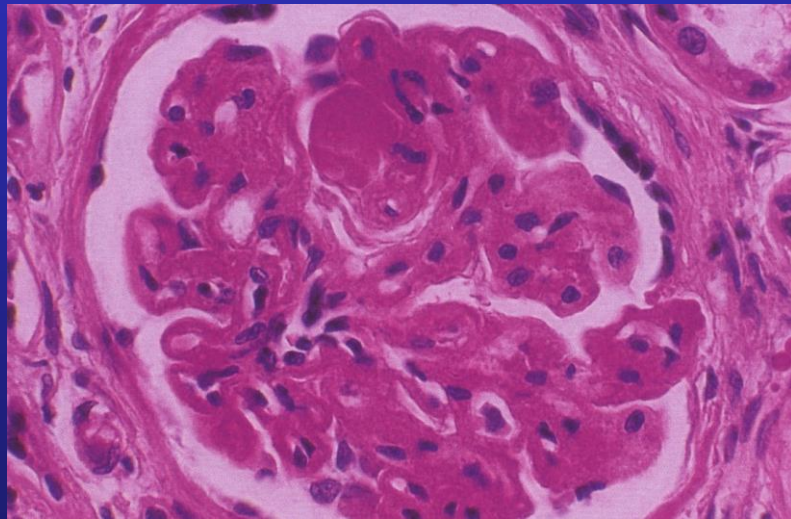


**VERRUCAE VULGARES –
COMMON WARTS**

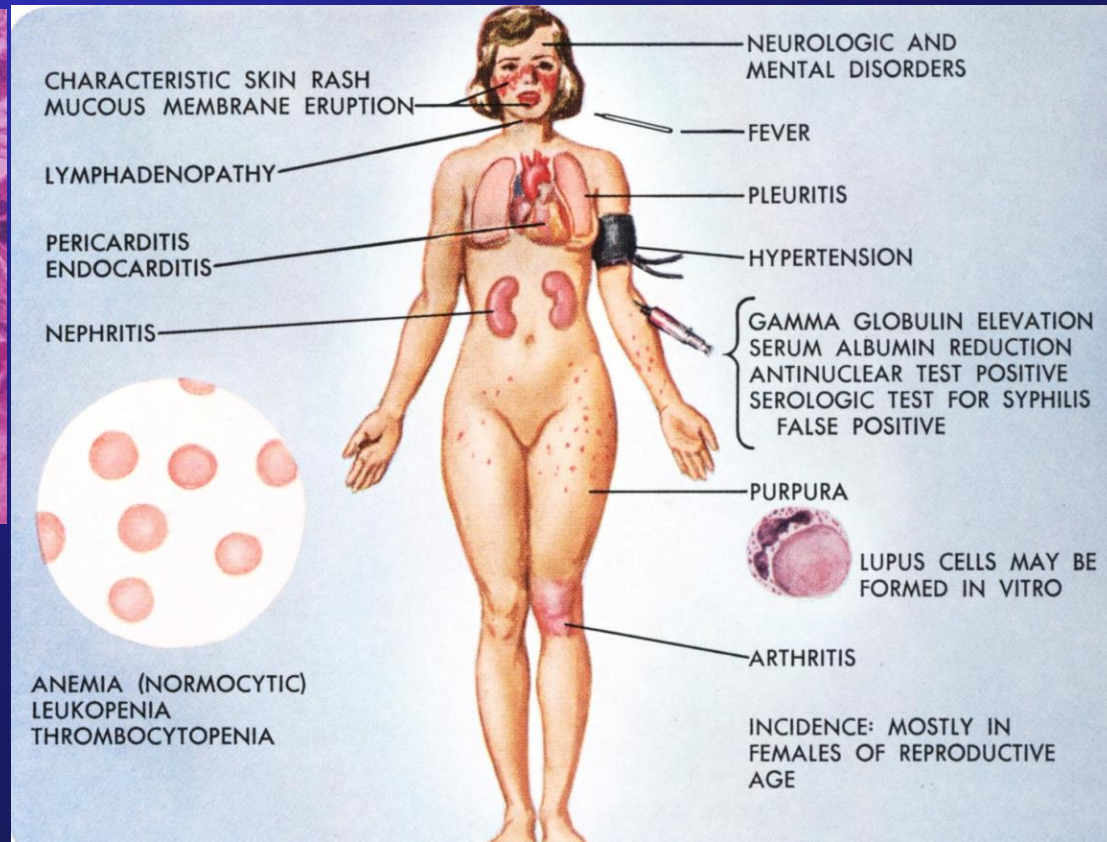
LUPUS ERYTHEMATOSUS

CLASSIC MULTIORGAN DISEASE OF AUTOIMMUNOLOGICAL ORIGIN. CHARACTERISTIC IS THE PRESENCE OF A SERIES OF AUTOANTIBODIES, ESPECIALLY ANTINUCLEAR ANTIBODIES.

MOST COMMONLY AFFECTED:
SKIN
JOINTS
KIDNEYS
SEROUS MEMBRANES
HEART



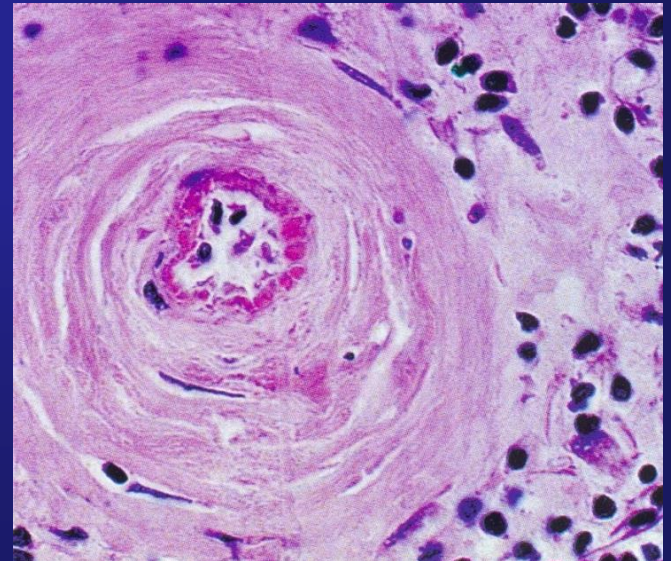
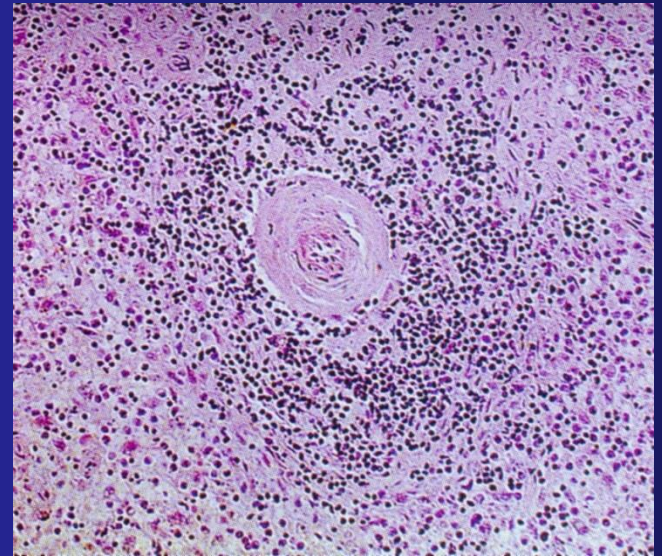
LUPOID GLOMERULOPATHY



LUPUS ERYTHEMATOSUS



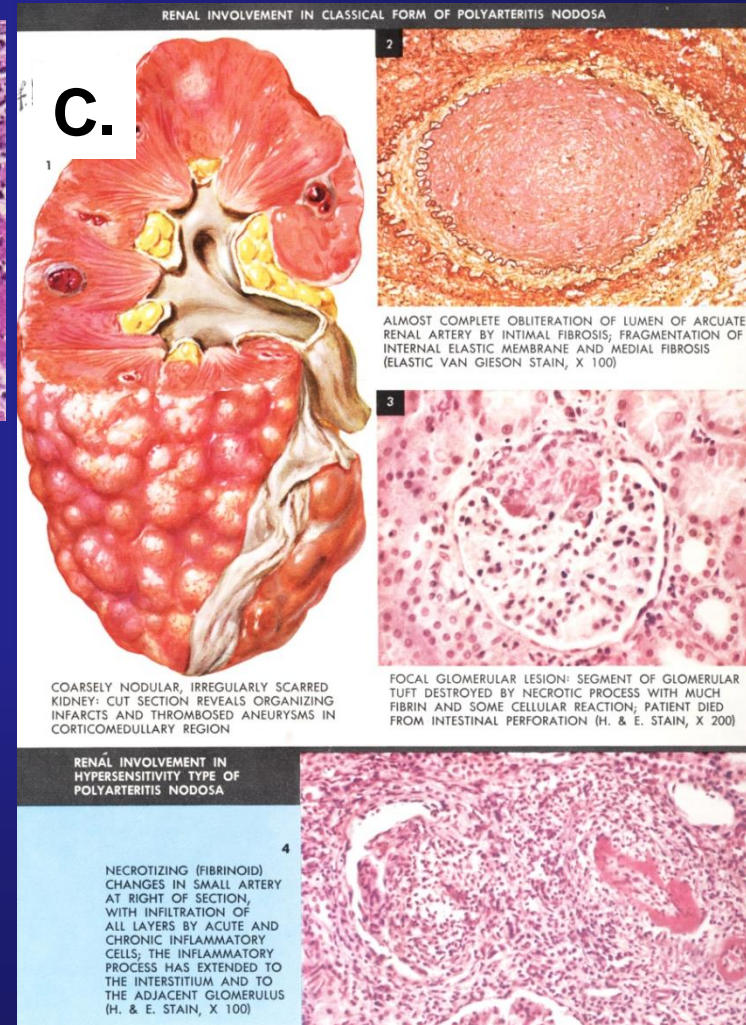
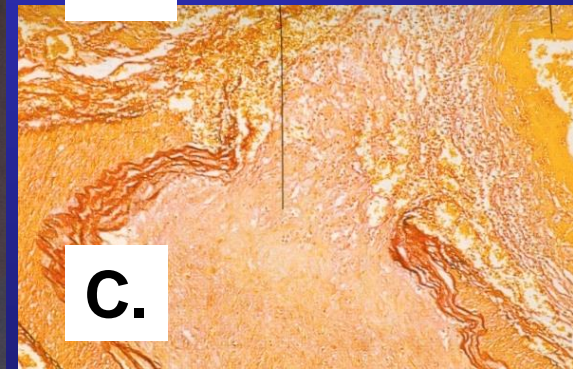
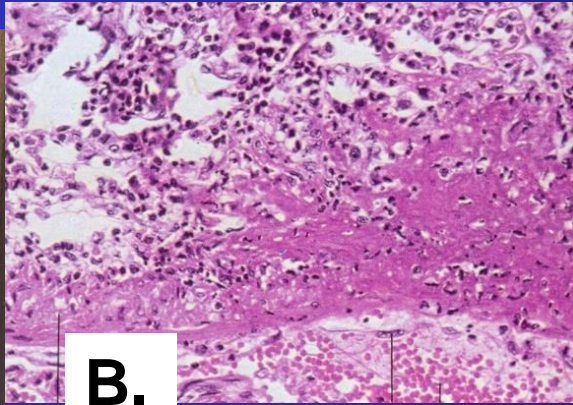
DISCOID LUPUS ERYTHEMATOSUS
SKIN CHANGES ON THE FACE → SHAPE OF
A BUTTERFLY



CHARACTERISTIC CHANGES OF
CENTRAL ARTERIOLES IN
SPLEEN. ONION-LIKE THICKENING
OF WALLS

POLYARTERITIS NODOSA

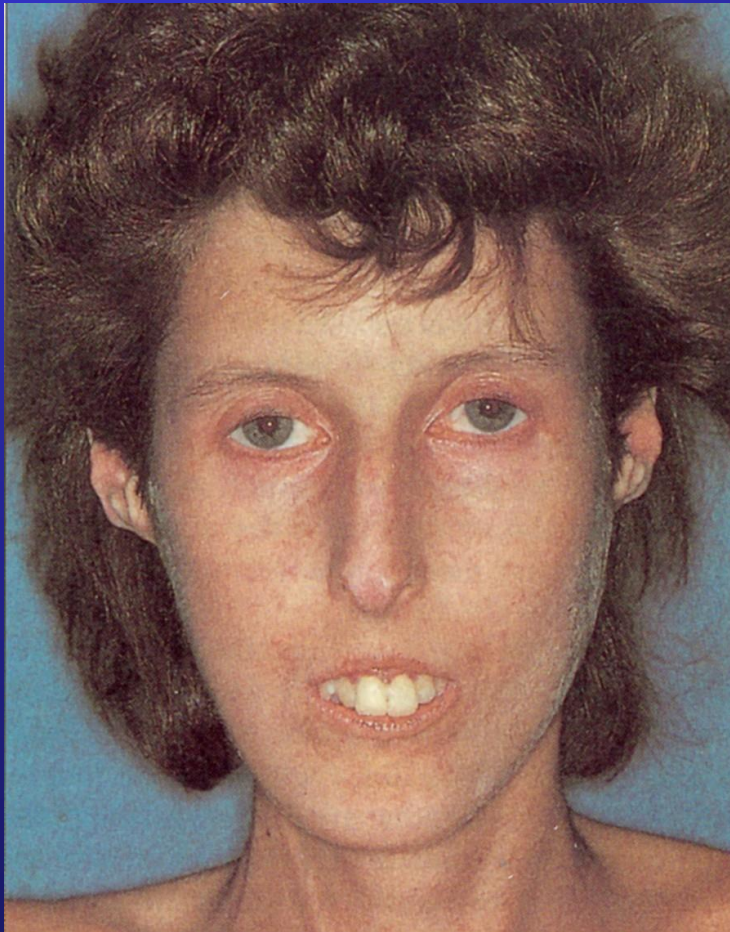
INFLAMMATORY CHANGES OF ARTERIES IN DIFFERENT ORGANS. FIBRINOID NECROSIS OF ARTERIAL WALLS → ANEURYSMS, THROMBOSIS AND INFARCTIONS



- A. SKIN CHANGES ON ARM
- B. FRESH FIBRINOID NECROSIS OF VESSEL WALL
- C. SCAR IN WALL OF VESSEL
- D. CHANGES IN KIDNEY DURING POLYARTERITIS NODOSA

SCLERODERMA

GENERALIZED FIBROSIS OF CONNECTIVE TISSUE IN SKIN AND IN INTERNAL ORGANS. DIFFERENCES IN INTENSITY OF THE DISEASE. VERY COMMON IN FEMALES - MICROCHIMERISM



TYPICAL FACE IN SCLERODERMA

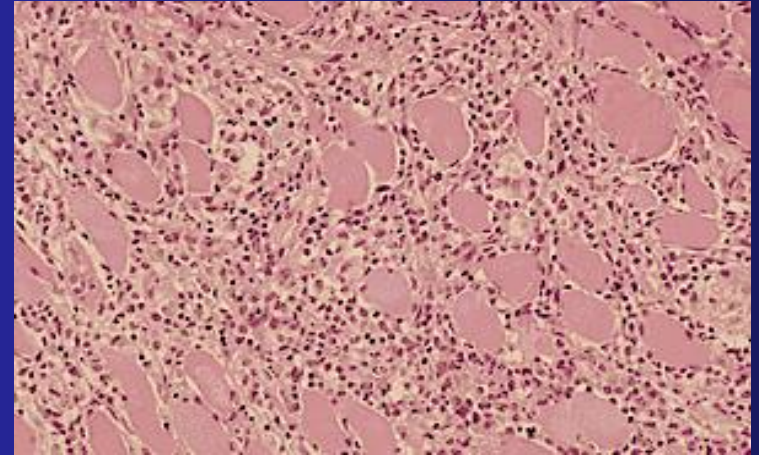


DERMATOMYOSITIS

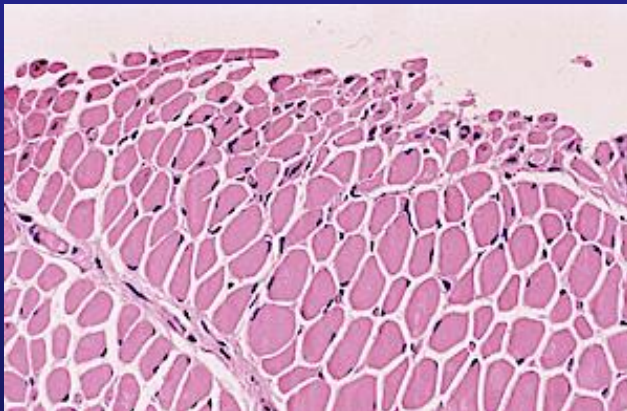
PROGRESSIVE WEAKENING OF THE MUSCLES OF DIFFERENT INTENSITY, EVEN IN SINGLE MUSCLES. DEGENERATIVE CHANGES IN MUSCLES AND INFILTRATIONS CONSISTING OF MONONUCLEAR CELLS, COEXISTING WITH OTHER AUTOIMMUNOLOGICAL DISORDERS.



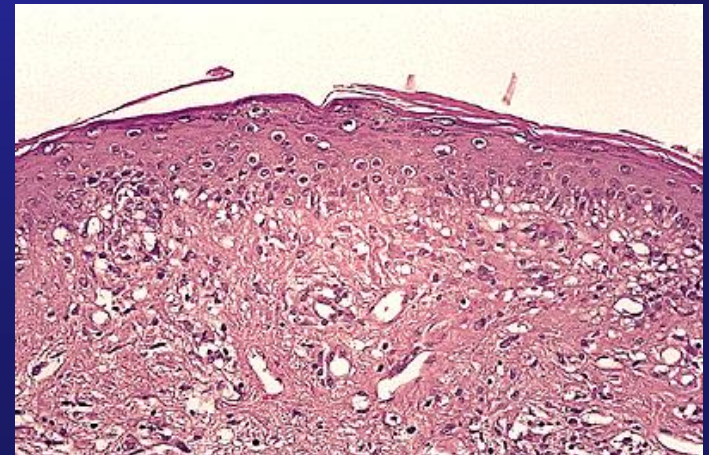
ITCHY SKIN CHANGES ON THE FACE



ABUNDANT INFILTRATION OF LYMPHOCYTES IN SKELETAL MUSCLE



ATROPHY OF MUSCLE FIBRES (TOP OF PICTURE)



LYMPHOCYTIC INFILTRATION IN SKIN AROUND VESSELS

THANK YOU

