

TUBERCULOSE

There are types of *M. tuberculosis*.

Human type affects humans, cattle; does not affect birds

M. tuberculosis bovis human bovine pig, sometimes affects the dog cat, horse sheep

M. tuberculosis avium sometimes affects cattle sheep at cattle.

M. Tuberculosis. Hominis sometimes affects monkeys, cattle dogs.

Mycolic acid provides acid resistance to the agent.

Lipid Increases the resistance of the agent. It increases the pathogenicity.

It keeps macrophages alive for 10 days. If the body is resistant or has already taken the causative agent, it is digested in macrophages.

If the body is resistant, they continue to reproduce and the disease is shaped.

Tuberculo protein causes hypersensitivity.

Pathogenesis

Where it first enters, neutrophil is covered by leucocytes.

However, the lipid substance cannot be eliminated by neutrophil leucocytes.

Therefore, the agent is taken by macrophages in the region. It maintains its viability for 10 days in macrophages.

In this period, the organism is sensitive and how to develop a reaction.

Therefore, the organism presents lesions in different forms and patterns.

If the organism is strong and the condition is weak (dose, pathogenicity is low), the productive type of inflammation develops.

If the resistance of the organism is weak, if it is strong, the exudative type of inflammation develops.

Exudative tuberculosis

Neutrophil begins with leukocyte and partly with fibrin exudation. With the Ziehl-Neelsen special paint method, small red rods are also found in these regions.

Subsequently, these areas undergo caseification necrosis. In the necrosis area, the basic structure of the tissue is selected in part. This is more evident in lung tissue rich in elastic yarns. The alveoli boundaries are further clarified by the application of the dyeing process, especially the dyeing of elastic yarns such as van Gieson.

This type of necrosis, in which the basic structure of the tissue can also be selected, is considered as the ild primary caseification necrosis .

Productive Tuberculose

Milier tuberculose

It is prominent in the early and late generalization of tuberculosis. It is more common in the areas where the lung is not well aired.

It has a productive structure.

Transparent begins in small lesions; then fuzzy yellowish-brown milier turns into tubercles.

The microscopic cyst is rich in epithelioid cells. In this respect, it is called “epithelioid cell tubercle .

After entering the organism, the tuberculosis agent draws different tables according to the resistance of the organism, the factor and the time elapsed and is named according to these.

Primary infect or Ghon focus

where tuberculosis bacilli first enters, it emerges with the findings previously described.

(Ghon = Anton GHON, pathologist, 1866-1936)

Primer complex (Ghon complex)

It is formed by spreading to the region lymph nodes with primary infect.

Incomplete primer complex

recovery of primary infect; only the area is characterized by the presence of a lesion in the lymph nodes.

The first period of infection

**Primer complex
and
Early generalization
Produktif tbc**

Exudate TBC

**Late generalization
Milier (productive)**

Exudative, glopan tbc

Postprimer infection period

Tuberculosis occurs after the first infection is overcome.

Tuberculosis of chronic organ, open organ (lung) tuberculosis as well as private names.

YOU HAVE SPECIAL FINDINGS!

Develops in two ways

Reinfection: Tuberculosis in the body of survivors of tuberculosis

Superinfection = Infected tuberculosis from outside with the TBc.

Transmission (Generalization)

Hematogen

This is the generalization of the body.

The result of intensive bacteraemia

larger and unified conglomerate tubercles are observed in the organs with the same age and size as the miliar tubercles or their combination.

Occasional recurrent bacteremia

Different age and size (nodular miliar) tubercles are encountered.

Lymphogenesis

Propagated by lymph vessels. In particular, there is a retrograde lymphogen expansion. Infection of macrophages is transported from the lymph nodes to other regions in the opposite direction

Contact spread

One focus is transported to the environment by macrophages. In this case, satellite lesions occur around the main lesion.

Canalicular spread

Chronic organ tuberculosis is characteristic. Moved through channels. For example, bronchus, bronchiol, trachea in the lung; Propagated by bile ducts in the liver