Level-1 Semester-2

Histology - MSS

BERLIN

4L.E

SCAN ME

MCQ Lecture 2

Cardiac & Smooth Muscle

DR M. YUSUF

MCQ on Cardiac & Smooth Muscle

1. **Which of the following muscles is non-striated:-** a) Wall of the heart b) Muscles of the tongue c) Smooth muscle of blood vessels d) Leg muscles e) Foot muscles	C
2. **Which muscle is responsible for voluntary control of movement:-** a) Skeletal muscle b) Smooth muscle c) Cardiac muscle d) All of the above e) None of the above	A
3. **In one type of muscles, a structure is formed of numerous gap junctions, desmosomes & adherens junctions. What is this structure:-** a) Dense bodies b) Intercalated disc c) Myofilaments d) Neuromuscular spindle e) Sarcomere	B
4. **The junctions that are the basis for electrical conduction from one cardiac muscle cell to another are called:-** a) Zona adherens junctions b) Gap junctions c) Desmosomes d) Occluding junctions e) Macula adherens junctions	B
5. **Regarding cardiac muscle fibers:-** a) They have regular striations more than skeletal muscle fibers b) They are not branching nor anastomosing c) In old age they acquire Lipochrome pigment d) No cell junction are observed between cells e) They don't show any striations	C

6. **Intercalated disc is:-** a) The connection between 2 cell membranes in smooth muscle fibers b) The connection between 2 cell membranes in skeletal muscle fibers c) The connection between 2 cell membranes in cardiac muscle fibers d) Responsible for the contractility of muscle fibers e) The structural and functional unit of muscle fibers	C
7. **Cardiac muscle fibers:-** a) Are single long fusiform cells b) Form parallel bundles c) Act voluntary d) Have central oval nuclei e) Don't join together end by end by cell junction	D
8. **Regarding tubules and sarcoplasmic reticulum of cardiac muscle fibers:-** a) Are well developed b) Are less developed c) Located at A-I junction d) Located at H zone e) Terminal cisternae are large and complete	B
9. **The cardiac muscle fibers:-** a) Lack intercalated discs b) Are not branching and anastomosing c) Have dyad of Sarcoplasmic reticulum and T tubules d) Have regular striations e) Their nuclei are multiple and peripheral	C
10. **Which of the followings is correct about Lipochrome pigment:-** a) Cause red atrophy of the heart b) Abundant in sarcoplasm of skeletal muscles c) Increases in old age d) Associated with T-tubules to form dyads e) All of the above	C

11. **Sarcoplasm of Cardiomyocytes contain:-** a) Numerous ribosomes b) Numerous lysosomes c) Numerous mitochondria d) Numerous rER e) Numerous nuclei	C
12. **Which of the followings is characteristic feature of Cardiomyocytes:-** a) Contain only dyad of t-tubules and terminal cisternae b) Not striated c) Long spindle cells d) Basophilic sarcoplasm e) Peripheral nucleus	A
13. **Which one is correct about intercalated discs:-** a) Pale stained b) Coincides with the M line c) Can be stained with silver d) Contain hemidesmosomes e) Present in smooth muscle cells	C
14. **True about gap junctions:-** a) Allow rapid transmission of impulse through intercommunicating channels b) Exclusive in skeletal muscles c) Prevent separation of myocardial cells during contraction d) Play a role in fixation of myofibrils e) None of the above	A
15. **Cardiac muscle cells grow mainly by:-** a) Hyperplasia b) Hypertrophy c) Meiosis d) Mitosis e) Increased cellularity	B

16. **All are true about cardiac muscle fibers except:-** a) They are involuntary b) They are histologically syncytium c) They are present within the myocardium d) Intercalated discs are present at cell junction e) They are striated	B
17. **All are true about cardiac muscle except:-** a) It is capable of extensive regeneration b) Intercellular junctions include desmosomes c) Intercellular junctions include fascia adherens d) Intercellular junctions include gap junctions e) They show extensive branching & anastomosing	A
18. **In L/M of cardiac muscle fibers which is true:-** a) Large caliber (75 micron) b) Symmetrical length c) Extensive branching and anastomosing d) Peripherally arranged nuclei e) Basophilic sarcoplasm	C
19. **About tubules and sarcoplasmic reticulum of cardiac muscle fibers which is not true:-** a) They are less developed b) They are only dyads not triads c) T-tubules are present at Z-line d) Large complete terminal cisternae e) None of the above	D
20. **Which part prevents separation of cardiac muscle cells during contraction:-** a) Desmosomes b) Myofibrils c) T-tubules d) Gap junctions e) Sarcoplasmic Reticulum	A

21. **The smooth muscle is characterized by:-** a) T-tubules are well developed b) Ce ls are multinucleated c) Transverse striations d) Involuntary action e) Each sarcomere has two triads	D
22. **Concerning smooth muscle fibers:-** a) Each fiber is formed of multiple cells b) They have distinct striations c) They have intermediate filaments d) They are voluntary e) They have many well developed T-tubules	C
23. **Which of the following is present in smooth muscle fibers but not skeletal ones:-** a) Actin b) Vimentin c) Myosin d) Troponin e) Tropomyosin	B
24. **The following is not under voluntary control:-** a) Skeletal muscles b) Muscles of the face c) The muscles of the tongue d) Smooth muscles e) Muscles of the leg	D
25. **Smooth muscle:-** a) Can be induced to contract by an act of will b) Does not contain actin filaments c) Does not contain intermediate filaments d) Has cells with centrally located nuclei e) Has well developed sarcoplasmic reticulum	D

26. Smooth muscle fibers are found in the following sites Except:- a) Pharyngeal muscles b) Walls of blood vessels c) Wall of the intestine d) Walls of the respiratory tract e) Walls of the urinary bladder	A
27. All of the following are true about smooth muscle Except:- a) Are spindle-shaped b) Have peripherally situated nuclei c) Possess actin and myosin d) Have intermediate filaments e) Are involuntary	B
28. All the following statements are true about smooth muscle fibers Except:- a) Show cross-striations b) Are involuntary c) Are innervated by the autonomic nervous system d) Have a single nucleus in each fiber e) Don't branch	A
29. Which of the following is not typical of smooth muscle:- a) Relatively slow and sustained contraction b) Rhythmic contraction c) Tonic contraction d) The sarcomere is well developed and appear between 2 Z-lines e) Can participate in peristaltic waves of contraction	D
30. Smooth muscle fibers as seen by electron microscopy do not possess:- a) Thick and thin myofilaments b) Intermediate filaments c) Mitochondria and ribosomes d) Golgi bodies e) Well- developed sarcoplasmic reticulum throughout the sarcoplasm	E