

Lec 2

Quiz: The Endocrine System - Thyroid & Parathyroid Glands

1. The structural and functional unit of the thyroid gland is:
- a) Colloid
 - b) Thyroid follicle
 - c) Follicular cell
 - d) Parafollicular cell

Answer: b) Thyroid follicle

2. The secretory product of the thyroid gland is stored:
- a) Intracellularly
 - b) Within the nucleus
 - c) Extracellularly
 - d) In the mitochondria

Answer: c) Extracellularly

3. Thyroid follicles contain which substance in their lumen?
- a) Calcitonin
 - b) Colloid
 - c) Parathormone
 - d) Iodine crystals

Answer: b) Colloid

4. Parafollicular cells are also known as:
- a) Basal cells
 - b) Clear cells
 - c) Follicular cells
 - d) Chief cells

Answer: b) Clear cells

5. Which hormone is secreted by parafollicular cells?
- a) T3
 - b) T4
 - c) Parathormone
 - d) Calcitonin

Answer: d) Calcitonin

6. The thyroid gland is lined with cuboidal epithelium under:
- a) Hypoactivity
 - b) Normal conditions
 - c) Hyperactivity
 - d) Disease conditions only

Answer: b) Normal conditions

7. In hyperactive thyroid gland, the follicular lining becomes:
- a) Squamous
 - b) Cuboidal
 - c) Columnar
 - d) Transitional

Answer: c) Columnar

8. Which of the following hormones lowers blood calcium levels?
- a) Parathormone
 - b) Calcitonin
 - c) TSH
 - d) T3

Answer: b) Calcitonin

9. Chief cells of the parathyroid gland

secrete: a) T3

b) Calcitonin

c) Parathormone

d) TSH

Answer: c) Parathormone

10. Which of the following best describes

oxyphil cells? a) Numerous, pale cytoplasm

b) Few, acidophilic granules

c) Cuboidal with dark nuclei

d) Squamous with clear cytoplasm

Answer: b) Few, acidophilic granules

11. Oxyphil cells are characterized by: a)

Small size and basophilic granules

b) Large size and numerous mitochondria

c) Presence of colloid in cytoplasm

d) Hormonal inactivity

Answer: b) Large size and numerous

mitochondria

12. The colloid in thyroid follicles is composed mainly of: a) Albumin
b) Thyroglobulin
c) Globulin
d) Collagen

Answer: b) Thyroglobulin

13. Inter-follicular cells represent: a) Active C cells
b) Tangentially cut follicles
c) Lining squamous cells
d) Blood vessels

Answer: b) Tangentially cut follicles

14. Removal of parathyroid glands may lead to: a) Hyperthyroidism
b) Tetany and death
c) Diabetes mellitus
d) Hypertension

Answer: b) Tetany and death

15. Thyroid follicles vary in morphology based on: a) Gender of the patient
b) Age only
c) Region and functional activity
d) Capsule thickness

Answer: c) Region and functional activity

16. The parathyroid gland is located: a) Anterior to thyroid
b) Within adrenal gland
c) Posterior to thyroid
d) Inside the thymus

Answer: c) Posterior to thyroid

17. What is the most abundant cell type in the thyroid follicle lining? a) Parafollicular cells
b) Squamous cells
c) Follicular cells
d) Interstitial cells

Answer: c) Follicular cells

18. Which stain makes colloid appear eosinophilic? a) H&E

b) Giemsa

c) Silver stain

d) Toluidine blue

Answer: a) H&E

19. In hypofunction of the parathyroid, calcium levels: a) Remain unchanged

b) Increase

c) Drop below normal

d) Are replaced by sodium

Answer: c) Drop below normal

20. Which type of epithelium lines

hyperactive thyroid follicles? a) Simple squamous

b) Columnar

c) Transitional

d) Stratified cuboidal

Answer: b) Columnar