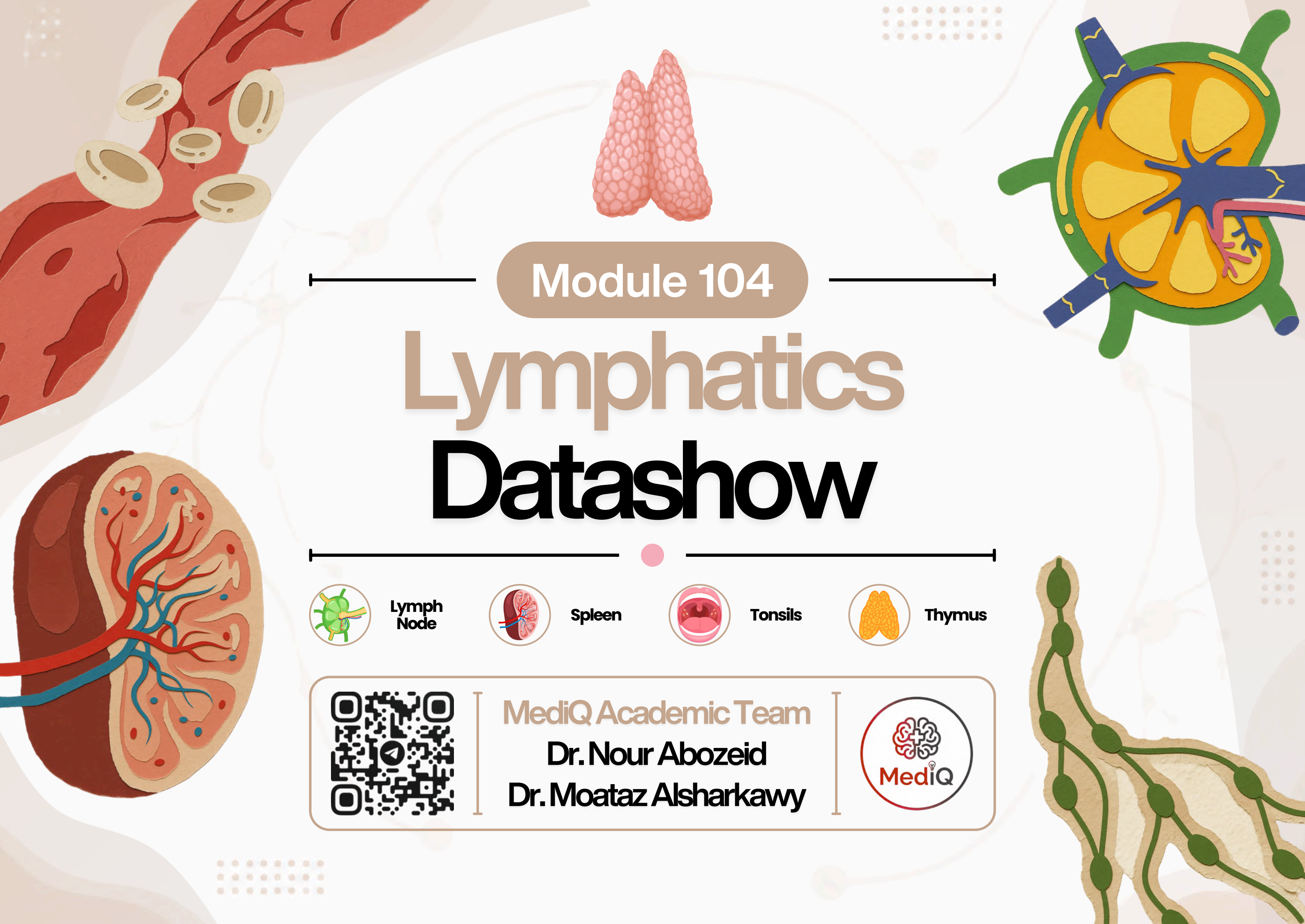
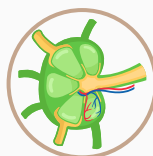


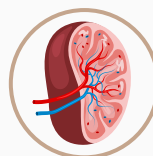


Module 104

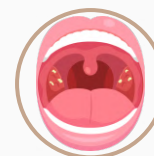
Lymphatics Datashow



Lymph
Node



Spleen



Tonsils



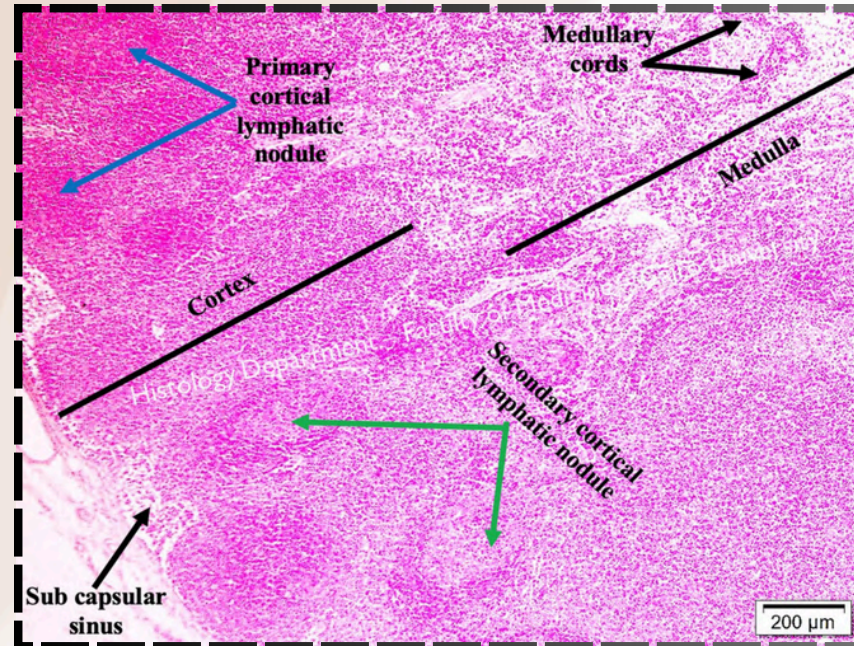
Thymus



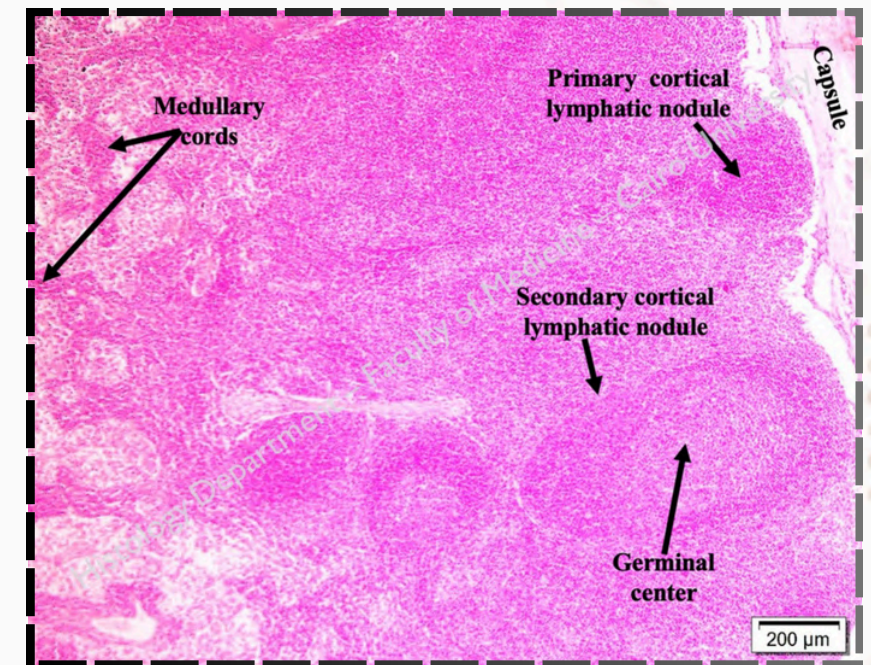
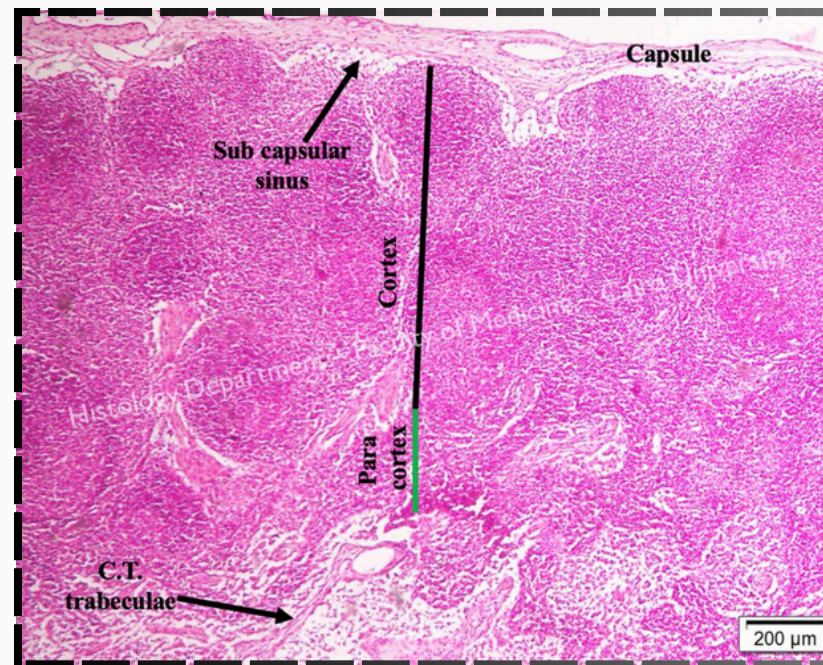
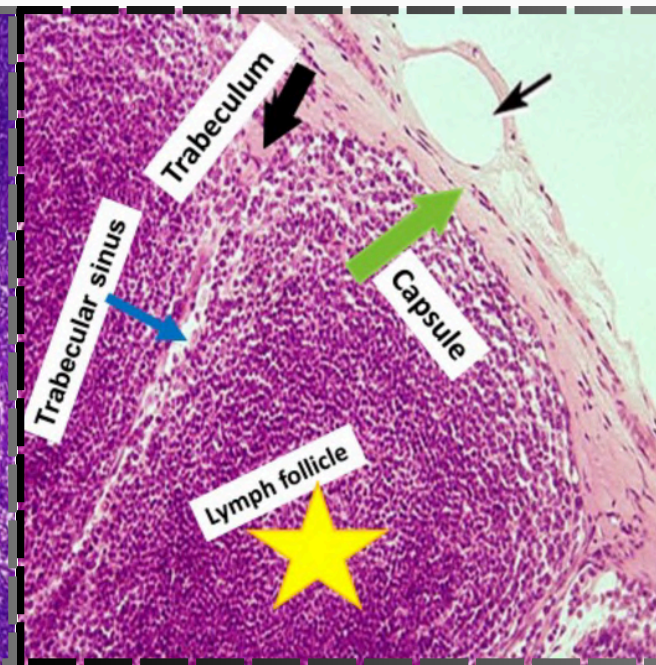
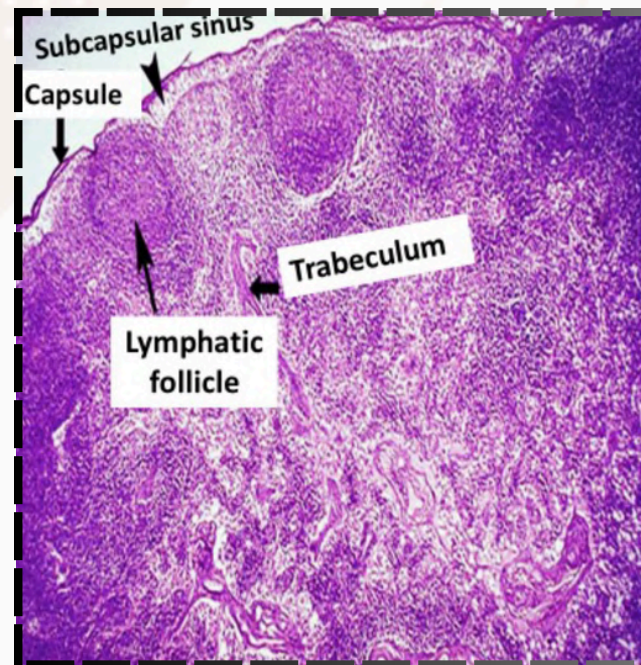
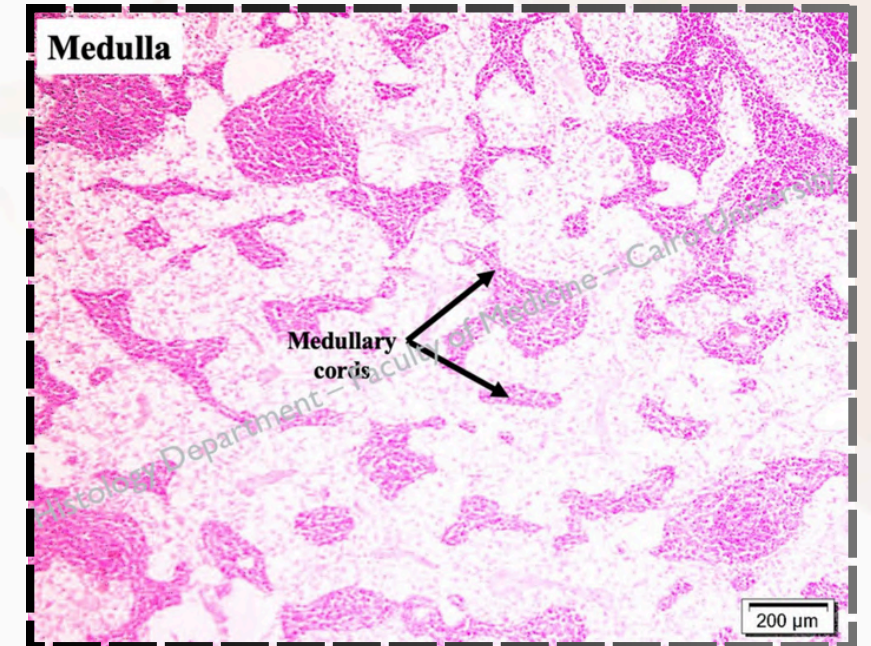
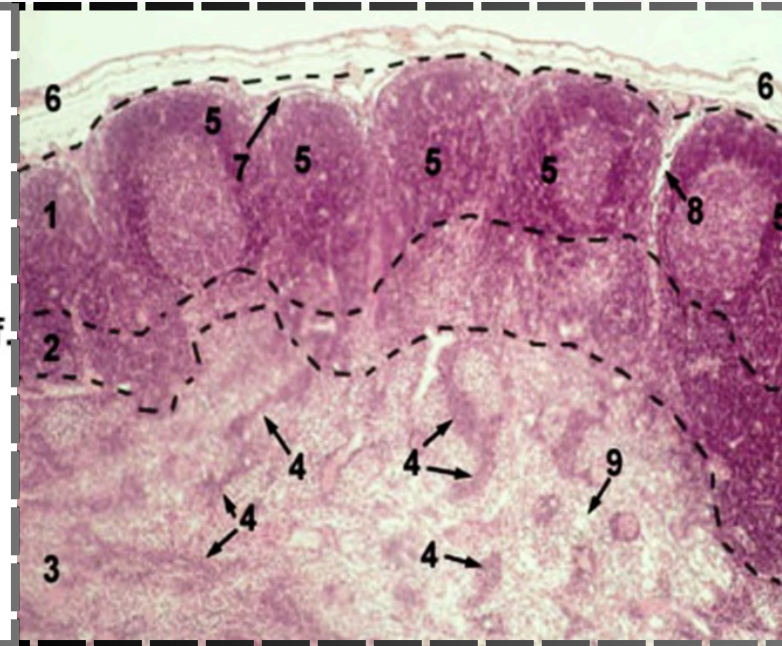
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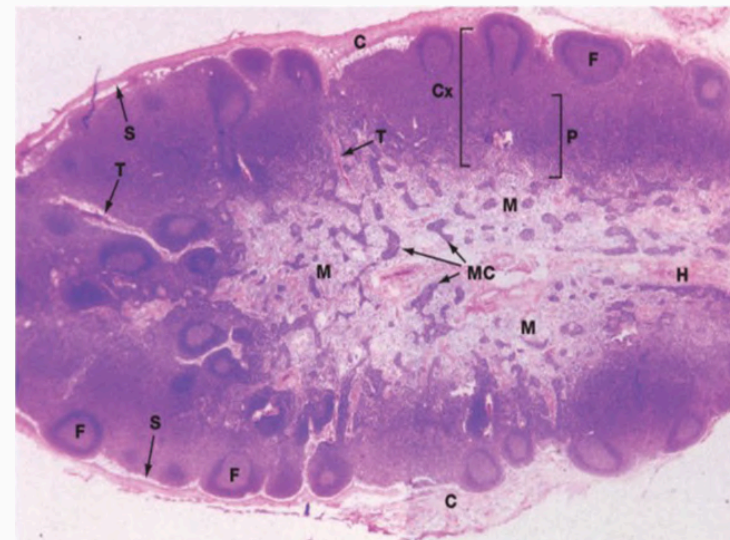
Lymph Node



- 1 - Cortex
- 2 - Paracortical zone
- 3 - Medulla
- 4 - Medullary cords
- 5 - Cortical lymphoid f.
- 6 - Capsule
- 7 - Subcapsular sinus
- 8 - Cortical sinus
- 9 - Medullary sinus

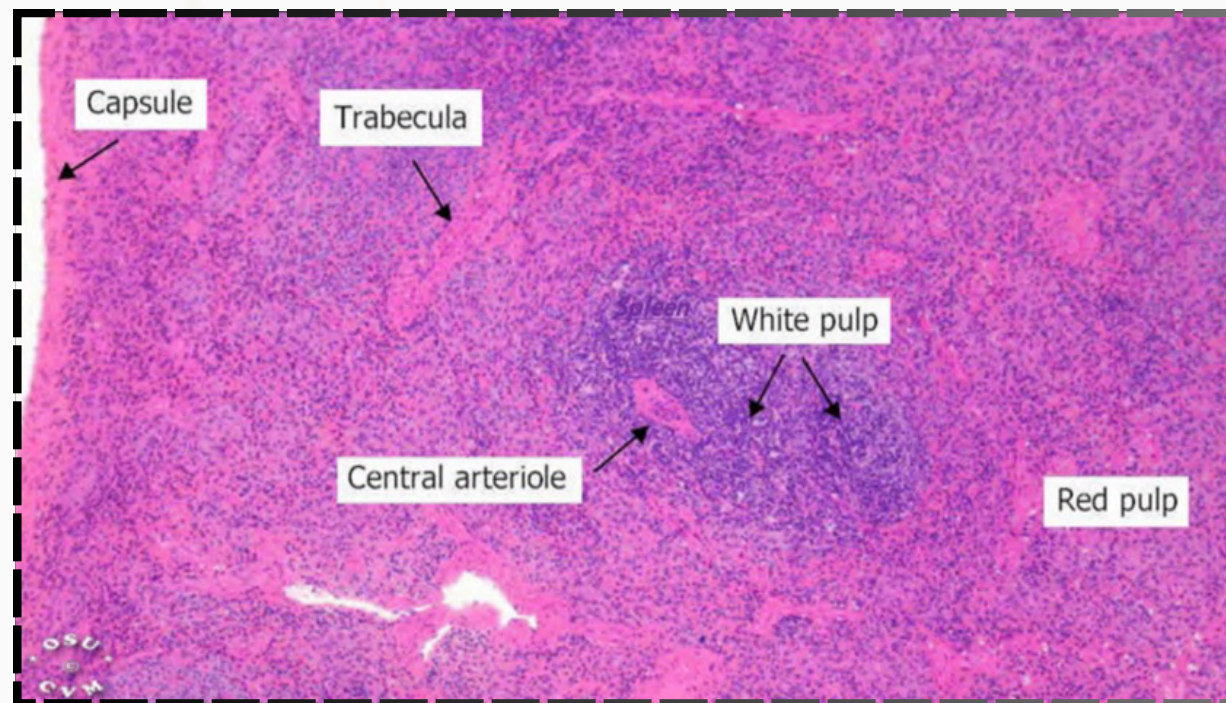
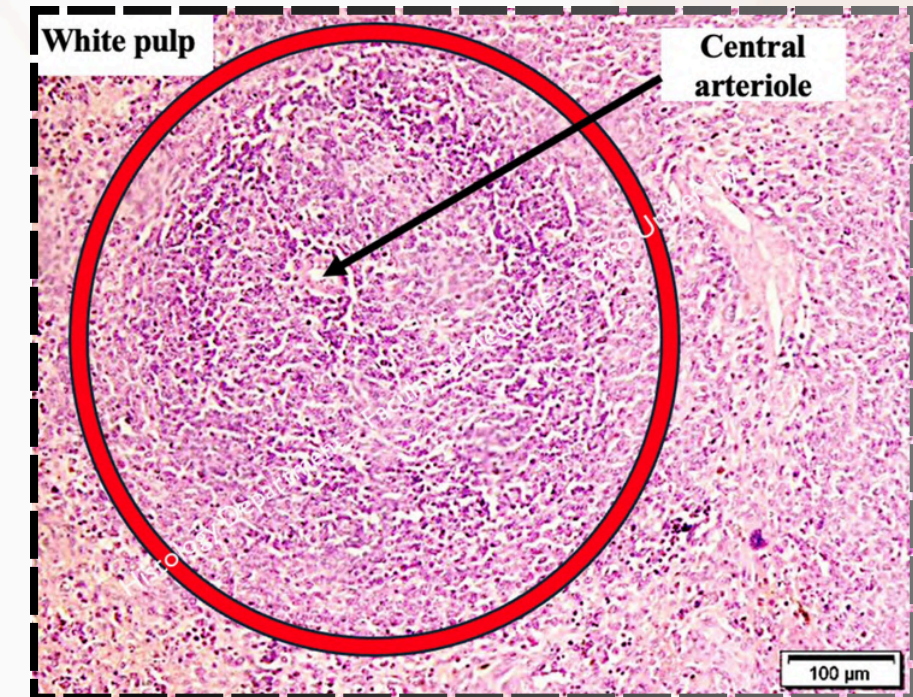
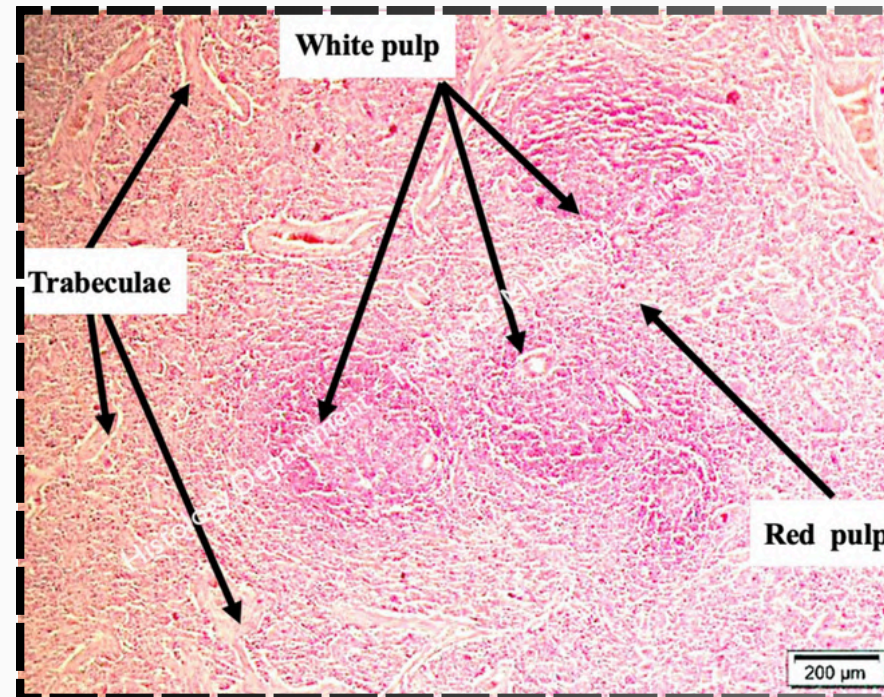
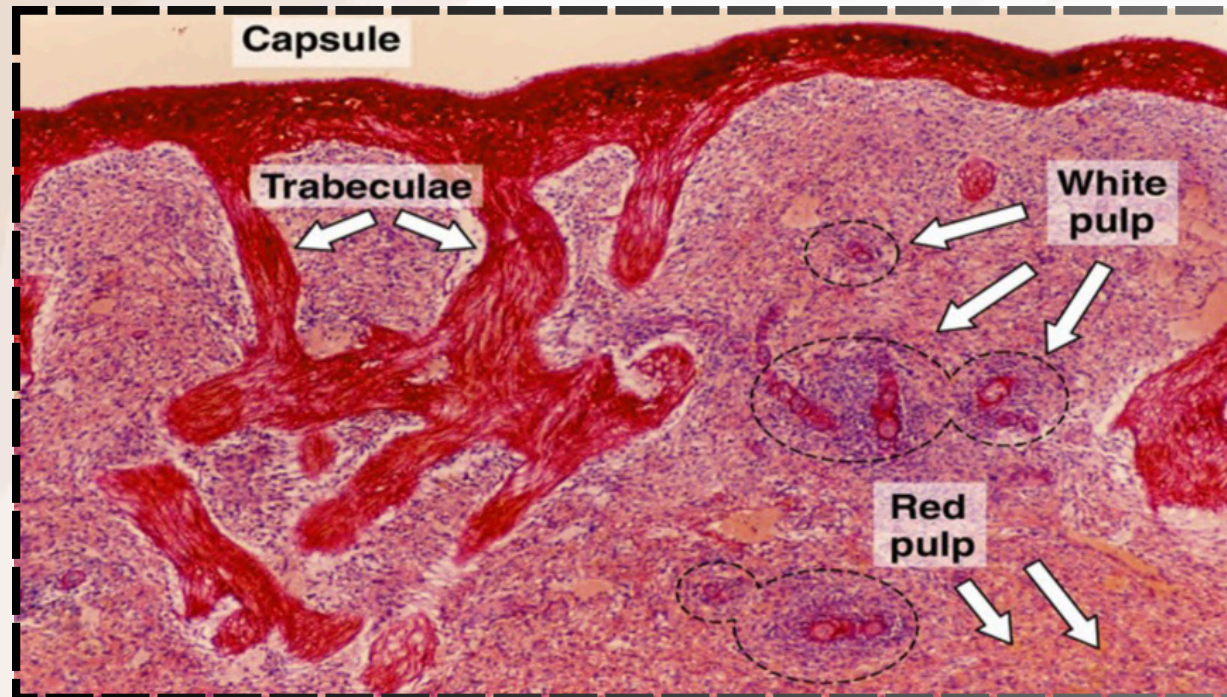


- | | |
|-----------|-------------------|
| C | Capsule |
| Cx | Cortex |
| M | Medulla |
| H | Hilum |
| S | Subcapsular Sinus |



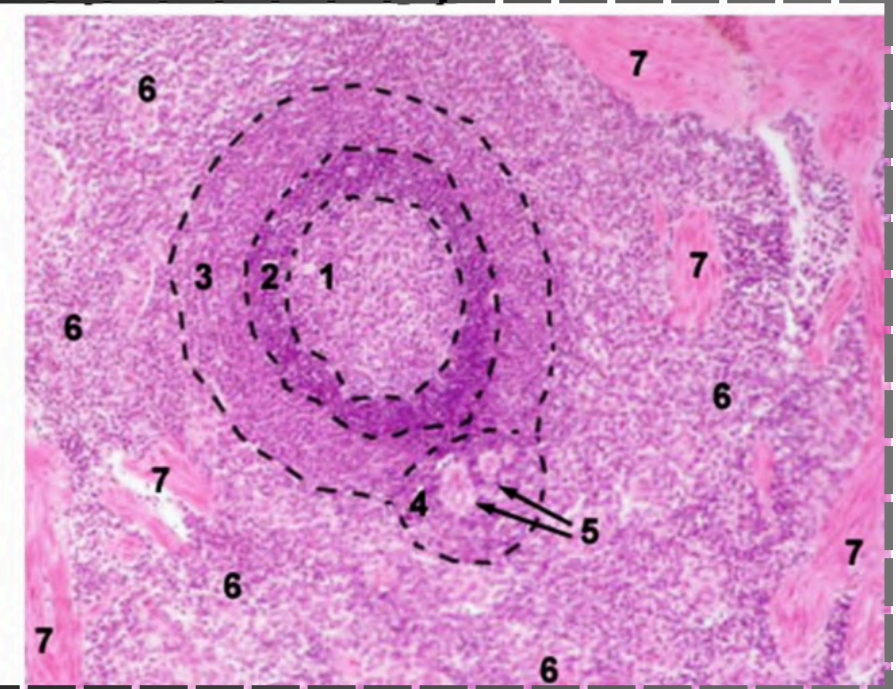
- | | |
|-----------|--------------------|
| F | Secondary Follicle |
| T | Trabeculae |
| P | Paracortex |
| MC | Medullary Cords |

Spleen

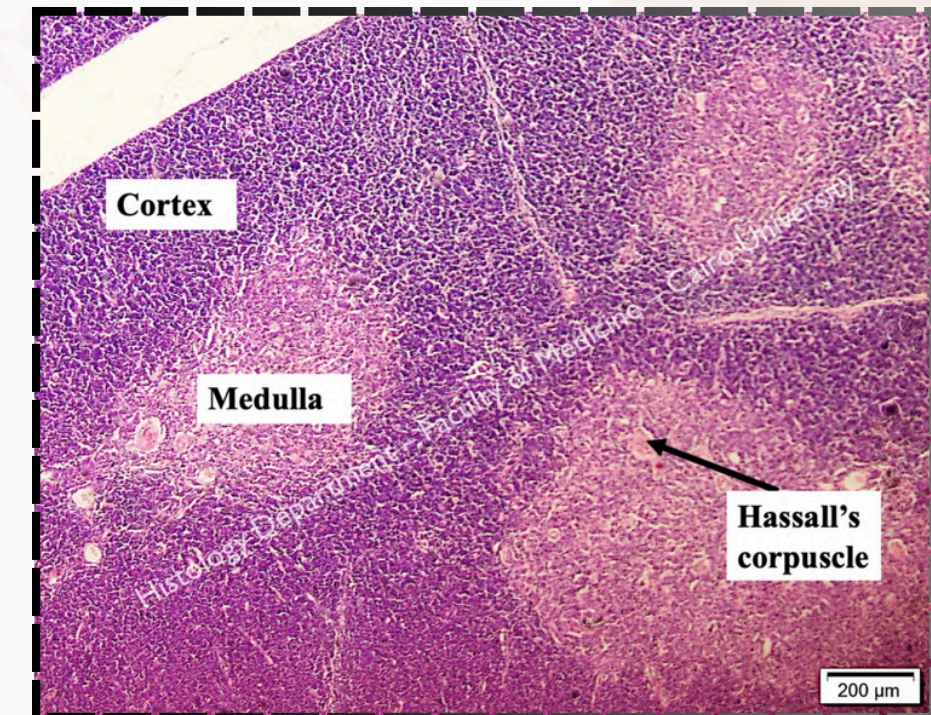
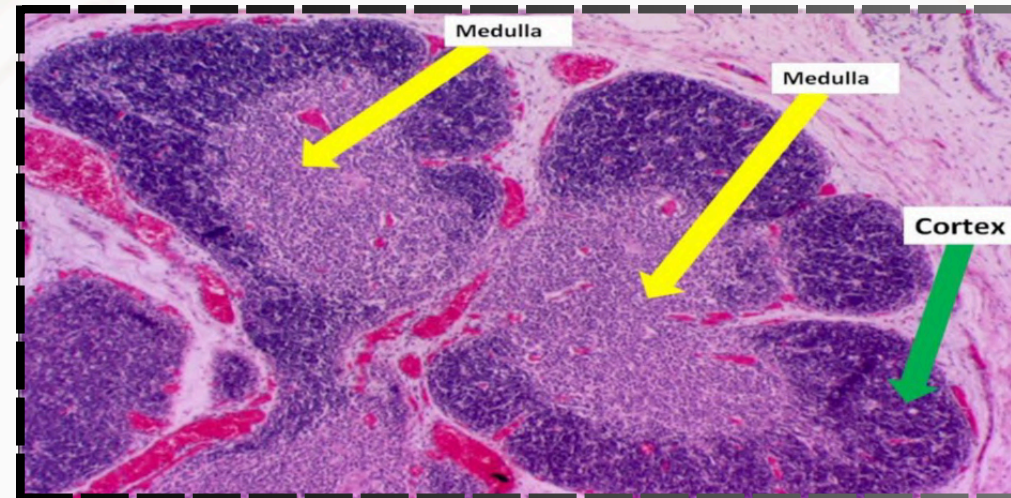
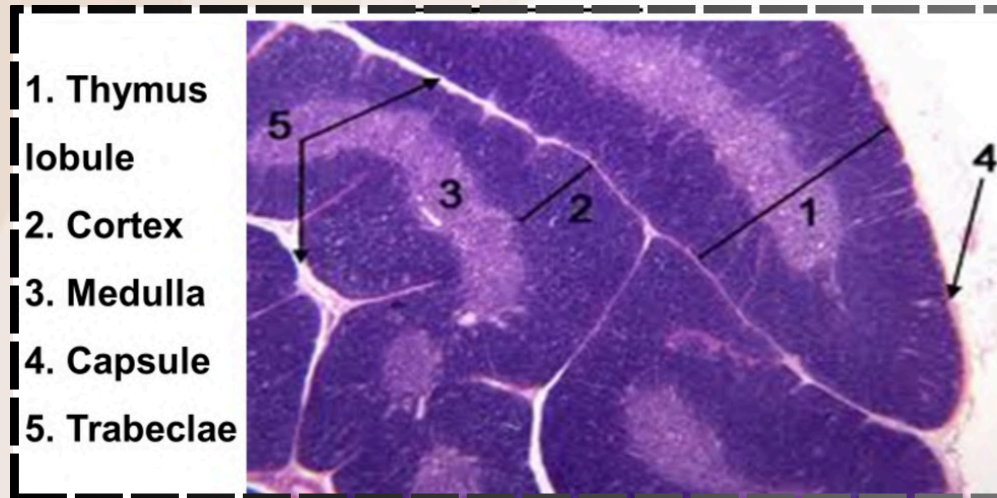


lymphoid follicle is circled by dotted line

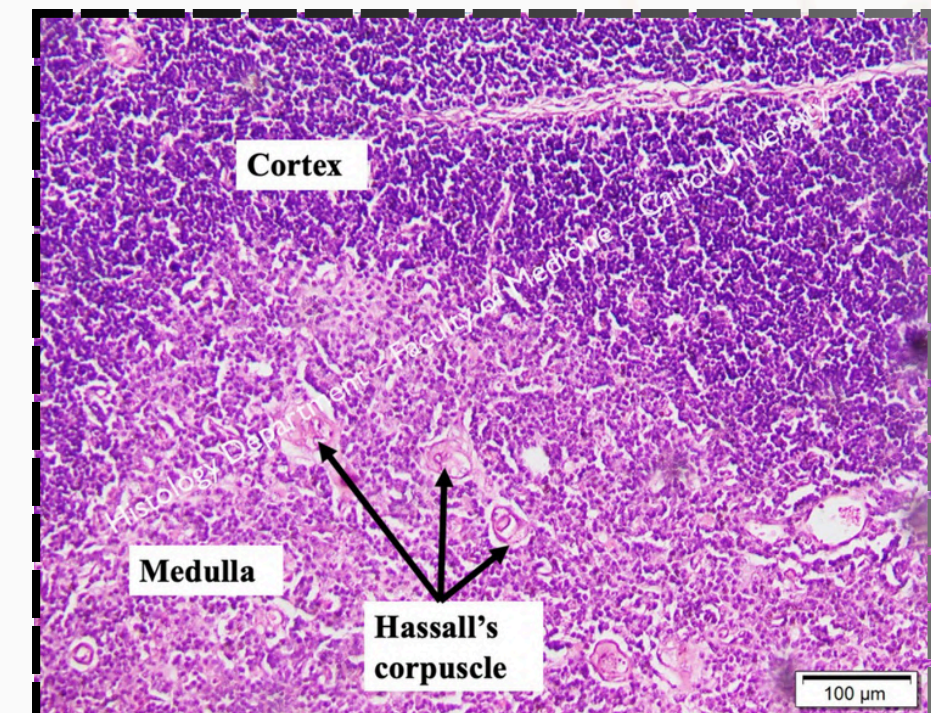
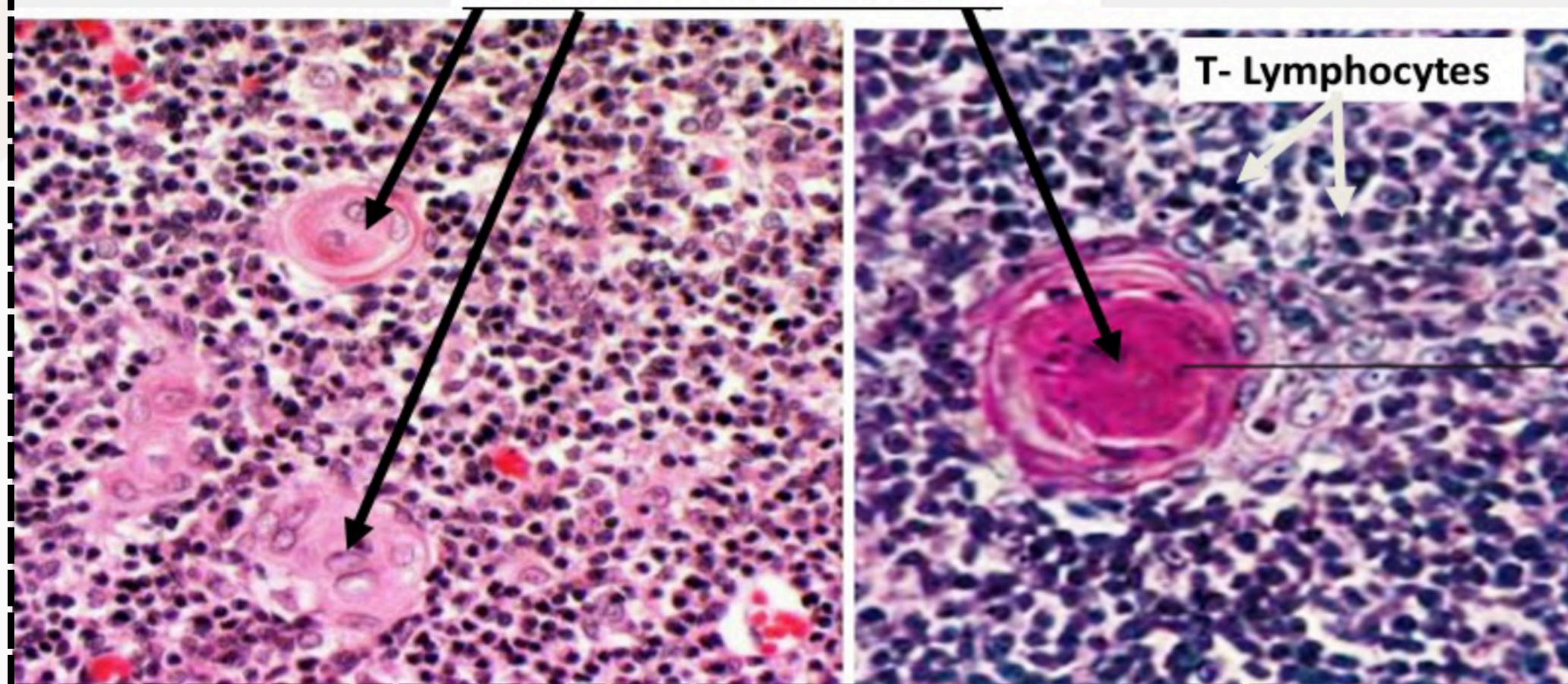
- 1 - Germinal centre
- 2- Follicular zone
- 3 - Marginal zone
- 4 - Periarterial area
- 5 - Central arteriole
- 6 - Red pulp
- 7 - Trabeculae



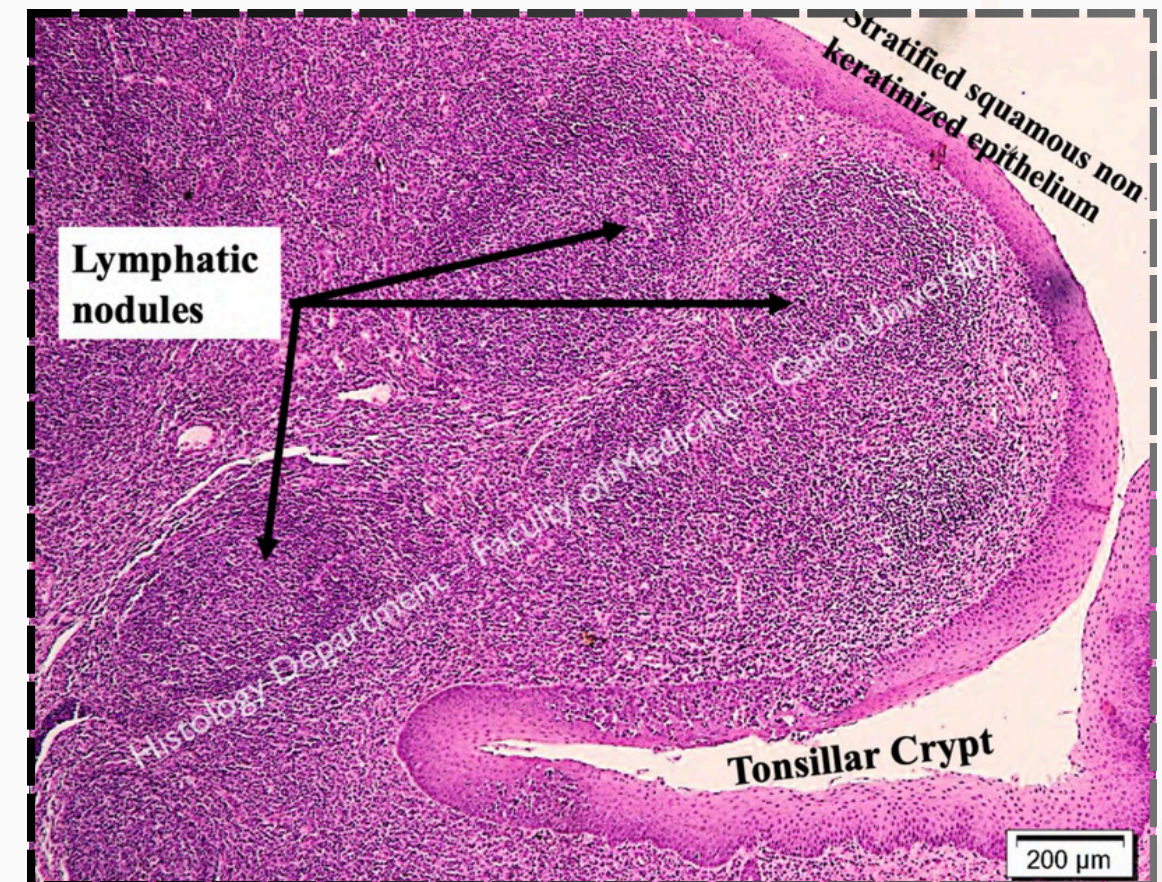
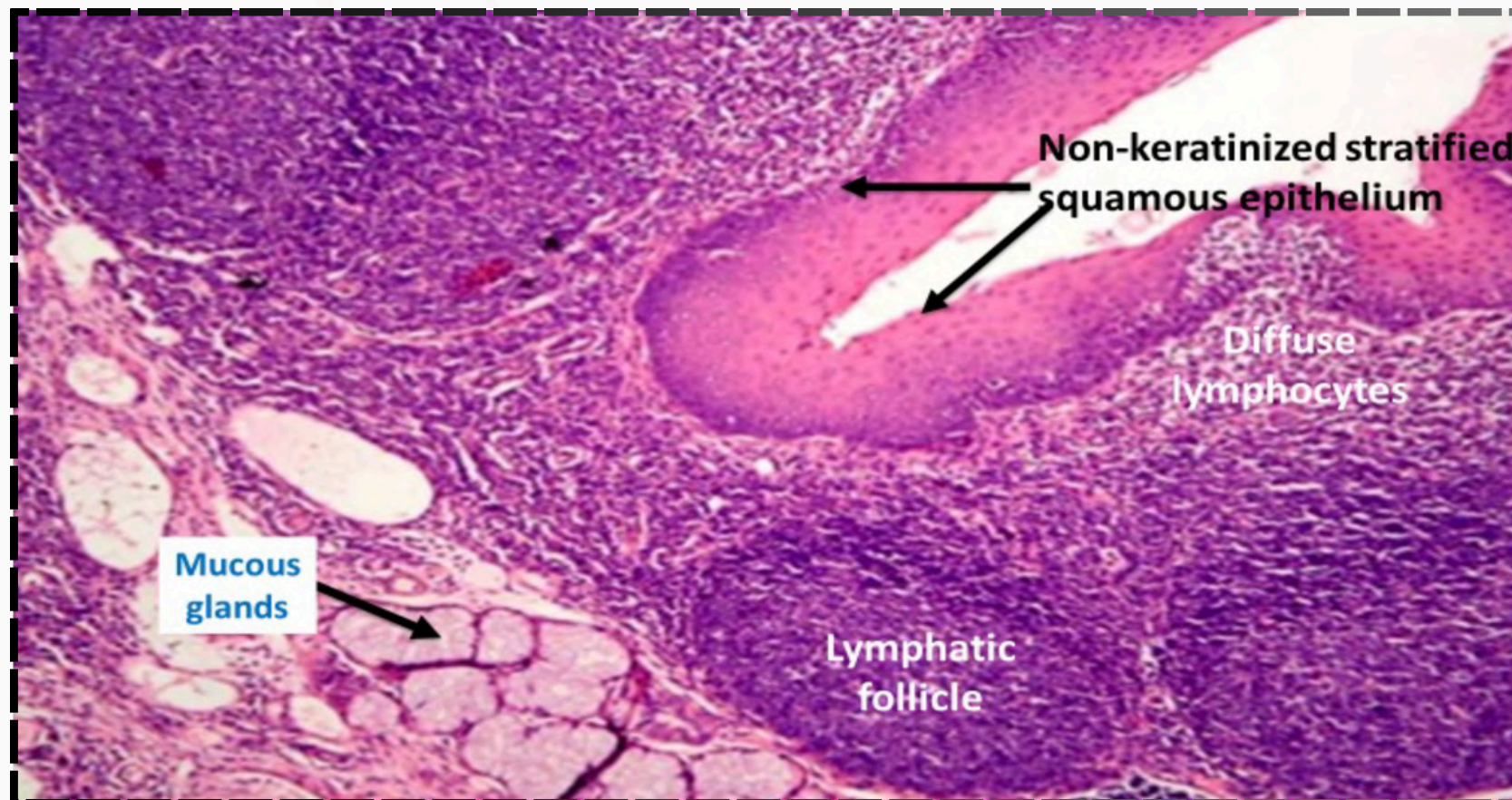
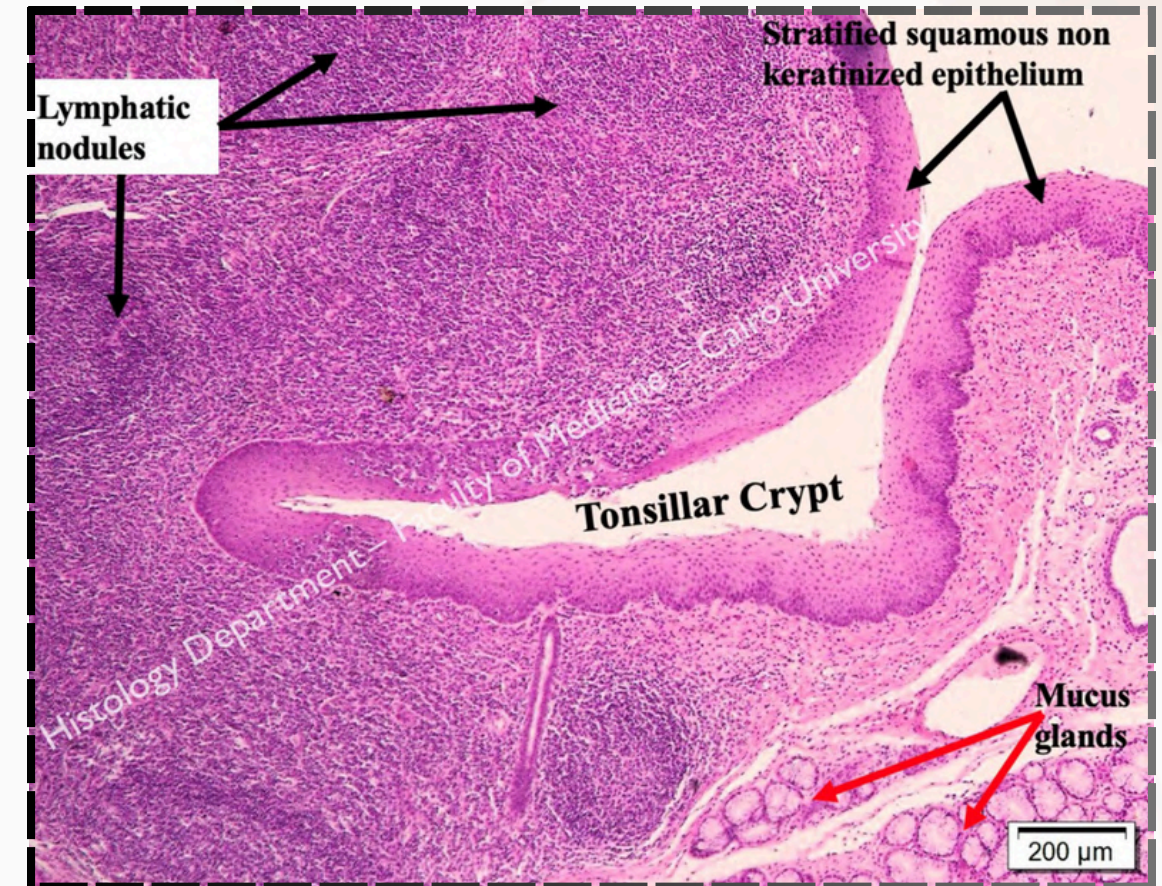
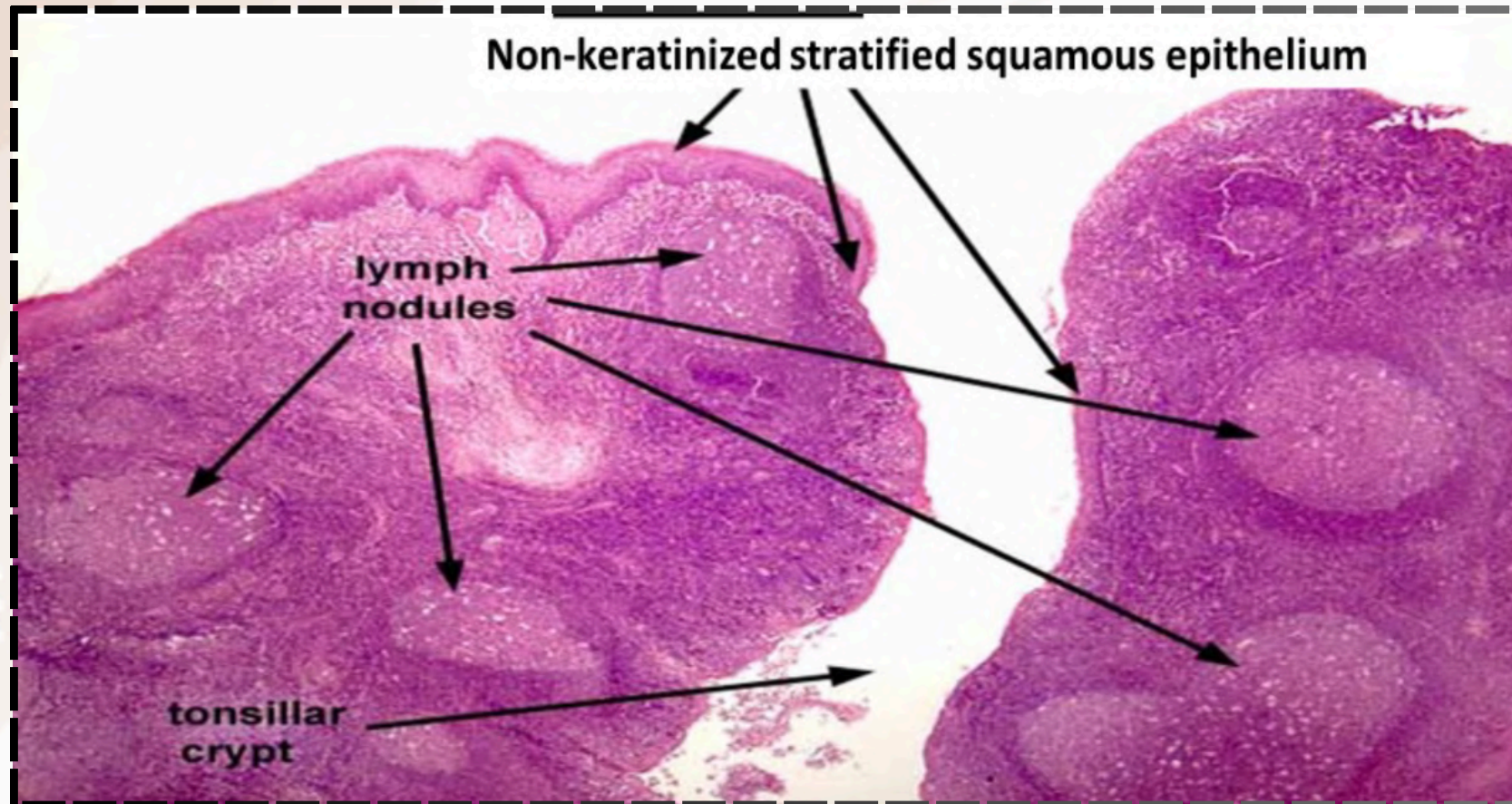
Thymus



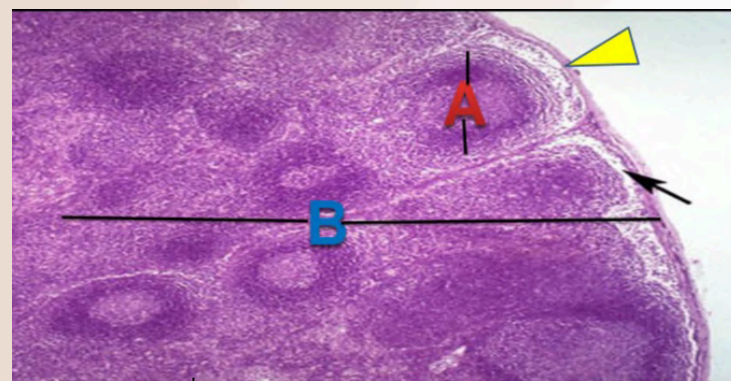
Hassall's corpuscle



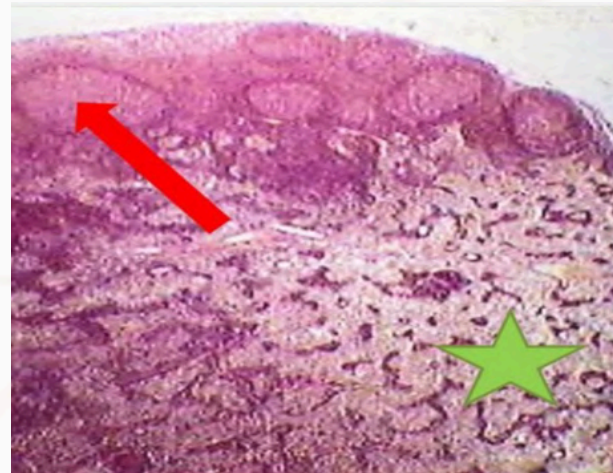
Tonsil



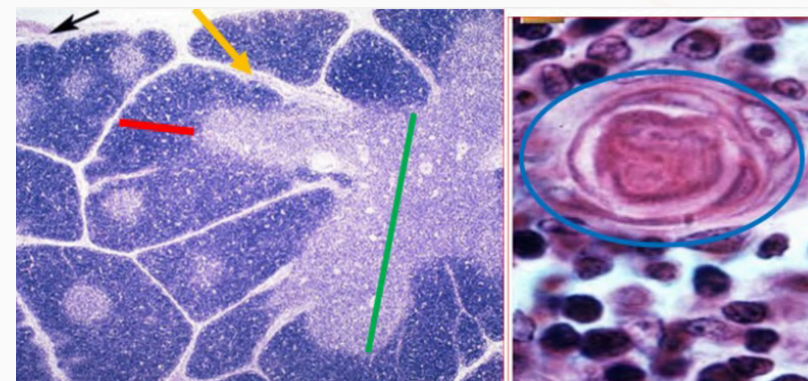
Trial Exams



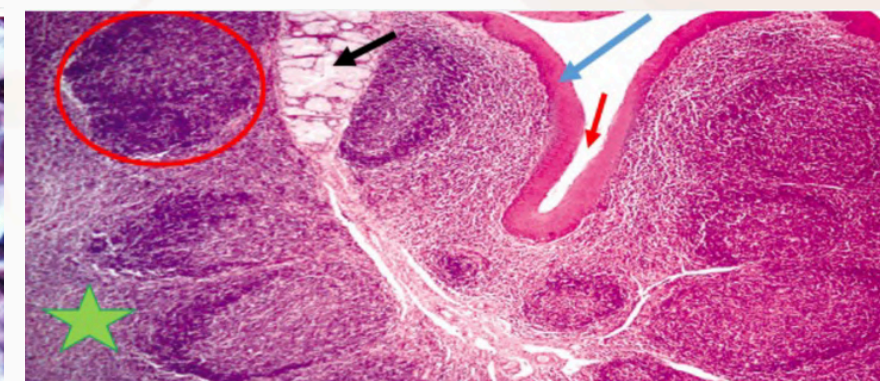
Organ	Lymph Node
→	Subcapsular Sinus
△	Capsule
A	Lymphatic Follicle
B	Cortex



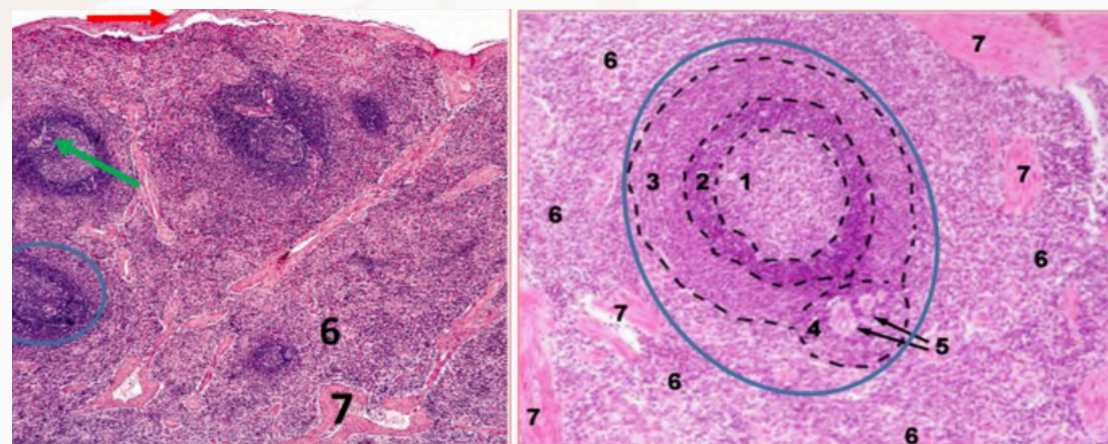
Organ	Lymph Node
→	Secondary Follicle
★	Medulla



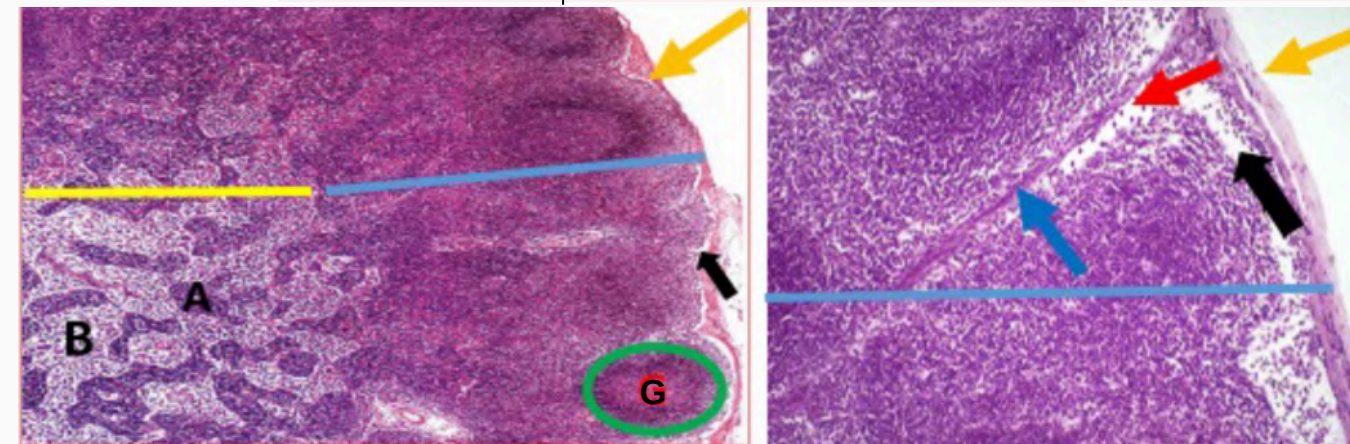
Organ	Tonsil
→ & →	Capsule & Trabeculae
Red Line	Cortex
Green Line	Medulla
Blue Circle	Hassal's Corpuscles & T Lymphocytes outside it



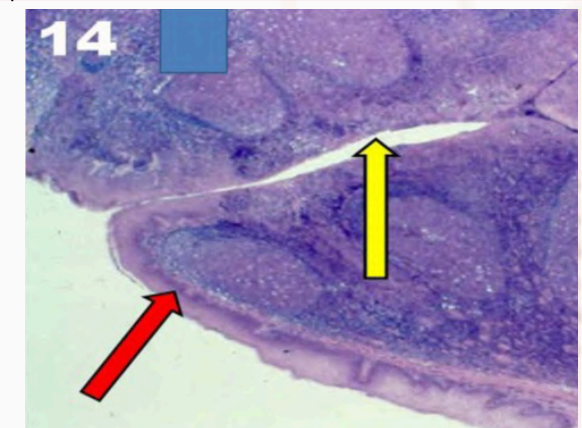
Organ	Tonsil
→ & →	Crypt & Mucus glands
Red Circle	Lymphatic Follicle
★	Diffuse Lymph Tissue
→ Epithelium	Nonkeratinized stratified squameous epithelium.



Organ	Spleen	Numbers:
→	Capsule	1: Germinal center
→	Central Arteriole	2: Follicular zone
○	White Pulp	3: Marginal zone
		4: Thymus dependent zone
		5: Central arteriole
		6: Red pulp
		7: Trabeculae



Organ	Lymph Node	—	Cortex	A	Medullary Cord
→	Capsule	—	Medulla	B	Medullary Sinus
→	Subcapsular Sinus	→	Trabecular Sinus	G	Germinal Center
→	Trabeculae	○	Secondary Follicle		

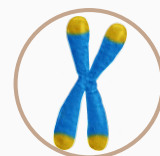


Organ	Tonsil
→	Crypt
→ Epithelium	Nonkeratinized stratified squ. epithelium



Module 104

Genetics Datashow



Chromosomes



Karyotyping



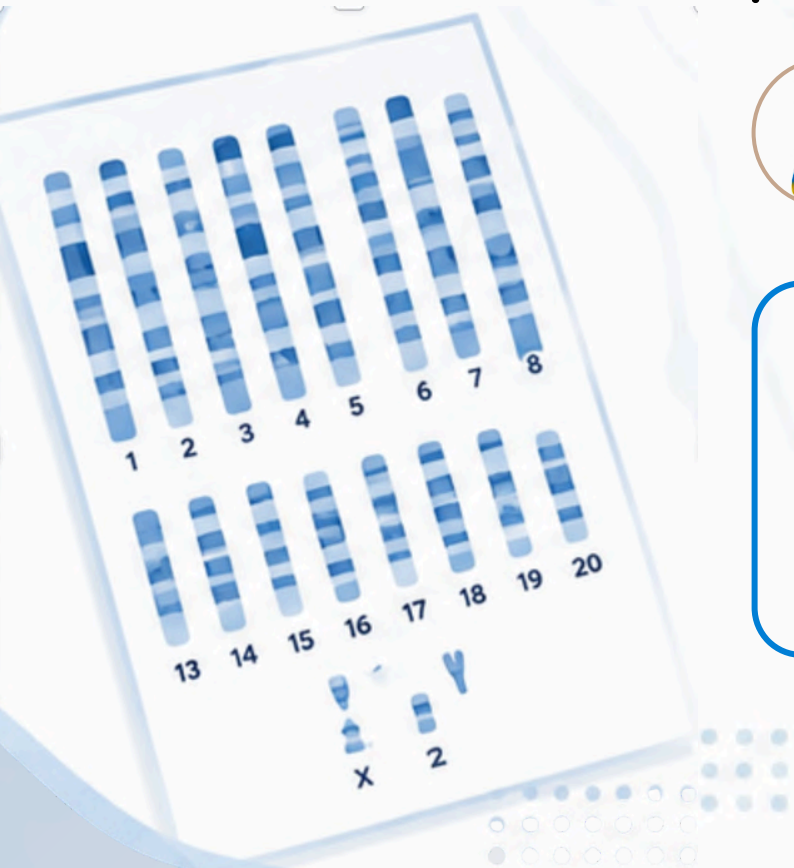
Abnormalities



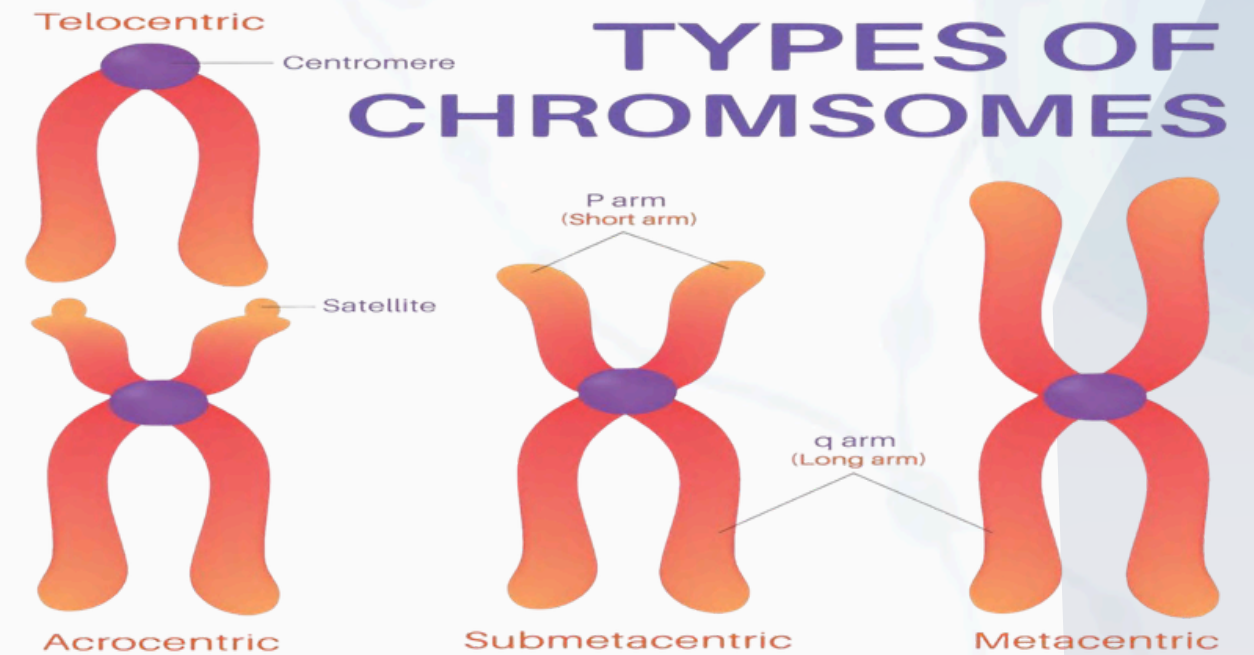
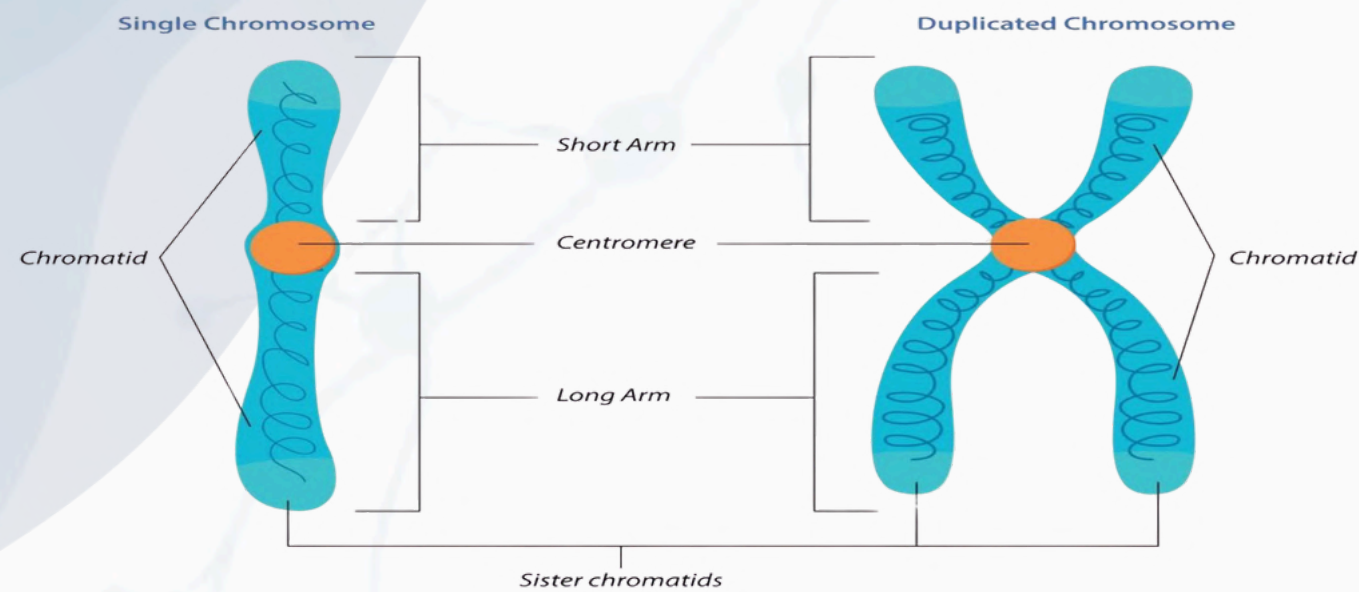
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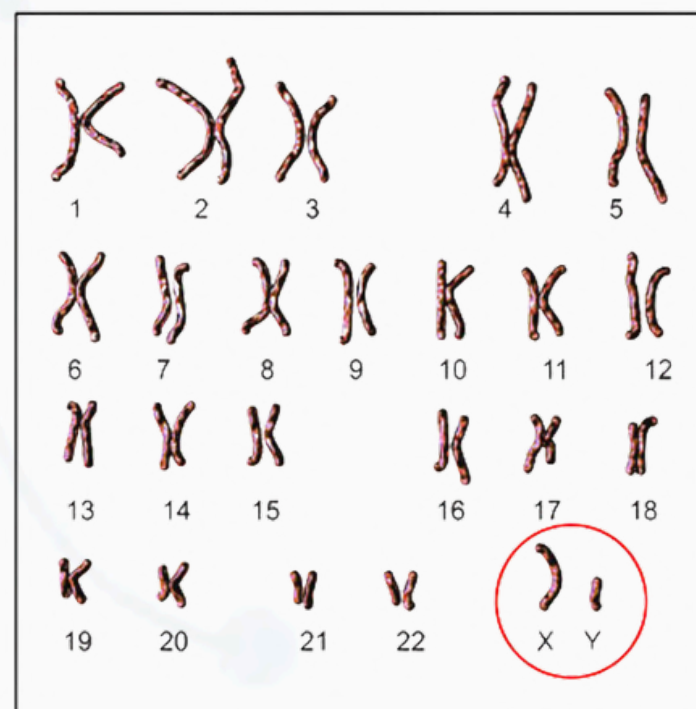


Chromosomes & Karyotypes

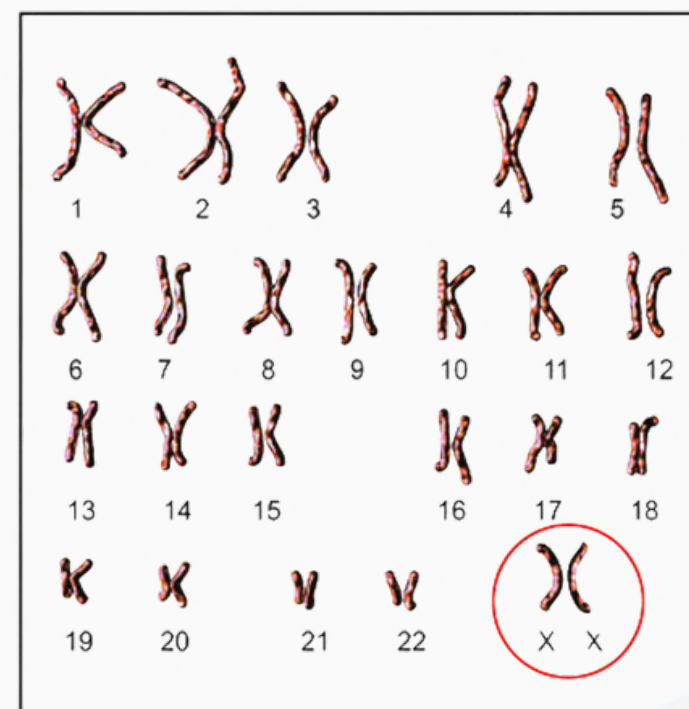


Human karyotype

Male

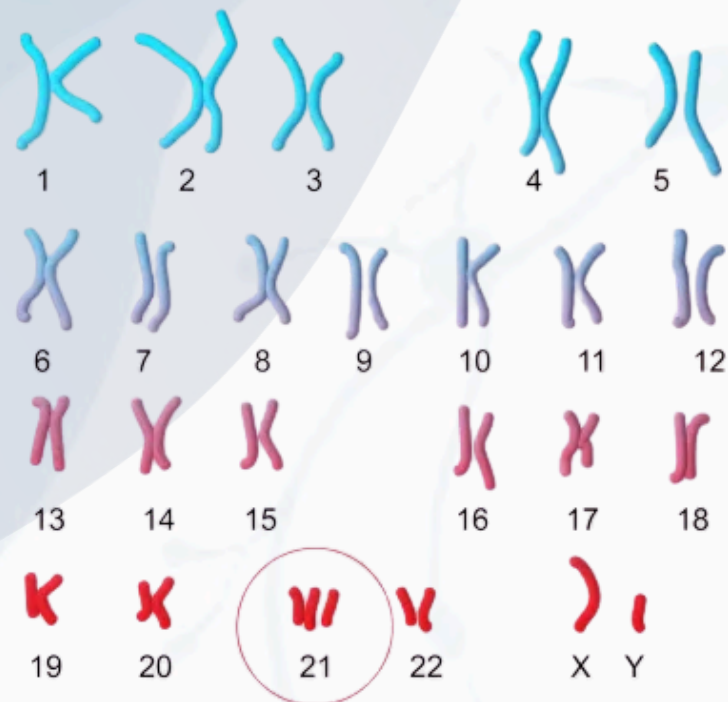


Female

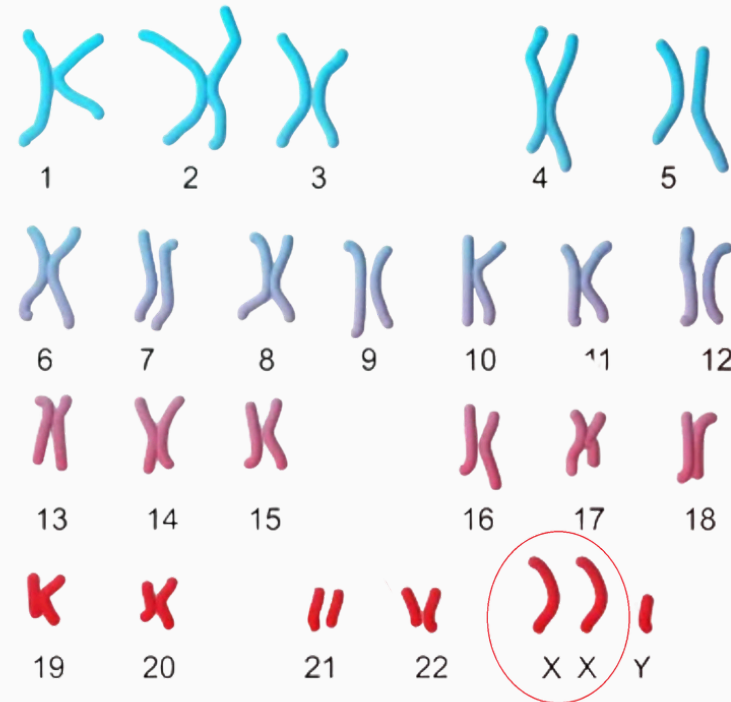


Abnormalities

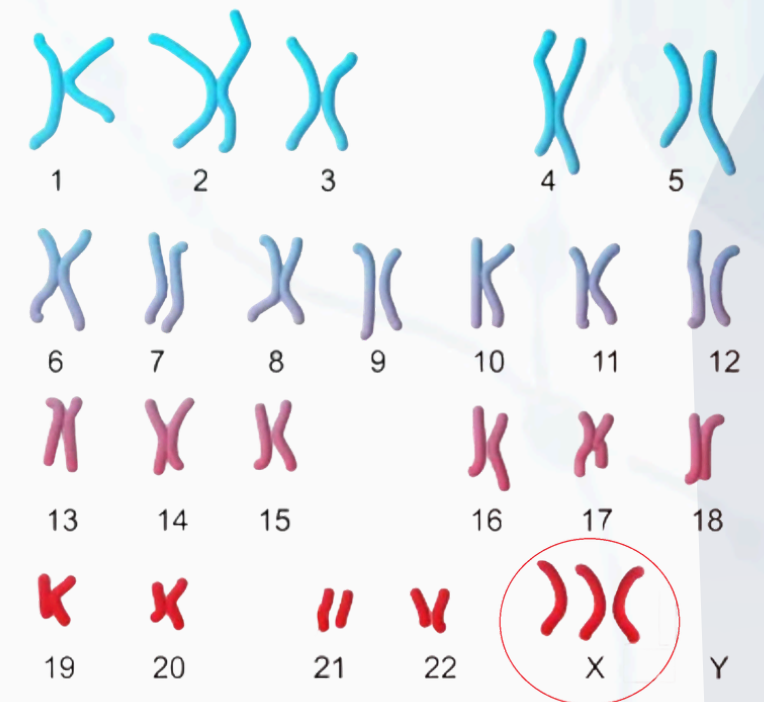
Trisomy 21: Down Syndrome



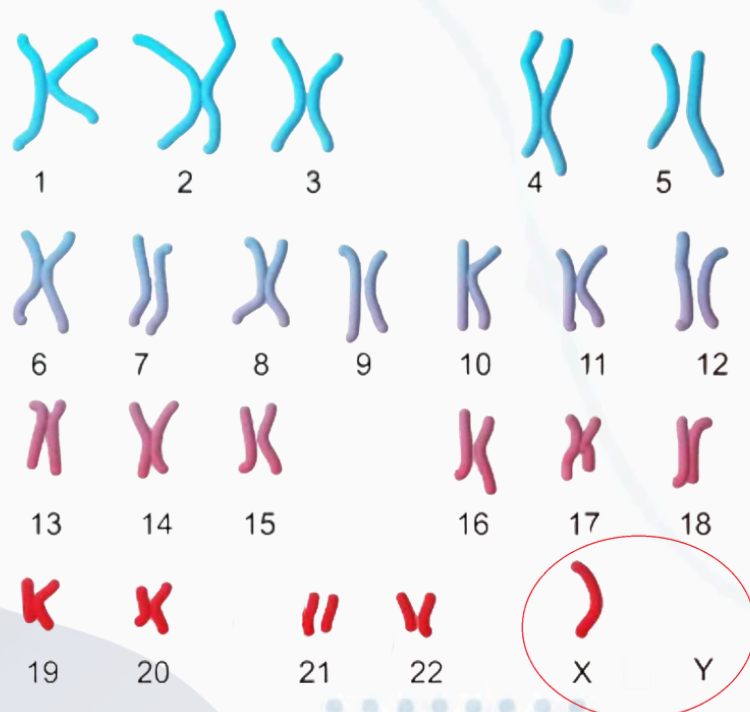
47 XXY: Klinefelter Syndrome



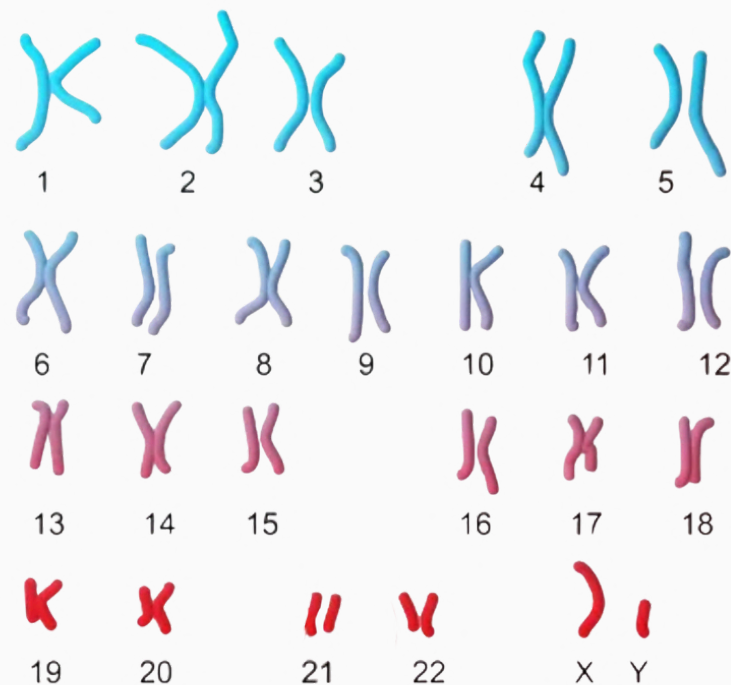
47 XXX: Triple X Syndrome



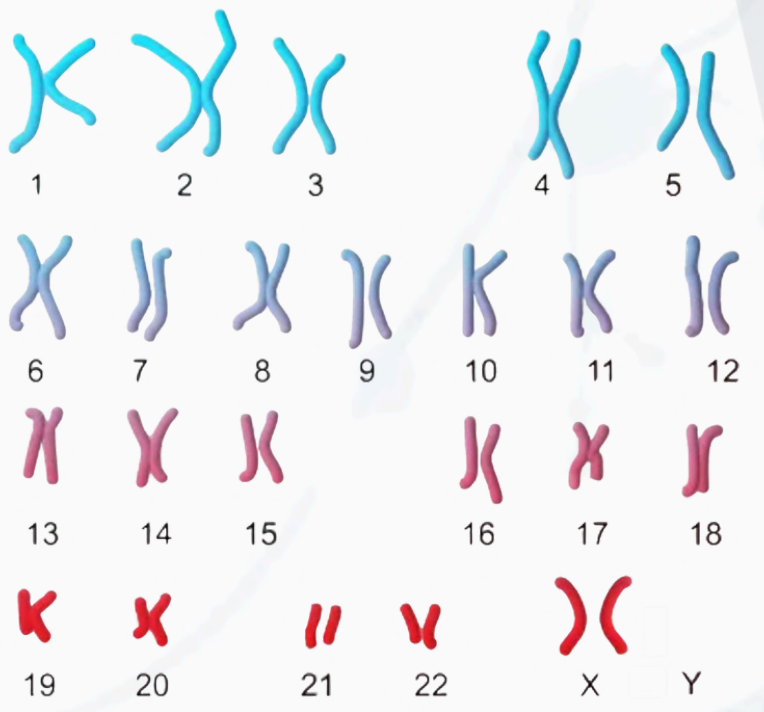
45 XO: Turner Syndrome



46 XY: Normal Male



46 XX: Normal Female

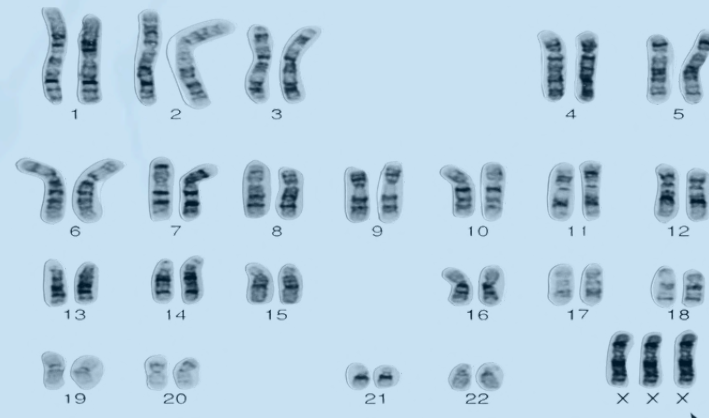


Trial Exams

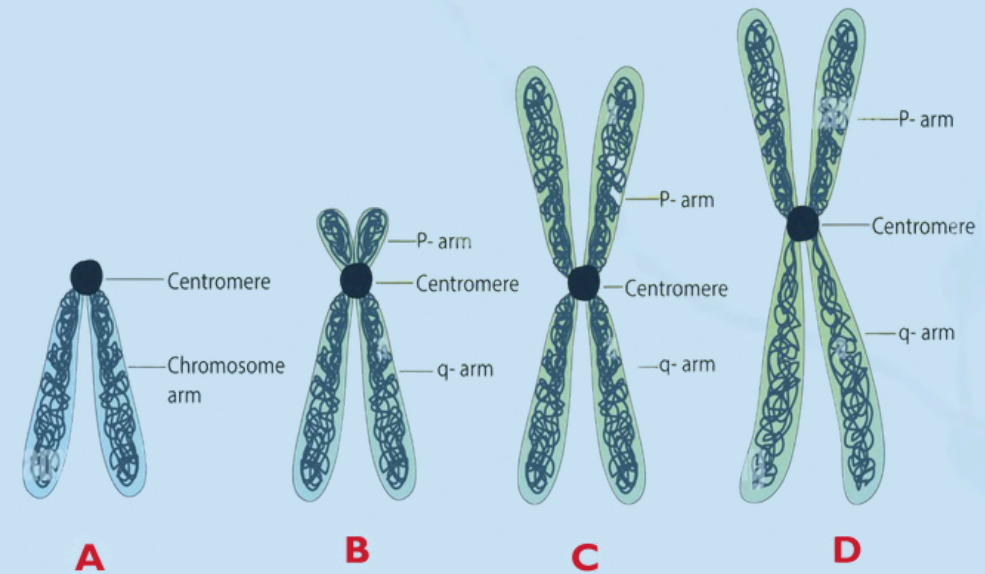
When Karyotyping, state the sex, chromosomal abnormalities if present, and the karyotyping number.



Male Trisomy 20, 47XY



Female Triple X Syndrome
47XXX



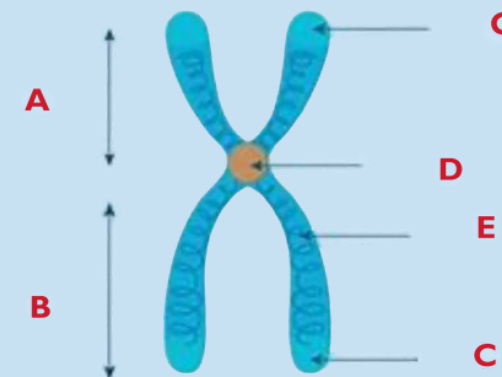
A: Telocentric
B: Acrocentric
C: Metacentric
D: Submetacentric



Normal Female, 46XX



Female Turner Syndrome
45XO



A: Short Arm
B: Long Arm
C: Telomere
D: Centromere
E: Chromatid



Female Trisomy 21, 47XX
Down Syndrome



Normal Male, 46XY



Male
Klinefelter Syndrome
47XXY