

#### Multisystemic , idiopathic disease , characterized by noncaseating granulomas , spread in different tissues and organs

Diagnosis by exclusion (tuberculosis, fungal infections, berylliosis etc.)

### PATHOGENESIS

- Cell mediated immune response to unknown antigens
- Altered immune response to non-identified agents
- Anergy (immune unresponsiveness) to common cutaneous tests
- At peripheric sites : ↓ of T lymphocytes with reduction of CD4/CD8 ratio
- In patients with Sarcoid lungs lesions: 

   f of T lymphocytes
   and increased (
   ) CD4/CD8 ratio in bronchoalveolar
   lavage fluid.

# SARCOIDOSIS

Besnier, Boeck, Schaumann disease

#### **Involved sites**

- Lymph nodes (neck, hylum of lungs)
- Lungs
- Joints (lower limbs arthritis)
- Skin (face, sup. trunk = erythema nodosum)
- Salivary and lacrimal glands
- Eyes (iridociclytis, choroiditis, retinitis)
- Oral mucosa
- Spleen, liver etc.
- Bones (multiple, cystoid osteitis)

Løfgren syndrome

Mikulicz syndrome

Heerfordt syndrome



# SARCOIDOSIS

Besnier, Boeck, Schaumann disease

#### **MACROSCOPIC FEATURES:**

Deep sites: nodular lesions, sharply demarcated, non-confluent with well defined borders

Skin and mucosal sites : subcutaneous/mucosal nodules or purplish hard plaques

## MORPHOLOGY OF SARCOID GRANULOMA

- Nodules of tightly packed epithelioid cells
- Multinucleated giant cells, similar to Langhans' cells or foreign-body type giant cells
- In the periphery, T-helper CD4+ lymphocytes
- Lack of central necrosis, sometimes central area of hyaline sclerosis
- Possible evolution into Scleroderma (hardened or scarred tissue)
- Inclusion bodies (Schaumann bodies): concentrically laminated inclusions made of calcium and proteins
- Asteroid bodies













# **EVOLUTION AND COMPLICATIONS**

- 65% = Healing with few sequelae
- 20% = Chronic respiratory insufficience, visus decrease
- 10% = progressive course (pulmonary fibrosis,
- Pulmonary Heart disease)