Med Anatomy & Embryology 2021

Anatomy

1) In a 50-year-old man who has loss of sensation on the lateral and medial sides of the ring finger. Which of the following nerves has/have most likely been injured?

- a. Ulnar and anterior interosseous
- b. Posterior interosseous
- c. Palmar cutaneous nerve branch of ulnar
- d. Median and ulnar nerves
- e. Palmar cutaneous nerve branch of median

2) Triangular Space transmits?

- a. Posterior circumflex humeral artery
- b. The radial nerve
- c. The profunda brachii artery
- d. Axillary nerve
- e. The circumflex scapular artery and vein

3)

Dawbarn's sign, can be seen in which one of the following?

- a. Klumpke's palsy
- b. Saturday night palsy
- c. Erb's palsy
- d. Subacromial bursitis
- e. Carpal tunnel syndrome

Which of the following is NOT a branch of the radial nerve?

- a. Posterior interosseous nerve
- b. Posterior cutaneous nerve of the arm
- c. Posterior cutaneous nerve of the forearm
- d. Medial cutaneous nerve of the forearm
- e. Inferior lateral cutaneous nerve of the arm

5)

Quadrangular space, choose the wrong statement.

a. Provides a passageway to axillary nerve and posterior circumflex humeral artery

b. Its medial border is supplied by the radial nerve

- c. Its lateral border is surgical neck of humerus
- d. Its lower border laterally rotates the shoulder joint
- e. Its superior border is supplied by a nerve that supplies the deltoid muscle

6)

A 50-year-old man falls and injures his upper limb. A radiograph shows a fracture at the radial groove of the humerus. Which of the following will be present during physical examination?

- a. Flexion of the ring and little fingers at DIP is lost
- b. Paralysis of lumbricals and interosseous muscles
- c. Loss of sensation over the lateral two thirds of the palm
- d. Elbow extension is preserved while at wrist and the fingers it is lost

e. Flexion of the index and middle fingers at the distal interphalangeal (DIP) and proximal interphalangeal (PIP) joints is lost

Which of the following innervates the muscle which is attached to the costal surface of the medial border of the scapula?

a. C8 and T1
b. C5, C6, C7, C8 and T1
c. C7, C8 and T1
d. C5, C6 and C7
e. C6, C7, C8 and T1

8)

A 50-year-old female was diagnosed with carpal tunnel syndrome. Which muscles most typically become weakened in this condition?

- a. Thenar
- b. Lumbricals III and IV
- c. Palmar interossei
- d. Dorsal interossei
- e. Hypothenar

9)

Choose the CORRECT statement about the muscle which is inserted into the lesser tubercle of the humerus.

a. It forms the lower border of the axilla

b. It initiates abduction at the shoulder joint

c. It is not considered one of the rotator cuff muscles

d. It rotates the shoulder joint in an opposite direction to that of the sternal head of pectoralis major muscle

e. It is supplied by two nerves from the posterior cord of the brachial plexus

10)

Choose the wrong statement about the muscles attached to the greater tubercle of the humerus.

a. One of the them initiates abduction at the shoulder joint

b. One of them takes its nerve supply from the same nerve that supplies subscapularis muscle

c. Two of them laterally rotate the shoulder joint

d. They all considered rotator cuff muscles

e. Two of them are supplied by a nerve from the upper trunk

11)

Which of the following is correct about the axillary artery?

a. Its first part gives off the highest thoracic artery which runs along the lower border of the pectoralis minor muscle

b. The subscapular artery arises from its third part

c. Its second part gives off the thoracoacromial and the superior thoracic arteries

d. It begins at the lateral border of the 1st rib as a continuation of the subclavian artery

e. It ends at the lower border of the teres major muscle, where it continues as the brachial artery

12)

The muscle which is inserted into the Olecranon process, is originated from?

- a. Lateral epicondyle of the humerus
- b. infraglenoid tubercle and shaft of humerus
- c. Styloid process of radius.
- d. Coronoid process.
- e. Tuberosity of radius.

13) The infraspinatus muscle, choose the wrong statement.

a. Its nerve also supplies infraspinatus muscle

b. It is related to the subacromial bursa

c. Its nerve and artery pass through the suprascapular foramen

- d. It is one of the rotator cuff muscles
- e. It abducts the shoulder joint

14)

Which one of the following is true about the ulnar nerve?

a. In its injury, O.K sign is positive

b. It arises from the lateral cord of the brachial plexus

c. It passes behind the lateral epicondyle of the humerus

d. It runs between flexor carpi ulnaris and flexor digitorum profundus and completely supplies both them

e. In its injury, sensation would be lost from the skin between the ring and little fingers

15)

Rami is unable to flex the distal interphalangeal joint of the middle finger. Which of the following nerves is most likely affected?

- a. Anterior interosseous and ulnar
- b. Median
- c. Posterior interosseous
- d. Ulnar
- e. Anterior interosseous

16)

The cubital fossa does NOT contain which of the following?

- a. Biceps brachii tendon
- b. Radial nerve
- c. Ulnar nerve
- d. Median nerve
- e. The brachial artery

17)

A baby's neck was excessively stretched during delivery. Which part of the brachial plexus was most likely injured during this delivery?

a. C7 and C8 b. C8 c. C7

d. C5 and C6 e. C8 and T1

18)

Which one of the following is TRUE about the elbow joint?

a. It is supplied by median, ulnar, musculocutaneous, and radial nerves

b. It allows supination of the forearm

c. Its lateral ligament is attached by its base to the radius

d. It is a synovial pivot joint

e. It allows abduction of the forearm

19)

Which of the following nerves do not supply any muscle in the arm?

- a. Median and radial
- b. Median and ulnar
- c. Musculocutaneous and median
- d. Radial and ulnar
- e. Musculocutaneous and radial

20)

Which of the following is TRUE about trapezius muscle?

a. Its middle fibers elevate the scapula

- b. It is not innervated from the brachial plexus
- c. Its inferior fibers retract the scapula
- d. It acts on the shoulder joint
- e. Its superior fibers retract the scapula

21)

Which one of the following does not contribute to the stability of the shoulder joint?

- a. Biceps tendon
- b. Ligaments
- c. The shape of the articulating bones

- d. Rotator cuff muscles
- e. Glenoid labrum

A 60-year-old male is brought to the emergency department after an injury. A radiograph shows fracture of the proximal end of the radius. Physical examination reveals no wrist drop, normal extension of the elbow joint and inability to extend the thumb. There is no loss of sensation in the affected limb. Which nerve was most likely affected?

- a. Posterior interosseous
- b. Median
- c. Anterior interosseous
- d. Superficial radial
- e. Ulnar

23)

What is common between serratus anterior and trapezius muscles?

- a. They act on the shoulder girdle
- b. Their origin
- c. Their insertion
- d. Nerve supply
- e. They act on the shoulder joint

24)

Which one of the following muscles abducts the arm from 15 degrees up to 90 degrees?

- a. Anterior fibers of deltoid
- b. Supraspinatus
- c. Middle fibers of deltoid
- d. Serratus anterior
- e. Upper fibers of Trapezius

25)

A 45-year-old man arrived at the emergency department with a fracture of the medial epicondyle of the humerus. This man may develop?

- a. Ape hand
- b. Erb's palsy
- c. Claw hand
- d. Carpal tunnel syndrome
- e. Waiters tip sign

The anterior fibers of deltoid muscle have similar function (at the shoulder joint) to which one of the flowing

- a. Latissimus dorsi muscle
- b. Clavicular head of pectoralis major muscle
- c. Pectoralis minor muscle
- d. Sternocosatl head of pectoralis major muscle
- e. Teres major muscle

27)

The radial pulse is felt lateral to which tendon?

- a. Flexor digitorum profundus
- b. Flexor digitorum superficialis
- c. Flexor carpi radialis
- d. Palmaris longus
- e. Flexor pollicis longus

28) In carpal tunnel syndrome, which nerve is involved?

a. C7, C8 and T1
b. C5, C6 and C7
c. C5, C6, C7, C8 and T1
d. C8 and T1
e. C6, C7, C8 and T1

Which of the following is a common function (at the shoulder joint) for the muscles attached to the bicipital groove?

- a. Extension
- b. Flexion
- c. Medial rotation
- d. Abduction
- e. Lateral rotation

30)

A first-year-medical student injured his little finger and the wound became infected. The infection may spread into?

- a. The midpalmar space
- b. The thenar space
- c. The ulnar bursa
- d. Between the metacarpal bones
- e. The radial bursa

| 1) D | 11) D/B/E | 21) C |
|-------------|---------------|-------|
| 2) E | 12) B | 22) A |
| 3) D | 13) C deleted | 23) A |

| 4) D | 14) E | 24) C |
|--------------|-------|-------|
| 5) D | 15) E | 25) C |
| 6) D | 16) C | 26) B |
| 7) D | 17) D | 27) C |
| 8) A | 18) A | 28) E |
| 9) E | 19) B | 29) C |
| 10) B | 20) B | 30) C |

Embryology

1) Meiosis I, results only in one of the following:

- a. Primary oocyte
- b. Primary spermatocytec. Separation of sister chromatids
- d. First polar body

e. Second polar body

2)

Sertoli cells or sustentacular cells, choose the wrong statement

- a. They phagocytize excess spermatid cytoplasm
- b. They extend from the basement membrane to the lumen
- c. They are located in the seminiferous tubules
- d. They are in direct relation with Leydig cells
- e. They nourish spermatocytes, spermatids, and sperm

3)

A Secondary oocyte arrested in metaphase of meiosis II can be seen in which one of the following?

- a. In the secondary and Graafian follicles
- b. In the secondary follicle
- c. In the primordial and primary follicles
- d. In the Graafian follicle
- e. In the primordial, primary and secondary follicles

4)

Choose the wrong match

- a. Hypothalamus......Gonadotropin releasing hormone
- b. Ovarian Cycle......Estrogen and progesterone
- c. Adenohypophysis......FSH
- d. Zona pellucida.....LH
- e. FSH.....15 to 20 follicles each month

5)

The blood-testis barrier, choose the wrong statement.

- a. It is formed by Sertoli cells
- b. Spermiogenesis takes place in the apical compartment
- c. It prevents an immune response against the spermatogenic cells
- d. Meiosis I and II take place in the basal compartment

e. It divides the seminiferous epithelium into basal and the apical compartments.

Oogenesis and spermatogenesis, choose the wrong statement?

- a. After meiosis I, both produce 1n cells
- b. Oogenesis has limited time (production of oocytes ends at certain age)
- c. There are no arresting periods in spermatogenesis
- d. Meiosis I extends longer in oogenesis than in spermatogenesis
- e. After meiosis I, both produce two cells equal in size

7)

Which one of the following is not a diploid?

- a. First polar body
- b. Oogonium
- c. Primary oocyte
- d. Spermatogonium
- e. Primary spermatocyte

8)

Which one of the following is not a feature of the primary follicle?

- a. Theca externa
- b. Zona pellucida
- c. Granulosa cells
- d. Secondary oocyte
- e. Theca interna

9)

Spermiogenesis includes all of the followings except:

- a. Formation of neck, middle piece, and tail
- b. Formation of the acrosome
- c. Condensation of the nucleus
- d. Primary spermatocyte gives early spermatid
- e. Shedding of most of the cytoplasm

10) Which one of the following secrets testosterone?

- a. Primary spermatocyte
- b. Spermatid
- c. Secondary spermatocyted. Leydig (interstitial) cells
- e. Sertoli cells

| 1) D | 6) E |
|-------------|------|
| 2) D | 7) A |

| 3) D | 8) D |
|-------------|-------|
| 4) D | 9) D |
| 5) D | 10) D |



DONE BY: RANA MA'MUN & DANA OSHROQLABAN