

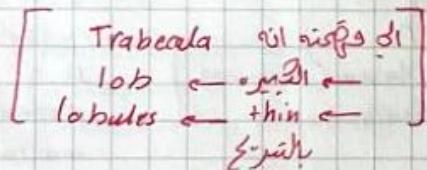
1 - highly lobulated ~~with~~ loss c.T capsule

### Thymus gland :



Stroma

- Capsule (loss c.T)
- Trabeculae (Septa)
  - Contain BV
  - $\hookrightarrow$  lobes
  - thin - divid lob into incomplete lobules



- No reticular fiber

1 - ERC divid Cortex  $\hookrightarrow$  Compartment

( functional component ) Parenchyma

Cortex

- ERC ✓
- T cell ✓
- macro ✓
- BV ✓
- Capillaries

medulla ( leave by ( via venous)

1 - peripheral dark-staining zone

2 - centrally pale

2 - Contin densely

- Packed T-cell : numerous
- ERC
- macro

2 - T (mature) - small  
Macroph - few  
ERC : numerous

ERC :-  $\longrightarrow$  function

endodermal

• Blachet cell

-   
pale  
Acidophilic

$\hookrightarrow$  Not product RF  $\neq$

1 - Cytoreticulum

2 - APC

3 - BT Barrier

4 - secreta Gf

- thymulin

- thymosin

- THF  $\equiv$  thymopoietin

3 - Hassalls Corpuscle  
( diagnostic feature )  
 $\hookrightarrow$  concentric layer of ERC  
( calcified, calcify )



## palatine Tonsil

Stroma: ~~fibroelastic~~

o Capsule (incomplete)

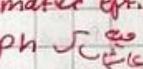
Ant. medie

post. medie

• epi. of oral  
(1<sup>st</sup> crypt)  
(2<sup>nd</sup> crypt)

C. T capsule  
palatine  
gland

(non-ker. str. sq. epi.)

- | Crypt: 1 - desquamated epi. cell  
2 - lymph   
3 - bacteria

have mucous acine  
that don't open  
in the crypt

Parenchyma

(under epi, around crypt)

lymphoid follicle

(lymphatic nodules)  
[under epi]  
[around crypt]

Diffuse  
lymphoid

[fusiform lymphoid]

- Macro
- Leuko
- Lympho
- Plasma

[bet. lymphatic  
nodules]

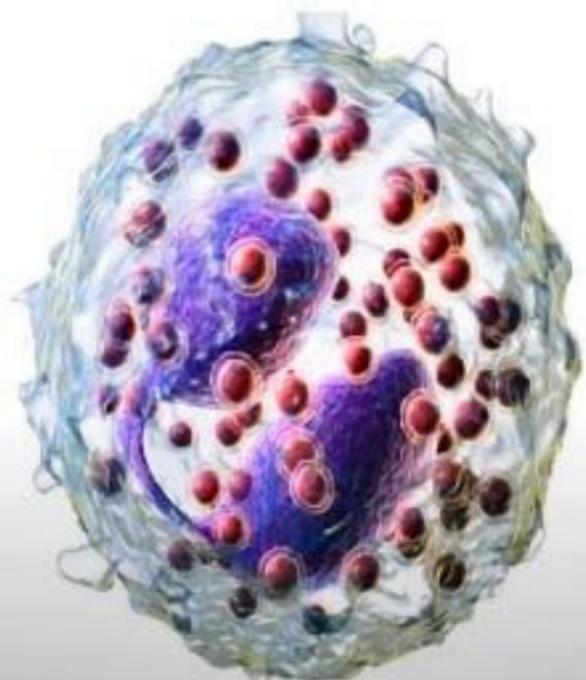
No lymph  
(sinuses)  
dry lines

## Which statement is the best to describe the structure of the thymus?

- 1-It is divided by CT septa into complete lobules.
- 2- It contains a well developed cytoreticulum formed by reticular cells.
- 3- The thymic cortex contains T lymphocytes, macrophages & plasma cells.
- 4- No lymphoid nodules characterize the parenchyma.

# What is the function of the cell in the opposite diagram?

- 1- Formation of blood clot.
- 2- Secretion of histamine.
- 3- First line of defense against microbes.
- 4- Killing of the parasites.



## Which statement is the best describing the inner cortex of the lymph node?

- 1- It contains numerous lymphoid nodules.
- 2- The parenchymal cells arranged in the form of branching cords.
- 3- It is populated by large number of T lymphocytes.
- 4- It is divided into lobules by connective tissue septa.

## Structure

I-Stroma

•Capsule

Fibrous

Fibroelastic.

•Trabeculae

Divide it into incomplete lobules.

Arise from capsule, perpendicular, divide cortex into compartments, run in different directions in the medulla.

•Reticular fibers.

Absent

Present.



## Structure

### II-Pareynchema

#### ❖ Cortex.

1-T- lymphocytes

2-macrophages

3-epithelial reticular cells .

#### ❖ Medulla.

1- Small lymphocytes

2-macrophage

3-epithelial reticular cells

4- Hassall's corpuscles

#### ❖ Cortex.

##### A- Outer cortex:

1- Lymphoid follicles.

2- Lymph sinuses

B- Inner cortex (thymic dependant area)

#### ❖ Medula.

1- Medullary cords

2- Medullary sinuses

#### ❖ Loose lymphatic tissues.

## Function

Site of  
development&maturation of T  
lymphocytes

Filteration of lymph.

## Which statement is the best to describe the parenchyma of the spleen?

- 1- The red pulp contains lymph sinuses.
- 2- The trabeculae arise at the hilum, run in different directions.
- 3- The lymphoid nodules are present exclusively under the capsule.
- 4- The area around the follicular artery is the thymic dependent area.

## Which statement describes the histological structure of the palatine tonsils?

- 1- The anterior and the medial surfaces are covered by simple squamous epithelium.
- 2- The mucous glands are present under the epithelial surface.
- 3- The crypts arise from the CT capsule.
- 4- The loose lymphoid tissues contain neutrophils.