

ANATOMY

General Questions

1. Which is an example of hyaline cartilage

- a. intervertebral discs
- b. epiglottis
- c. articular surface of clavicle
- d. epiphyses
- e. knee menisci

F – Fibrocartilagenous
F – Elastic fibrocartilagenous
T – Hyaline cartilage but not the best answer
T – Hyaline cartilage
F – Fibrocartilagenous

2. Hyaline cartilage

- a. forms glenoid labrum
- b. does not ossify with age
- c. relatively vascular
- d. forms epiphyseal growth plates
- e. forms articular margins of acromioclavicular joint
- f. unable to be deformed
- g. regrows in new cartilage

? – Unsure
F – Does ossify with age
F – avascular so difficult to repair
T – yes it does
? – Unsure
F – able to be deformed
F – don't think so

3. An example of a synovial joint is p21 Moore

- a. intervertebral disc
- b. sternomanubrial joint
- c. sacroiliac joint
- d. epiphyses
- e. distal tibulofibular joint

F – Fibrocartilagenous secondary cartilagenous joint
F – Secondary cartilagenous
T – Synovial joint BUT different from most because it has little movement
F – Primary cartilagenous joint
F – Syndesmosis/fibrous

4. An example of a secondary cartilagenous joint p21 Moore

- a. costochondral joint
- b. intervertebral disc
- c. TMJ
- d. lambdoid suture (head)
- e. proximal tibial epiphysis

F – Primary cartilagenous (usually temporary union)
T – fibrocartilagenous secondary cartilagenous joint
F – modified synovial joint p925 Moore's
F – fibrous joint
F – primary cartilagenous joint
NOTE: Secondary are strong slightly moveable
(fibrocartilage –v- primary hyaline cartilage)

5. What type of joint is the 1st sternocostal joint p69 Moore

- a. Secondary cartilagenous
- b. Typical synovial
- c. Primary cartilagenous
- d. Fibrous
- e. Secondary synovial

F – manubriosternal joint, intervertebral discs
F – sternocostal joints 2 to 7, costovertebral joints = synovial plane joints.
Has joint cavity, articular cartilage and articular capsule
T – costochondral joints, xyphisternal joint, epiphysis and epiphyseal plates
F – sutures of skull, radioulnar joints = syndesmosis type of fibrous joint, dental joints = gomphosis
F – ?? There are plane, hinge, pivot, saddle, condyloid, ball and socket

6. Which of the following movements are permitted at the joints named p24 Moore

- a. Plane joint – gliding/sliding movements
- b. Hinge joints- multiaxial
- c. Pivot joint – multi axial
- d. Saddle joint – multiaxial
- e. Condyloid joint – biaxial
- f. Ball and socket joint – biaxial

T – usually uniaxial, gliding or sliding movements = AC joint
F – uniaxial, permit flexion and extension only = elbow
F – uniaxial, allows rotation only = atlantoaxial joint
F – biaxial, permits movements in two different planes = first carpometacarpal joint
T – biaxial, flexion and extension, abduction and adduction, and circumduction = metacarpophalangeal joint
F – multiaxial, movement on several axis = hip joint

ANATOMY

7. Regarding muscle,

- a. epimysium covers muscle and collects fluid
- b. all skeletal muscle is a mix of red and white fibres
- c. white fibres are slow twitch and aerobic
- d. Motor unit supplies red and white muscle fibres

F – Dense layer of collagen, surrounds skeletal muscle, continuous with tendons
T – best answer
F – fast and anaerobic like white lightning!
F – a motor unit supplies a motor fibre so you won't have both types in one

8. Regarding cardiac and skeletal muscle (repeat) p31NM

- a. both striated
- b. multinucleated
- c. gap junctions

T
F – just skeletal
F – just cardiac

9. Regarding the deep fascia which is incorrect

- a. It is not present in the face
- b. It forms the retinaculae
- c. It is anchored firmly to the periostium
- d. It is well developed in the iliotibial tract
- e. It is not sensitive
- f. Can provide attachment for muscle
- g. Attaches to skin by thin fibrils

T – not present in face
T – it does
T – anchored to bone in some places
T – but unsure
F – it is VERY sensitive and is supplied by the skin
T – it can
T – it does

10. Panniculus adiposus

- a. not well developed in man
- b. is a thin layer of muscle
- c. is unlike fat
- d. contains nerves blood vessels and lymph

F – well developed in man
F – fat layer
F – it is a fat layer
T – it does

11. Regarding bone

- a. Periostium covers the articulating surface of bones
- b. Haversian canals are the smallest canals in bone
- c. Bone substance does not receive its nutrition from the periostium
- d. Periostium is not sensitive
- e. nutrient artery supplies cortical bone predominantly
- f. trabecular network in cancellous bone is capable of considerable re-arrangement with regard to fibre orientation

F – hyaline cartilage does
F – Haversian are the largest, canaliculi are smaller

F – it does, and via nutrient arteries
F – it is very sensitive
F – but needs to be checked

T – this is how bone ensures good strength in the right direction

ANATOMY

Nervous System

1. With respect to dermatomal nerve supply
p87 Moore, p 539 and p696 NM
 - a. the umbilicus is supplied by T12
F – T10
T – it does
 - b. C7 supplies the index finger
F – they are contiguous
 - c. anterior axial line divides C6 and C7
F – T4
 - d. T6 lies at level of the nipple
T – also L5 according to my version of Moore's, NOT NEW MOORE's
 - e. heel skin is supplied by S2
F – L5
 - f. Great toe is L4
2. A dermatome pg87 Moore
 - a. Is separated from a discontinuous dermatome by an axial line
T – that is the definition of an axial line
 - b. They do not overlap in the chest
F – They overlap in the chest
 - c. Is the area of skin and muscle supplied by a single spinal nerve
F – pair of spinal nerves
 - d. They do not overlap at axial lines
T – correct but not the best answer
3. Diameter of a motor nerve fibre is
 - a. 1-2 micrometere
F
 - b. 10 millimetre
F
 - c. 12-20 micrometres
T – this is correct
 - d. 5-7 millimetres
F
 - e. 20-50 micrometers
F
4. Regarding parasympathetic nervous system
 - a. supply all viscera
? – not sure
 - b. have connector cells in brainstem and sacrum
T - craniocaudal

ANATOMY

Upper Limb - Nerves

1. Of the Brachial plexus what is INCORRECT?

- a. Divisions forming behind clavicle and entering anterior Triangle
- b. Cords embrace 2nd part axillary artery
- c. Cords enter axilla anterior to axillary artery.
- d. Branches of cords surround 3rd part of axillary artery
- e. Erbs palsy results in medially rotated arm with elbow flexion
- f. Ulnar nerve palsy (probably writing as C7/T1) gives interossei weakness and numbness over radial part of hand
- g. Injury proximal to trunks will not affect supraspinatus/infraspinatus
- h. Fall onto the shoulder damages C8/T1
- i. Pec major only muscle that can test all roots
- j. suprascapular nerve is C5,6
- k. nerve to subclavius is C5, 6
- l. serratus anterior supplied by C6/7/8
- m. all branches originate from roots, divisions or cords
- n. suprascapular nerve comes off the posterior cord
- o. dorsal scapular nerve comes off C5
- p. is contained in the anterior triangle of the neck
- q. there are 7 divisions of the trunks
- r. the nerve to subclavius is the only trunk
- s. the radial nerve is derived from C7,8,T1
- t. the axillary nerve is derived from the lateral cord
- u. the roots lie between the scalene muscles

F – Divisions have nothing to do with it

T – named in relation to axillary artery

F

T – p709-717

F – c5-c6 deltoid, brachioradialis, brachialis and biceps (adducted shoulder, med rotated arm and extended elbow) p716

F – gives ulna part of hand p759

F – Suprascapular nerve comes off anterior division of superior trunk therefore injury proximal to trunks will knock them out

F

T – C5-T1

T

T

F – C5,6,7

F – The early ones come off early eg dorsal scap n comes off ventral ramus of C5

F

T

F - the roots are in the posterior triangle of the neck and leave through the gap between anterior and middle scalene p708

F - No 6

F - No it is a branch coming off a trunk

F - No it is C5-T1

F - No it is from the posterior cord

T - p 708

2. Injury to the middle trunk of the brachial plexus

- a. will mean C8 sensation will be affected
- b. will manifest in the medial cord
- c. will affect the long thoracic nerve
- d. will affect the median nerve
- e. all of the above

F - No

F - Wrong

F - Wrong. It comes off the roots

T

F

3. In the upper limb, which is CORRECT? P682

- a. Upper arm receives supply from T4
- b. upper arm and forearm supplied by C3,4,5,6,7,8,T1
- c. upper arm dermatomes are C4,5,8,T1
- d. elbow flexion is C7,8
- e. thumb dermatome is C8

F - Wrong

F - Wrong not C3

T - C4 is in neck. ?? Could this be best answer??

F - No. C5,6

F - No, C6

4. Which myotome is incorrect:

- a. C5 shoulder adduction.

F - Adduction is C6,7

5. Which movement of the arm does not involve C6

- a. Pronation
- b. Supination
- c. shoulder adduction
- d. wrist flexion
- e. wrist extension

T – C7 via pronator quadratus and pronator teres

F – C6 supinator and biceps brach

F – C6,7,8

F – C6,7,8 (FCU + FCR)

F – C6,7,8 (ECRL and brevis and ECU)

See 736, 737, 742, 793, 801, 806, 807

ANATOMY

5. Which is a branch of medial cord
- Medial pectoral nerve
 - Lateral pectoral nerve
 - Dorsal scapula
 - Axillary nerve
 - Lower subscapular
- T – C8, T1
F – lateral cord c5-c7
F – ventral ramus c5
F – terminal branch posterior cord c5,6
F – anterior branch of posterior cord P711 moores
6. Which one of the following statements regarding the dorsal scapular nerve (nerve to the rhomboids) is correct
Pg 695, 708 to 711 (good table 710)
- it is a branch of C6 from the cervical plexus
 - it passes through scalenus medius
 - it usually gives a branch to serratus anterior
 - it does not supply levator scapulae
 - it is at risk of injury as it runs superficial to the rhomboids
- F - C5 ventral ramus with common contribution from C4
T
F - no branches mentioned
F - occasionally supplies levator scapulae
F - enters deep surface of rhomboids
7. something medial nerve injury affects
- all of arm flexors
8. If the median nerve is injured at the level of the wrist, which of these actions CANNOT be performed? Pg 739 Moore
- oppose thumb to little finger
 - flex tip of thumb
- T – as below
T - flexor Pollicis Longus supplied by ant interosseous nerve from median
anterior interosseous nerve supplies pronator quadratus, flexor pollicis longus and FDP non-ulna portion. It is a branch of the MEDIAN n in the distal part of the cubital fossa)
9. Injury to wrist with impairment of Abduction of thumb, what other lesion is probable p833NM
- Inability to flex DIP joint index finger
 - Inability to flex DIP joint index finger
 - Inability to oppose thumb to little finger
- F - The innervation to FDP, FDS is Median nerve (ulna nerve to median part of FDP) BUT it is ABOVE the wrist (and lumbricals 2,3,4 + interossei with still be working from ulna n)
F
T - AbdPB and OP are both supplies by Median nerve
10. Which of the following findings makes the diagnosis of carpal tunnel syndrome UNLIKELY?
- wasted thenar muscles
 - loss of sensation over the thenar eminence
- F
T - Correct answer because palmar cutaneous branch comes off before the carpal tunnel
11. Regarding the radial nerve p710, 713, 714 p794NM
- it runs with profunda brachii in the radial groove
 - it contains fibres from C 5,6,7,8 only
 - it has no cutaneous branches in the upper arm
 - it occupies the whole length of the radial groove
 - Runs with profunda brachii in the radial groove
 - gives off the posterior interosseus in the spiral groove
 - contains only fibres of C 5,6,7
 - occupies the entire length of the radial groove
 - passes through the quadrilateral space
 - it gives off the posterior interosseous nerve in the radial groove
- T - pg 83 Lasts
F - T1 as well) Moore 713
F – supplies skin of post aspect of arm-posterior cutaneous nerve of arm- and forearm Moore 713
F – lies for most part behind medial head of triceps separating it from bone. Only at lateral edge of humerus is nerve in contact with periosteum of lower end of radial groove) pg 83 Lasts
T
F - No. comes off later
F - No gives C5-T1
?
F - No. I think it comes through triangular space
F - No. It gives off PIN at level of lateral epicondyle of the humerus

ANATOMY

12. Ulna digital nerve supply p78 LASTS (Moore page 782, 783, 774)

- a. digital nerve branches lie superficial to the superficial palmar arch F - No they lie deep to it.
- b. digital nerve lies dorsal to the digital nerve along the fingers T
- c. common digital nerves lie superficial to superficial arch F
- d. palmar nerves only supply palmar surface F
- e. digital nerves are only sensory. T
- f. digital nerve lie posterior to digital artery F - NO. it is NAV palmar to dorsal

13. Dorsal scapular nerve

- a. Supplies deep part of rhomboids T - pg 695 Moore (and levator scapulae)
- b. Branch of cervical plexus – C4 F - (kinda true but not best answer – arises chiefly from post aspect of ventral ramus C5 with frequent contribution from C4) pg 708-moore

14. What is supplied by PIN

(continuation of deep branch of radial nerve)?

- a. Extensor carpi radialis longus F – radial nerve branch above elbow, before PIN given off pg 99 lasts, pg 742 Moore
- b. Anconeus F – radial nerve branch that leaves trunk in radial groove)
- c. Extensor carpi ulnaris T

15. Which nerve does not pass through the muscle shown

- a. radial nerve and brachioradialis F - doesn't go through. It runs btwn brachialis and brachioradialis
- b. posterior interosseous nerve and supinator T - It does
- c. musculocutaneous and coracobrachialis T - It does
- d. ulna nerve and FDS F - it passes through FCU
- e. median nerve and pronator teres T - Yes.

16. Regarding the cutaneous nerve supply to arm and forearm (moore 682)

- a. C3/4 supply pectoral and upper shoulder F - No. C3/C4 supply the neck. The pec is supplied by T1-T5
- b. Branches of the brachial plexus supply arm and forearm T
- c. C4/5/6 T1 supply the majority of the arm F - Not really. C7 and C8 supply a lot

17. Which is true concerning digital nerves?

- a. arteries are superficial to them on the palm of the hand F - No NAV from palmar to dorsal
- b. they are purely sensory T

18. Which muscle is supplied by the posterior interosseous nerve in the cubital fossa p742

- a. Extensor carpi radialis longus F - No radial n
- b. Anconeus F - No radial n
- c. Extensor carpi radialis brevis F - ?radial n
- d. Extensor digitorum T - Yes but ?in cubital fossa
- e. Supinator F - By deep branch of radial n accord to Moore BUT by PIN accord to LASTS.... le CORRECT BY LASTS

ANATOMY

Upper Limb - Muscles

19. Which muscle initiates shoulder abduction
- a. the multipennate centre of deltoid F
 - b. the anterior and posterior fibres of deltoid F
 - c. supraspinatus T – first 10degrees but deltoid is chief abductor
 - d. teres minor F – aids lat rot'n
20. Which causes lateral rotation of the shoulder ? p792 table 6.13
- a. Subscapularis F
 - b. teres minor T- from BLITZ
 - c. teres major F
 - d. deltoid T - YES deltoid and teres minor are synergists (infraspinatus is main one)
 - e. serratus anterior F
 - f. Is conducted by muscles supplied by C5 T – but C5 and C6(infrspin, teres, deltoid)
 - g. Is associated with shoulder adduction F – abduction
21. What stabilises the abducted shoulder ? p789
- a. Capsule F
 - b. long head of triceps T – from BLITZ
 - c. glenohumeral ligament F
 - d. coraco-acromial arch F
 - e. gleno-humeral joint F
 - f. Is largely due to the glenoid labrum F
 - g. Is mainly due to the glenohumeral ligaments F
 - h. Is due mainly to musculotendinous cuff F - UNSURE but blitz says triceps
22. Rotator cuff includes all the following EXCEPT p698
- a. Subscapularis F
 - b. teres major T - All the rest are rotator cuff muscles
 - c. teres minor F
 - d. infraspinatus F
 - e. supraspinatus F
23. Which muscles directly attach the pectoral girdle (scapula / clavicle) to the thorax
- a. pectoralis major T – Prox to clavicle and sternum and insertion to humerus
 - b. pectoralis minor T
 - c. subclavius T
24. Which pairing is correct regarding scapula movement: CHECK
- a. Protraction – serratus anterior T - p752 Moore
 - b. Rhomboids – depression F - Retracts scapula and rotates it to depress the glenoid cavity
 - c. Teres minor - arm lateral rotation F - Serratus posterior
25. Latimus dorsi p692
- a. arises from spinous processes of T2 to L5 F – T7-T12 pg 692 Moore
 - b. externally rotates humerus F – medially rotates humerus – anterior attachment to humerus) pg 691 moore
 - c. inserts into lesser tuberosity of humerus F – floor of intertubercular groove of humerus) pg 691 Moore
 - d. spirals around the upper border of teres major F - spirals around lower border of teres major
 - e. arise from the iliac crest T
26. Teres major table 6.2 p691
- a. forms the lateral border of the triangular space F - forms upper border
 - b. largely acts to extend the arm F - No adducts and medially rotates
 - c. forms the lower border of the quadrilateral space T
 - d. is supplied by the axillary nerve F - No. C6.C7 lower subscapular nerve
 - e. arises from the medial border of the scapula F - No. From dorsal surface of inferior angle of scapula

ANATOMY

27. The deltoid p760 NM

- a. is supplied by the axillary nerve
- b. has a multipennate arrangement for maximal range of movement
- c. inserts into the bicipital groove
- d. Is unipennate
- e. Origin
- f. Innervation

T - p711, 691 Moore

T - There is a unipennate ant and post part and a ,multipennate middle part p695

F - no, proximal attachment is lateral third of clavicle, acromion and scapula, and distal end is deltoid tuberosity of humerus p691

F - multipennate in the middle and unipennate posteriorly and anteriorly
From deltoid tubercle on humerus to lateral portion clavicle + spine of scapula and acromion
Axillary n (C5,6)

28. Regarding the subclavius; which is incorrect

- a. inserts into the first costochondral joint
- b. is important in stabilising the clavicle with shoulder 1. movement
- c. supplied by the medial pectoral nerve

T

T

F - by n to subclavius

29. Serratus anterior (pg 689)

- a. Protracts scapula
- b. Formed by 6 slips
- c. Supplied by thoracodorsal nerve
- d. Medially rotates the shoulder
- e. is unipennate
- f. Arises from the upper 6 ribs
- g. is supplied by the thoracodorsal artery

T - pg 688 Moore

False - has muscular slips ? how many - 8) p688

F - long thoracic nerve supplies serratus anterior, thoracodorsal supplies lat dorsi

T - rotates scapula

F - has fleshy slips

F - arises from upper 1-8th ribs

F - artery is superior thoracic

30. Pectoralis major (pg 687, 752 moore)

- a. Only muscle that can be used to test all levels of brachial plexus
- b. Adducts arms
- c. Attaches to a tuberosity

T

T

F - proximal attachment - 2 heads - clavicular head, ant surface of medial half of clavicle and Sternocostal head, ant surface of sternum, sup 6 costal cartilages, aponeurosis of ext oblique muscle - distal attachment + lateral lip of intertubercular groove of humerus

T - pg 80 moore - when breathing forceful and deep

F - adducts arm and medial rotator of humerus

F - attaches proximally to costal cartilages

F - it is supplied by all the ROOTS not branches p68

- d. Is accessory muscle of respiration
- e. Abducts arm
- f. Costal part has bone attachments
- g. supplied by all branches of the brachial plexus
- h. is quadrilateral in shape
- i. inserts to the medial lip of bicipital groove

F - More triangular in shape

F - Proximal: Clavicular head: anterior surface of medial 1/2 of clavicle, Sternocostal head: anterior surface of sternum, superior six costal cartilages, aponeurosis of ext oblique.

Distal: Intertubercular groove of humerus

T - YES C5-T1

F - No I don't think so. I think it passes over the short head of biceps

F - No the clavicular head arises from the anterior surface of the clavicle

- j. is supplied by all 5 segments of the brachial plexus
- k. lies between biceps and the humeral shaft
- l. has a head arising from posterior surface clavicle

ANATOMY

31. Regarding the origins of Triceps Brachii, all are true EXCEPT

- a. all are below the radial groove and deltoid ridge
- b. it has a curved origin

pg 723 moore – origin long head infraglenoid tubercle of scapula, lateral head posterior surface of humerus, superior to radial groove, medial head post surface of humerus, inf to radial groove)
who knows what this meant??

32. Triceps

- a. blood supply is posterior interosseus artery
- b. is supplied by the radial nerve
- c. only has two heads
- d. stabilises the shoulder in adduction
- e. often has it's nerve supply compromised by humeral shaft fractures

F - No. p723
T
F
F - IN ABDUCTION

F - Not likely to paralyse triceps because nerves leave high

33. Which pair supply Biceps femoris?

- a. Obturator and Tibial nerve
- b. Femoral and obturator nerve
- c. Tibial and common peroneal nerve

F
F
T - long head tibial n, short head common fibular nerve
Long head attaches to ischial tuberosity and short head attaches to linea aspera and lateral supracondylar line and both go to lateral tibial condyle via a tendon which is split into two by the fibular collateral ligament

- d. Common peroneal and femoral nerve
- e. Tibial and femoral nerve

F
F

34. Which one of the following statements regarding the biceps muscle of the arm is correct – Pg 722 table 6.5

- a. the long head arises from the infraglenoid tubercle
- b. the short head arises from the acromion process
- c. it is supplied by the musculocutaneous nerve
- d. it inserts into the bicipital tuberosity of the ulna
- e. it is a powerful pronator of the forearm
- f. the two heads merge in the upper arm
- g. is supplied by the median nerve
- h. is a supinator of the forearm
- i. the short head arises from the acromion
- j. the long head arises from the greater tuberosity of the humerus

F - from supraglenoid tubercle of scapula
F - from coracoid process of scapula
T - C5, C6
F - tuberosity of radius and fascia of forearm via bicipital aponeurosis
F - Supinates and flexes forearm
F
F - No musculocut nerve
T
F - No from tip of coracoid process of the scapula

F - No from supraglenoid tubercle of scapula
NOTE: Long head of biceps brachii runs over superior humerus under the transverse humeral ligament and attaching to supraglenoid tubercle. Plays a role in keeping humerus from moving superiorly, so query in abduction? Couldn't find this in textbook but asked Parko and that's what he thought.

35. Regarding brachialis; which is correct pg 722, 723 Moores

- a. innervated by the radial nerve
- b. inserts upper 1/3 of humerus
- c. inserts coronoid process of ulna
- d. arises from the upper third of the humerus
- e. inserts into the coronoid process and tuberosity of ulna
- f. is supplied exclusively by the radial nerve
- g. is a powerful supinator of the forearm
- h. adducts the arm

F - innervated by musculocutaneous nerve)
F - distal 1/2 of anterior humerus)
T - and tuberosity of ulna)
F - origin distal half of anterior of humerus
T
F - Musculocutaneous N
F - flexes forearm
F

36. Pronator teres

- a. Pure pronator
- b. Attaches to maximal concavity of radius
- c. Ulnar nerve goes between 2 heads

F - pronator of forearm and flexor of elbow joint pg 737 moore
proximal attachment medial epicondyle of humerus and coronoid process of ulna to lateral surface of radius
F - attaches to radius most lateral point, which occurs approx in middle of its curved body)
F - No between two heads of FCU

ANATOMY

37. Which is false with respect to the lateral intermuscular septum

- a. Origin of medial head of triceps
- b. pierced by anterior branch profunda brachii artery
- c. pierced by posterior branch profunda brachii artery
- d. brachioradialis is anterior

?F

?T

NOTE: c, e is true of lateral intermuscular septum – is the attachment of triceps behind but not sure if medial head and is pierced by profunda brachii artery but don't know whether post/ant)

- e. medial head of triceps arises from it.
- f. it has brachioradialis as an anterior relation
- g. pierced by the radial nerve
- h. it extends along the lateral supracondylar line

T

T

T

T

38. Regarding flexor digitorum superficialis

- a. It arises from the coronoid process and sublime tubercle
- b. The tendons of the little/index fingers travel superior to those of the middle/ring fingers

T - Ulna head Arises from coronoid process. ,medial epicondyle of humerus (CFO), ulnar collateral lig., Radial head superior half of anterior border of radius

F - 3,4 superficially and 2,5 deeper therefore this is wrong

39. Flexor digitorum profundus Moore 737

- a. assists pronator quadratus in pronation
- b. is supplied 10 % of the time purely by the median nerve
- c. is the strongest muscle of the forearm
- d. partly inserts into the flexor retinaculum
- e. has it's action enhanced by wrist flexion
- f. Attachment olecranon and anterior surface of radius
- g. it is the strongest forearm muscle

F - No PT

F

T - ?YES

F - No. Palmaris longus

F - No. Strengthened in extension

F - No. It attaches to the olecranon and upper ¾ of the medial border of the ULNA + IO membrane

T - Straight from Last's p 64

40. Flexor pollicis longus is

- a. unipennate muscle with fibres inserting into its radial side

T - but the base of the distal phalanx is the insertion – useful in distinguishing from flexor carpi radialis) lasts 91

NOTE: Long flexor of thumb, only flexor of interphalangeal joint of thumb, also flexes MCP and carpometacarpal joint of thumb and wrist.

41. Forearm muscles p742, 736

- a. pronator teres is the most powerful pronator
- b. palmaris longus is absent in 30 % of cases
- c. FPL is unipennate
- d. FCR runs over whole length of flexor retinaculum
- e. pronator quadratus arises from lower radius

F - No pronator quad is strongest pronator

F - No in 14% of cases

T

F - No it runs over the distal half of it and palmar aponeurosis

F - No arises ulna INSERTS radius

42. Deepest mid-forearm structure is

- a. FPL
- b. median nerve
- c. basilic vein
- d. radial artery
- e. ulnar nerve

T

F - Descends between FDS and FDP

F - No is only in upper arm and is superficial

F - No p750

F - No runs FCU and FDS

ANATOMY

43. Lumbricals

- a. are all supplied by ulnar nerve
- b. form proprioceptive bridges between flexors and extensors
- c. aid in flexion of the terminal phalanx
- d. oppose the actions of the interossei
- e. arise from flexor digitorum superficialis
- f. all are supplied by the ulnar nerve
- g. form a proprioceptive bridge between flexors and extensors

F - ulna and median

T

F - they flex at MCP and extend IPJ pg 770 Moore, confusing in pg 120 Lasts

F - same action

F - from 4 profundus tendons - lasts pg 112

F - 2 ulnar lumbricals supplied by ulna and 2 radial lumbricals supplied by median nerve

T - pg 120 Lasts

44. Regarding the interossei of the hand, which is INCORRECT (Moore 770) pg 832, 833NM

- a. arise from flexor retinaculum
- b. palmar cause abduction
- c. palmar have two heads of origin
- d. innervated by deep branch of ulnar nerve
- e. combined palmar and dorsal causes abduction
- f. when act together, flex the MCPJ
- g. They arise from the tendons of Flexor digitorum Superficialis
- h. Palmar interossei have two heads
- i. They abduct the fingers
- j. They are chiefly responsible for flexion of MCP joints & extension of DIP joints
- k. insert into proximal phalanx
- l. insert into dorsal expansion
- m. when act together, the dominant action is adduction

F - No. From MC's

F - No PAD DAB

F - No palmar are unipennate, dorsal Bipennate

T

F - No assist lumbricals with flexion. PAD DAB

T - Yes and extend the IPJ

F - No arise from the MC's (lumbricals arise from tendons of FDP not FDS)

F - NO. Dorsal are bipennate

T -. The dorsal ones do

F - No. In conjunction with the lumbricals they do this ie NOT CHIEFLY

T - they do AND dorsal/extensor expansions

T - they do AND proximal phalanx AKA extensor expansion

F - Dominant action when together with each other plus lumbricals is MCP flexion and IP ext

45. Palmar interossei

- a. have two heads
- b. abduct the fingers
- c. chiefly responsible for flexion MCPJ and extension PIPJ

F - No they are unipennate, dorsal are bipennate

F - No PAD

F - No. This is lumbricals p 833 M

ANATOMY

Upper Limb – Fascia and spaces

46. Which does not pass through the clavipectoral fascia
- a. Lymphatics
 - b. cephalic vein
 - c. medial pectoral nerve
 - d. thoracoacromial artery
 - e. lateral pectoral nerve
- F – In
F – In
T – it does not pass through
F – Out
F – out
2 in 2 out: in cephalic vein, lymphatics, OUT lateral pectoral nerve and thoracoacromial artery. However, part of clavipectoral fascia superior to pec minor – costocoracoid membrane – pierce by lateral pectoral nerve
47. Which is not true regarding the quadrangular and triangular spaces (pg 65 Lasts)
- a. both share the same medial border
 - b. the circumflex scapular artery passes through the quadrangular space
 - c. long head of triceps forms a border of both spaces
 - d. the triangular space transmits the radial nerve
 - e. teres minor does not form a boundary of either space
 - f. circumflex humeral artery thru triangular space
 - g. both share the same medial border
 - h. circumflex humeral artery passes through quadrilateral
 - i. long head of triceps borders both spaces
 - j. Triangular space admits the radial nerve
 - k. teres minor does not form a border to either space
- T - (long head of triceps)
F - (correct for question – post circumflex humeral artery)
T - (medial border)
T
? Viewed from behind – teres minor bounds the quadrangular space superiorly)
F
T
T
T
T
F - It does from a triangle superior border from the posterior view (!?)
48. Regarding the hand what is INCORRECT
- a. 3 palmar spaces
 - b. septum between midpalmar and thenar spaces
 - c. deep transverse ligaments
 - d. relationship between digital nerves and arteries à digital nerves palmar to arteries in midpalmar space or similar
- F – 2 palmar spaces – midpalmar and thenar space – p 765 Moore)
? - formed by lateral border of palmar aponeurosis to 3rd metacarpal p 765 Moore
F
T
49. In the cubital fossa which of the following is lateral to the radial artery
- a. brachial artery
 - b. median nerve
 - c. biceps tendon
 - d. posterior interosseus nerve
- F
F
F
T
50. In the cubital fossa p731
- a. nerve to pronator teres is derived from the radial nerve
 - b. radial nerve is medial to biceps tendon
 - c. the ulna artery lies superficial to the pronator teres
 - d. radial artery originates from brachial artery
 - e. the median nerve lies lateral to the brachial artery
 - f. posterior interosseous nerve lies lateral to radial nerve
 - g. medial cutaneous nerve to forearm lies medial to basilic
- F
F
F
T
F
T
F - It does run with the basilic but I think it is lateral to it

ANATOMY

51. Which is FALSE regarding the carpal tunnel,

p772,775 Moore p836,840NM

- Median nerve and flexor pollicis longus are superficial
- Flexor pollicis longus has it's own sheath
- FDS and FDP tendons lie within the same sheath at the tunnel
- FCR tendon may pierce the flexor retinaculum
- FCU lies within the canal of Guyon
- tendon of FPL and median nerve lie in superficial compartment
- eight flexor tendons share a common sheath
- tendon of FPL and median nerve lie in superficial compartment
- eight flexor tendons share a common sheath
- FPL in same sheath
- median nerve runs superiorly

T

T

T

T

F - it holds ulna art and nerve only

F

T - They sit in a common flexor sheath

F - No. Median n runs superficial and FPL below it

T - The tendons of FDS and FDP sit in a *common flexor sheath* .

F - As what? FPL is in its OWN sheath

T - superior to FPL

52. Midpalmar space NMP829

- extends into lumbrical canals distally
- is continuous with common carpal space
- extends proximally to the origin of FDS
- lumbrical tunnels
- common synovial sheaths

T - Prob Yes

F - probably false

F

F - It runs above the lumbricals so don't think so

? - It runs below the common synovial sheath (I think they mean common flexor sheath) so don't think so. BUT BLITZ HAS THIS ONE ie would have a fucking clue

53. The anatomical snuff box p780

- has trapezoid palpable at it's base
- has EPL on it's ulna side
- contains the posterior interosseus artery
- lies between EPL and APL
- is most obvious with the thumb abducted
- wrong tendons as boundary option
- Branches of the radial nerve can be palpated over the tendons
- The cephalic vein begins in the roof
- The bones palpable are the radial styloid, scaphoid, trapezium and the base of the first metacarpal
- The tendons of abductor pollicis longus and extensor pollicis longus form one boundary
- On one side is extensor pollicis brevis and on the other are EPL and APB.
- A cutaneous branch of the radial nerve is palpable in the snuffbox.
- Cephalic vein is in the floor
- Radial artery is palpable in it floor
- Scaphoid, trapezium, 1st MC + radial styloid are palpable

F -No. Scaphoid and trapezium

T - (EPB and AbdPL on radial side)

F - No contains the radial artery

T- yes but EPB is closer of the radial side

F - No. Extended and abducted

Anatomical snuff box bound by APL and EPB anteriorly and EPL posteriorly pg 749 Moore

F - because you can't actually feel it

T - YES accord to LASTS p 68

T

F - APL and EPB form one boundary and the EPL forms the other

F - EPB and APL on one side and EPL on the other

F - It lies in the roof but good luck if you can actually palpate it...

F - in the roof

T

T

ANATOMY

Upper Limb – Vessels

54. Regarding lymphatic drainage of the arm p685

- a. superficial lymphatics follow volar aspect
- b. superficial travel with arteries
- c. deep travel with veins
- d. hand drains into apical LN in axilla

?
F – with veins
T
T

55. Which of the following is not a branch of the axillary artery

- a. Medial thoracic
- b. Thoraco-acromial
- c. superior thoracic
- d. posterior circumflex humeral
- e. dorsal scapular
- f. circumflex scapula
- g. Lateral thoracic

F
F - 2nd part
F - 1st part
F - 3rd part
T - from subclavian p1029
F - Is a branch of the third part
T

NOTE:

1. 1st – superior thoracic
2. 2nd thoracoacromial and lat thoracic
3. 3rd part – supra scap and ant + post circumflex humeral

56. Regarding the radial artery, which is true? Pg 751 Moore

- a. it is medial to the radial nerve in the forearm
- b. it goes under supinator at the elbow goes under BR
- c. it is medial to the brachial artery in the antecubital fossa
- d. in its middle third has the radial nerve medial to it
- e. lies on brachioradialis in the upper arm
- f. passes between the tendons of EPB and APL
- g. forms both the anterior and posterior carpal arches
- h. Largest branch of brachial a.
- i. Lateral to radial n.

T – brachial artery splits into Y shape making radial and ulnar artery and the nerves lie outside the arteries ie never cross. Therefore radial nerve is lateral to radial artery and ulnar nerve is medial to ulnar artery in anatomical position
F - above
F – lateral
F - No. It is medial to it
F - No. Deep to BR
F - Not between them but under both of them
T
F - Who the fuck knows
F - it lies medial to it

57. The brachial artery p725

- a. is a continuation of the subclavian artery
- b. runs parallel but deep to the profunda brachii
- c. is crossed posteriorly by the median nerve
- d. lies anterior to the cephalic vein
- e. lies lateral to the brachial plexus

T - sort of. BLITZ SAYS YES BUT AXILLARY COMES FIRST....
F - It shouldn't be deep to profunda which is deep....
F - No Anteriorly
F
T - YES accord to BLITZ

58. Which is not a branch of the axillary artery ?

59. The axillary artery p702, 699

- a. arises from the vertebral artery
- b. has no branches in its 3rd part
- c. is clasped in its 3rd part by the cords of the brachial plexus
- d. supplies the pectoral muscles via the superior thoracic artery
- e. is divided into 3 parts by teres minor

F - No from the subclavian
F - No. It has three (circumflex scapular, posterior circumflex scapular, Thoracodorsal)
F - No. 2nd part is clasped by the cords
T - ?YES. Superior thoracic comes off the first part and supplies 1st and second IC space ??pec muscles
F - No. By Pec minor

ANATOMY

60. In the forearm the ulna artery p759, 760, p814, 815NM

- a. has the ulna nerve lying medial to it
- b. has the ulna nerve lying lateral to it
- c. supplies deep palmar arch
- d. has common interosseus as it's major branch
- e. pulsation felt radial to FCU
- f. Ulnar nerve lateral to the artery in the forearm

T - (** same goes for medial nerve lying medial to rA)

F - No. Medial to it

F - No. Superficial palmar arch which does anastomose with the deep palmar arch...

T – first branch of the ulnar A which divides into ant and post inteross. Branches almost immed into these.

T

F - medial

61. Regarding lymphatic drainage of the arm p750NM

- a. superficial lymphatics follow volar aspect
- b. superficial travel with arteries
- c. deep travel with veins
- d. hand drains into apical lymph nodes in axilla

F – but most do

F - No. with superficial v's

T - YES ?best answer

F - most do but not all

ANATOMY

Upper Limb - Joints

62. Regarding the acromio-clavicular joint, which is incorrect

- a. The coracoclavicular ligament is not important in joint stability
- b. It is a synovial joint
- c. It is supplied by the suprascapular nerve
- d. Movement is passive
- e. There is a thickening of fibres on top which constitutes the acromioclavicular ligament
- f. is a complex joint with fibrocartilage intracapsular disc
- g. Moved by subclavius
- h. Coracoclavicular ligament is not important in stability

F – it maintains it's integrity
T – plane type
T – supplied by suprascap nerve
T

T

T

T - Kinda because it anchors AND depresses it

F - the coracoclavicular (conoid and trapezoid portions) are more NB than AC

lig

- i. AC ligament is important in stability
- j. coraco-clavicular ligament is not a stabilising factor
- k. all movements are passive
- l. is innervated by the cervical plexus supraclavicular, lateral pectoral and axillary nerves – brachial plexus

F - Not hugely

F - CC lig anchors the clavicle to the coracoid process

T - they are all passive

T

P784-787 p852NM

63. The sternoclavicular joint p781,711 table 6.4

- a. is supplied by nerve branches C8 and T1
- b. contains two fibrocartilaginous discs
- c. is the fulcrum of movements of the sterno-clavicular joint
- d. is mostly stabilised by the costoclavicular ligament
- e. communicates with the manubriosternal joint

F - Incorrect C456

F - No. Has one disc and two compartments

F

T - There are three others also anterior and posterior SC ligaments and interclavicular ligament

F

ANATOMY

Upper Limb - Bones

64. Loss of Greater tuberosity leads to loss of which movement ?
- a. Abduction and lateral rotation T
 - b. Adduction and medial rotation F
 - c. Abduction and medial rotation F
 - d. Lateral rotation F
 - e. Adduction and lateral rotation F
65. Humerus p788NM
- a. coracobrachialis attaches to ? From anterior part of mid humerus to coracoid process of scapula
 - b. pectoralis minor attaches to ? From ribs 3-5 to coracoid process
66. The scaphoid articulates with all the following except (diagram pg 675)
- a. Trapezium F
 - b. Triquetral F
 - c. Trapezoid F
 - d. Lunate F
 - e. hamate T
67. The flexor retinaculum attaches to all bones except
- a. Trapezium F
 - b. Hamate F
 - c. Pisiform F
 - d. Scaphoid F
 - e. capitate T
68. Which of the following bones is attached to flexor and extensor retinaculum
- a. Scaphoid F
 - b. Hamate F
 - c. pisiform T - Accord to Blitz
 - d. trapezium F
 - e. triquetral F

ANATOMY

f.

Lower Limb – Nerves

1. By Hilton's law which nerve does not supply the hip joint
P613 Moore p681 NM, p125 Last's
 - a. nerve to rectus femoris F
 - b. obturator nerve F
 - c. femoral nerve F
 - d. sciatic nerve F
 - e. gluteal nerve T - doesn't cross joint but does supply hip joint
 - f. inferior gluteal T

2. Regarding femoral nerve p 529, 530 Moore
 - a. Deep and superficial branches of nerve separated by lateral femoral circumflex artery T
 - b. Nerve runs between pectinues and adductor magnus ?
 - c. Runs in adductor canal F - Saph n (continuation of fem n) does
 - d. Origin of nerve is anterior divisions of anterior rami F - Posterior divisions of rami of L2,3,4 (Obturator n is anterior div's of L234)

3. The deep peroneal nerve travels through the lower leg with which artery p 579 Moore
 - a. Posterior tibial F
 - b. Common peroneal F
 - c. Deep peroneal F
 - d. Anterior tibial T

4. Which is not a branch of the common peroneal nerve p582 Moore
 - a. superior genicular nerve F
 - b. lateral cutaneous nerve of the calf F
 - c. inferior genicular nerve F
 - d. recurrent genicular F
 - e. sural nerve F

?? no correct answer. Could say that (e) is best answer since it also receives supply from tibial n.
FROM Lasts p319: Branches of common fibular before it splits into superficial and deep are: Superior and inferior genicular nerves, recurrent genicular, Lateral cutaneous nerve of calf, Sural communicating nerve

5. With regard to cutaneous innervation of the lower limb p 529, 602 Moore
 - a. Branches of the tibial nerve supply most of the dorsum of the foot F - this is largely by superficial fibular nerve going OVER the extensor retinaculum
 - b. The medial plantar nerve supplies a greater area than the lateral T - Medial plantar nerve supplies a greater portion of the sole than does the lateral
 - c. Deep peroneal nerve supplies the 3rd digital cleft F - The 1st web space
 - d. Sural nerve supplies the medial malleolus F - Saphenous nerve
 - e. Superficial peroneal nerve supplies the 1st inter-digital cleft F - deep fib does this

ANATOMY

6. The dermatome supplying the great toe is usually
- a. L3 F
 - b. S1 F
 - c. L5 T – 529 Moore, 539 NM
 - d. S2 F
 - e. L4 F
7. The correct dermatome for the little toe p529 Moore, 539 NM
- a. S1 T
 - b. L5 F
 - c. S2 F
 - d. S4 F
6. Which is the CORRECT myotome p 539 NM
- a. S1 supplies hip abduction T – as well as L5
 - b. L3,4 causes knee extension T – L3/4 kick the door
 - c. L5 supplies skin of dorsal 1st web space F – L5 is the great toe
 - d. plantar flexion L4,5 F – S1/2 plantarflex, L4/5 dorsiflex
 - e. shoulder abduction C5,6 T – it does Deltoid from axillary n c5,c6, supraspinatus from suprascapular n mainly c5
 - f. ankle eversion L 4 F – inversion
 - g. elbow extension C7,8 T – via radial nerve
 - h. opponens pollicis C8 T – via recurrent branch of the median nerve
 - i. Muscle/movement supplied by single peripheral nerve F – by a single or pair of SPINAL nerves
 - j. Knee is flexion is L3,4 F – L5, S1 by the hamstrings p563. L3/4 kick the door p531
 - k. Shoulder adduction is C5 F – C6/7/8 p791, 688, 691
 - l. Foot inversion is L4 T – correct p577
 - m. Elbow extension C6/7 F – C7/8 shut the gate
 - n. C6, 7 Wrist flexion/extension T
 - o. C7 adduction and medial rotation T
 - p. C7,8 finger flexion ext of fingers, extension of elbow T
 - q. T1 – adduction abduction of fingers T

ANATOMY

Lower limb – Muscles

8. Which of the following does not insert into the greater Trochanter p551 Moore
- a. Gluteus maximus T
 - b. Piriformis F
 - c. Obturator internus F
 - d. Superior gemelli F
 - e. Obturator externus F
9. Gluteus maximus p551 Moore, p 608NM
- a. is the deepest of the gluteal muscles F - it is most superficial
 - b. is supplied by L5, S1 F - Sort of, by L5, S1, S2 (could be correct too)
 - c. medially rotates and extends the hip F - It does extend the thigh but doesn't medially rotate
 - d. forms the skin crease of the gluteal fold T
10. Popliteus p588, 589 Moore, 649NM
- a. does not attach to lateral meniscus F - It goes from lateral surface of lateral femoral condyle AND lateral meniscus to posterior surface of tibia superior to soleal line
? p621 Moore
 - b. causes lateral rotation of femur on fixed tibia T - It rotates femur laterally 5 degrees on a fixed tibia to unlock the joint (also rotates tibia medially when limb is unplanted) p588 Moores
 - c. arise from the tibia above the condyles F - below the condyles
 - d. Is part of the capsule of the knee ? - passes through the capsule but is adherent to the capsule p588 Moores
 - e. Is supplied by the tibial nerve T - L4, L5 S1
 - f. slopes upwards and medially F - up and laterally
 - g. inserts into the lateral meniscus T
 - h. acts to lock the knee in full extension F - to unlock
 - i. is innervated by a branch of the common peroneal nerve F - tibial nerve
 - j. is a weak flexor of the knee T - And it unlocks knee and rotates femur 5 degrees on fixed tibia and rotates tibia on unplanted limbs
 - k. intracapsular F - Sort of half and half since it inserts in lateral meniscus and lateral femoral condyle in the joint capsule and then emerges from the capsule and attaches to the tibia medially superior to soleal line

ANATOMY

11. Lateral compartment of leg

(P582 to 585 and 577tbl Moore, p 645, 640 NM)

- a. Weak dorsiflexors
- b. Go over peroneal trochlea
- c. Longus, brevis, deep peroneal nerve all in same Compartment
- d. contains peroneus longus, brevis and tertius
- e. the muscles are supplied by the deep fibular nerve
- f. the fibularis longus muscle arises only from the fibula
- g. the fibular muscle tendons are bound at the lateral malleolus by the inferior peroneal retinaculum
- h. the fibular muscle tendons share a common synovial sheath at the lateral malleolus
- i. fibularis longus helps steady the leg on the foot when a person stands on one leg
- j. contains the deep peroneal nerve
- k. peroneus longus grooves the bone
- l. brevis goes above trochanter on lateral surface of calcaneum
- m. PB and PL run in the same synovial sheath under the inferior retinaculum
- n. brevis goes above the lateral malleolus
- o. the muscles are supplied by the deep peroneal nerve
- p. contains peroneus longus/brevis and deep peroneal nerve
- q. Fibularis longus grooves lateral malleolus
- r. Fib. Brevis goes over trochlear
- s. Fibularis longus only attaches to fibula
- t. Fibularis longus and brevis share common synovial sheath
- u. the peroneus longus arises only from the fibula
- v. the blood supply is anterior tibial
- w. peroneal muscle tendons share same muscle sheath at the lateral malleolus
- x. peroneal muscle tendons are bound at the lateral malleolus by the inferior peroneal retinaculum

F - Weak plantar flexion NM p 642 – mainly everts
F - Don't even know what the fuck they are talking about

F - FL, FB and SUPERFICIAL Fib N in lateral compartment p585 Moore
F - tertius in ant compartment
F - supplies ant leg muscles, dorsum of foot and skin of first interdigital cleft
T - origin head of fibular, insertion base of 1st metatarsal and medial cuneiform

F - tendons of fibularis longus and brevis are bound down at the malleolus by the SUPERIOR fibular retinaculum

T - but not the best answer as sheath encloses all of fibularis longus and brevis

T - "when a person stands on one leg fibularis longus helps steady the leg on the foot"

F - superficial

F - lies superficial to brevis, so brevis grooves the bone

T - LASTS 191

T - Bounded by superior and inf fibular retinaculum

F - inferior to it

F - Superficial

F - contains superficial fibular nerve

F - brevis does since it is close to the bone but longus runs above it

T - and longus goes UNDER it

T - head and superior 2/3rds

F - They do above the superior fibular retinaculum and then they divide

T - both longus and brevis only arise from the fibula

F - Sort of perforators from anterior tibial AND from fibular artery (but doesn't run in lateral compartment)

F - Split at the fibular retinaculum

F - The peroneal muscle tendons do go in a common sheath and are bounded by the inferior peritoneal retinaculum but I think it is further inferior to the lateral malleolus at the fibular trochlea

12. Which muscle inserts into both the tibia and fibula p 577 Moore

- a. tibialis anterior
- b. tibialis posterior p 589 Moore
- c. Extensor digitorum longus
- d. Flexor digitorum longus
- e. Peroneus
- f. Extensor hallucis longus

F - from fibula and IO membrane

T - p637, 649 Moore

T

F - fibula and IO membrane

F

F - from fibula and IO membrane

13. What muscle causes dorsiflexion and inversion of the ankle

- a. tibialis anterior
- b. tibialis posterior
- c. extensor hallucis longus
- d. peroneus tertius

T - p640NM

F - plantar flexion and inversion

F - Dorsiflexion of great toe and dorsiflexion

F - dorsiflexion and eversion

14. Which muscle causes inversion of the foot? 577 589 moore

- a. TA
- b. Peroneus tertius
- c. TP
- d. Peroneus Brevis
- e. EHB

T - DF + inv

F - DF + Ever

T - plantar flex + inv

F - evert + PF

F - Flex toe

ANATOMY

15. Muscle of the lower leg which can initiate dorsiflexion and inversion p640NM

- a. tibialis posterior
- b. tibialis anterior
- c. peroneus tertius
- d. peroneus longus
- e. peroneus brevis

F - Plantar flex and invert
T
F - Dorsiflex + evert
F - Everts and weakly plantar flexes
F - Everts and weakly plantar flexes

16. Tibialis anterior p640NM

- a. dorsiflexes and everts the foot
- b. arises from the upper two thirds of the fibula membrane
- c. inserts into the medial cuneiform
- d. shares it's site of insertion with peroneus tertius
- e. is supplied by L5, S1

F - DF and invert
F - lateral condyle + superior 1/2 of lateral surface of tib and interosseous

T - and 1st MT
F - It goes to dorsum of base of 5th
F - L4, L5 (deep fibular nerve)

17. Regarding foot interossei p596 Moore, p658NM

- a. Palmer/sole side have 2 heads
- b. Axis is 3rd metatarsal
- c. When act together flex MTP and extend IP
- d. Supplied by medial planter nerve

F - Dorsal are bipennate (DAB ie they abduct andBipennate)
F - 2nd toe (Lasts p148)
F - Lasts says YES. Moore's says No: Flex MTP and Add/Abd
F -by lateral planter nerve

18. Which is true of the layers of the foot? Lasts 197

- a. the plantar aponeurosis can be regarded as the 5th layer
- b. the 2nd layer comprises the long tendons and the lumbricals
- c. neurovascular bundle lies between layer 1 and 2
- d. First layer contains AbH, FDB and AbDM
- e. Third layer contains plantar and dorsal interossei
- f. Long tendons and their connections are in second layer
- g. Flexor digitorum brevis is in second layer
- h. part of the transverse arch is not in the 3rd layer
- i. flexor hallucis brevis is not in the third layer
- j. adductor hallucis is not in the third layer
- k. flexor digiti minimi brevis is not in the third layer
- l. peroneus longus is not in the third layer
- m. long flexor tendons lie in the 2nd layer
- n. plantar aponeurosis is in the 4th layer
- o. it consists of three layers

F - aponeurosis is superficial to 1st layer
T - p198 Lasts
T - between 1 and 2, and 3 and 4 pg 596 Moore
T
F - 4th layer
T - p199 lasts
F - 1st layer
F ???
F
F
F
T - it is part of the 4th
T
F - Not a layer and is the superficial compartment
F - four

Note: Aponeurosis
1st - 3 muscles FAB - FDB, AbH, AbDM
Neurovascular bundle
2nd - 2 musc 2 tend - Quad plant, lumbricles
3rd - 3 musc 2 lig FAF - FHB AdH FDMB
Neurovascular bundle
4th - 1 musc 1 lig 3 tend FIT - Fib long, tib ant, tib post, Interossei

ANATOMY

Lower limb – Fascia and Spaces

19. Which passes through the lesser sciatic foramen p577
- a. inferior gluteal artery F
 - b. superior gluteal artery F
 - c. internal pudendal artery F
 - d. piriformis F
 - e. pudendal nerve T
20. Of the inguinal canal, which is INCORRECT?
(P 193 Moore, p273NM, p201 Instant Anat)
- a. Iliinguinal nerve enters the deep ring p 187 F – ductus deferens or round ligament and gonadal vessels pass through
 - b. Roof formed by external oblique F - internal oblique and transversus abdominal muscles
 - c. Floor formed by inguinal ligament T - Superior surface of inguinal ligament and lacunar ligament medially
 - d. Anterior wall formed by internal oblique F - aponeurosis of external oblique
 - e. Posterior wall partly by the inguinal flax T – transversalis fascia with medial aspect reinforced by the conjoint tendon (inguinal flax)
 - f. The ilioinguinal nerve enters the superficial ring T – spermatic cord and gonadal vessels also
 - g. the inguinal nerve does not pass through the deep ring T - pierces the lower border of the internal oblique goes through the inguinal canal and exits via the superficial inguinal ring. Supplies anterior 1/3rd of scrotum, root of penis/clitoris and upper medial part of groin
21. Which is true of the adductor canal? P200 Instant Anat
- a. vastus lateralis is one of the borders F - VM
 - b. the nerve to vastus lateralis is superior F
 - c. nerve to vastus lateralis passes through F
 - d. the vein is medial to the artery throughout F – VAN drives out
 - e. the lateral boundary is vastus lateralis F
 - f. femoral artery lies between the saphenous nerve and femoral vein T
 - g. adductor longus forms the roof F
22. In the femoral triangle
- a. The lateral circumflex femoral artery separates superficial from deep branches of the femoral nerve T
 - b. adductor longus is a medial boundary T
 - c. anterior division of obturator nerve is on adductor brevis T
 - d. femoral vein receives the great saphenous T
 - e. lateral border is medial border of Sartorius T
 - f. lateral and medial circumflex femorals leave femoral artery F - it leaves from profunda femoris
23. The skin over the femoral triangle is supplied by
- a. ilio-inguinal nerve F
 - b. obturator nerve F
 - c. medial femoral cutaneous nerve F
 - d. lateral femoral cutaneous F
 - e. genito-femoral nerve T - according to Blitz and Adam
24. Medial lymph nodes DO NOT drain
- a. anal canal F
 - b. scrotal skin F
 - c. testicles T - To lumbar LN's (Adam)
 - d. urethra F
 - e. anterior skin distal to umbilicus and above inguinal ligament F

ANATOMY

25. In the popliteal fossa NMP632, p 571 Moore

- a. the popliteal artery runs vertically
- b. the inferomedial border is soleus
- c. the popliteal vein lies between popliteal artery and tibial nerve
- d. the roof is formed by biceps femoris
- e. the sural nerve branches from the common peroneal nerve

F - runs inferolaterally
F - medial head of gastroc

T - Tibial nerve superficial, then pop vein, then pop artery deep
F - subcut tissue and popliteal fascia
F - from common fib/per AND tibial n

26. What passes superficial to the superior flexor retinaculum of the foot

- a. The superficial fibular nerve

F - IF it is a typo and they mean the extensor retinaculum

27. Under the extensor retinaculum the most lateral structure is

- a. sural nerve
- b. dorsalis pedis artery
- c. EHL
- d. EDL
- e. Peroneus tertius

F
F
F
F
T - p641NM

28. All of the following structures pass deep to the superior extensor retinaculum EXCEPT

- a. deep peroneal nerve
- b. anterior tibial artery
- c. superficial peroneal nerve
- d. peroneus tertius
- e. extensor digitorum longus

F
F
T - passes superiorly (p668 NM)
F
F

29. The plantar aponeurosis p662 NM, p595 Moore

- a. covers the abductor and adductor compartments
- b. has fibrous septa joining to each metatarsal
- c. Covers the abductors of the big and little toe
- d. Is inserted to all 5 metatarsals
- e. Does not attach to skin
- f. Arises from talus
- g. Covers half length of sole
- h. attaches to calcaneus posteriorly
- i. separates short flexors
- j. fibrous septa to all 5 metatarsals
- k. includes adductor/abductor compartments

F - covers central compartment
F - No to digits one and 5
F - doesn't cover abductors
F - 1st and 5th only
F - it does
F - calcaneus
T
T - it arises from the calcaneus. Distally it divides into five bands that become continuous with the fibrous digital sheaths
F - but unsure
F - to 1st and 5th only which divides the foot into three compartments; medial, central and lateral
F - doesn't cover abductors

ANATOMY

Lower limb – Vessels

30. What is true of the Femoral artery? P155 LASTS, p 603NM

- P545 Moore, p 371 Instant anat
- a. it's pulse is found along the inguinal ligament and 3.5cm medial to the pubic tubercle F
- b. it has the median circumflex femoral artery as it's main branch F - profunda femoris
- c. Profunda femoris artery is separated from the femoral artery by adductor longus T - p603 NM
- d. is separated from the hip joint capsule by fat only F - It sits on the ilopsoas and pectineus
- e. is crossed by the femoral vein from medial to lateral as it descends F - Don't think it goes medial
- f. enters the adductor canal by piercing Sartorius F - Doesn't need to pierce Sartorius
- g. is found at the mid-inguinal point T
- h. gives off the medial femoral cutaneous as it's major branch F - biggest branch is the profunda femoris

31. Branches of femoral artery p604 NM p 371 Instant anat

- a. Superficial epigastric T
- b. Superficial circumflex iliac T
- c. External pudendal T
- d. profunda femoris T
- e. medial and lateral circumflex iliacs F - come from the profunda femoris NOT femoral artery (usually...)
- f. Deep perforating artery F
- g. Deep circumflex artery F
- h. Pudendal artery F - from internal iliac if they mean internal pudendal BUT external pudendal DOES come off femoral

32. All are tributaries of the femoral artery except p603

- a. deep circumflex iliac F ??
- b. medial femoral circumflex T - it comes from the profunda femoris (moore – different from blitz)
- c. superficial circumflex iliac F
- d. superficial external pudendal F
- e. deep external pudendal F

33. The great saphenous vein p525 instant anat

- a. is a continuation of the lateral marginal vein of the foot F – medial. Formed by union of the dorsal vein of great toe and dorsal venous arch of foot
- b. runs between the two heads of gastrocnemius F - that is small saph
- c. pierces the cribriform fascia T
- d. can be found immediately below and lateral to the pubic tubercle F - 4cm below and lateral
- e. does not communicate with the superficial vein varicosities F – it does, a lot

34. All drain into the great saphenous vein except p580

- a. superficial epigastric F
- b. superficial circumflex iliac F
- c. deep external pudendal F
- d. superficial external pudendal F
- e. deep circumflex iliac T - it goes to the external iliac

35. Blood supply of the head of the femur

- a. Unsure of stems
- Via the medial circumflex femoral and lateral circ fem both from profunda femoris which then go to retinacular arteries (most from medial circ fem because the lat has to try to get through the iliofemoral lig) . Also small amount from artery to head of femur from obturator (p680 NM)

ANATOMY

Lower limb – Joints

36. The hip joint p678NM p607 Moore
- a. is flexed largely by sartorius and rectus femoris
 - b. is limited in full extension by the pubofemoral ligament
 - c. is only supplied by the obturator and sciatic nerves
 - d. has the ischiofemoral as it's strongest ligament
 - e. derives it's stability largely from it's articular surfaces
- F – strongest is iliopsoas
F - It limits abduction
F - Also femoral nerve
F - it is the weakest. Iliofemoral is the strongest (and limits extension)
T
37. With regard to the knee joint p687NM p607 Moore
- a. the lateral meniscus is more 'c' shaped
 - b. the tendon of popliteus is intra-articular
 - c. the medial collateral ligament is extra-articular
 - d. the medial collateral extends 8 cm beyond the joint line
- F - Medial meniscus is more C shaped ("MC")
F - Sort of because it attaches to the lateral meniscus + lat fem condyle
T - Mainly, yes but some fibres join the medial meniscus
Unsure
38. Regarding knee joint Capsule (Moore 619)
- a. attaches to articular margins
 - b. attaches to the femur proximal to the articular margins.
 - c. Attaches to the articular margin inferiorly except where the tendon of popliteus transgresses the capsule
 - d. Does not attach to intercondylar groove
 - e. Tendon of popliteus transgresses capsule
- F - Superiorly it attached just proximal
T
T
?
T - *Blitz has this as the best option*
39. Regarding the menisci of the knee p690 NM p607 Moore
- a. posterior cruciate is medial
 - b. fold of synovium lies posterior to anterior cruciate
 - c. anterior horn of medial meniscus is attached to medial tibial condyle
 - d. medial meniscus is avascular
 - e. fold of synovium lies posterior to anterior cruciate
- T - It is attached to the medial femoral condyle
F
F - anterior intercondylar area
F - Not exactly they are largely avascular but the peripheral zone is vascularised
???
40. Medial meniscus of the knee p690NM p607 Moore
- a. Smaller
 - b. attached to the tibia via anterior horn
 - c. attached to PCL
PCL. It is also attached to the popliteus tendon
 - d. doesn't attach to medial ligament
- F – bigger
T - and posterior horn and laterally to joint capsule
F - but the lateral meniscus is via the posterior meniscomfemoral ligament to the
F - It does
41. Regarding the cruciate ligament p607 Moore
- a. PCL is attached to the medial condyle of the femur
 - b. tibial nerve supplies the cruciate ligament
- T - p691NM
T – according to Lasts, moores is silent on this topic
42. Regarding ligaments of knee (moore 620) lasts 181
- a. Posterior cruciate attached to medial condyle of femur
 - b. Posterior is longer and stronger
 - c. Posterior stops tibia slipping forward on femur
 - d. Lateral collateral contributes to capsule significantly
 - e. Anterior cruciate has fold of synovium posteriorly
- T
F - Stronger yes , ?longer
F – stops anterior displacement of femur
F - LIES free of capsule
F - posterior surfaces uncovered
43. All the following ligaments in the knee joint are extra-capsular except p607 Moore
- a. patella retinacula
 - b. oblique popliteal
 - c. transverse ligament
 - d. tibial collateral
 - e. fibular collateral
- T
T
F - It joins the anterior edges of the menisci p690 NM (Adam agrees, Blitz says (d) but don't think this is right)
F
F

ANATOMY

44. Which ligament forms part of the capsule p607 Moore

- a. lateral collateral
- b. medial collateral
- c. anterior cruciate
- d. posterior cruciate
- e. popliteus tendon

F
T - At its midpoint fibers go to the medial meniscus.
F
F
F

45. Regarding ankle joint Last's p 150, p702NM, p632 Moore

- a. Capsule attaches to articular margins of tibia, fibular, talus
- b. Deep part of deltoid ligament is triangular
- c. Lateral ligament attaches to talus and calcaneus
- d. the capsule is attached anteriorly to the neck of the talus
- e. it has a fixed axis of rotation
these though which is through the talus
- f. capsule attaches posteriorly
- g. has 3 ligaments to the talus
- h. weight bearing in supination
- i. in full plantarflexion, a significant amount of inversion
and eversion is possible at the ankle joint
- j. the lateral ligament is made up of three separate bands
that all insert into the talus
- k. the weight bearing surfaces are the upper facet of the
talus, the inferior facet of the tibia and the medial and
lateral malleoli

T - ?YES Blitz says false, annie and adam reckons yes
F - On medial side, dep and superficial, superficial part is triangular
T - fibula to talus and calcaneus. Three ligs all from lateral malleolus
T - (from blitz)
F - Can't be since it is dorse/plantarflexion only. It does have a fixed axis for

??? - I think to talus
F - Kinda four; ant+post talofibular and ant+post tibiotalar
F - Uhm..

F - it is dorsi/plantar flexion

F - There are three: Anterior and posterior talofibular and
calcaneofibular BUT all don't insert into talus

F - Wt bearing surfaces are upper facet of talus, inf facet of tibia.
STABILISING surfaces are the malleoli.

46. Question about the capsule of the ankle joint p632 Moore

- a. is attached anteriorly to the neck of the talus

T - p 203 Lasts

47. Regarding the ligaments on the lateral aspect of the ankle,
which is FALSE? P632 Moore

- a. There are 3 bands, all connected to the talus

F - They are attached talus and calc

48. Regarding the medial side of the ankle p702 NM p632 Moore

- a. deltoid ligament is continuous with the spring ligament
- b. great saphenous vein runs posterior to the malleolus
- c. anterior talo-fibular ligament strengthens the joint
- d. posterior tibial artery runs anterior to malleolus
- e. short plantar ligament strengthens medial arch

T
F - anterior
F - on the lateral side
F - posterior
F - plantar lig is lateral arch

49. Regarding the deltoid ligament of the ankle

- a. strengthens the lateral aspect of the ankle
- b. has three layers
- c. superficial part is triangular

F - medial
F - four
T

50. What movement occurs at the subtalar joint p707NM

- a. Inversion
- b. Eversion
- c. Equinovaris
- d. Plantarflexion

T
T
F
F

51. Movement at the mid-tarsal joint includes

- a. inversion/eversion
- b. dorsiflexion / plantarflexion

T - It augments inversion eversion of the subtalar joint p708NM
F - this is at the ankle joint

ANATOMY

Lower limb – Bones

52. Regarding the ossification centres of the bones of the foot, which is incorrect

- a. there are three at birth
- b. fifth metatarsus has three ossification centres
- c. metatarsals have two centres
- d. metatarsals have two ossification centres

FROM ADAM's ANSWERS

F - Calc, Tal, Cub, 3 Tarsals, MT, Phalanges

T

T - the rest have two

T - ?yes accord to blitz

53. Arch of foot, which is wrong?

- a. Lateral arch formed of calcaneus, cuboid and lateral two metatarsals
- b. Tibialis Anterior is major stabilising factor
- c. Bones contribute little to arch stability
- d. Pillars of arch are bases of metatarsals and calcaneus
- e. Cuboid is not part of the medial arch

T - Medial long: Calc, talus, navicular, x3 cuneiforms, MTs1-3, TV arch: Cuboid, x2cuneiforms, Bases of MT's

T - it stabilises the long arches

F - True accord to LASTS p154 but MOORE says that they contribute

F - It is the heads of the MT's LASTS p154

T - p640 moore

54. The tibia p567 NM

- a. Has one subcutaneous border
- b. Has medial and lateral condyles at the proximal end
- c. The weight bearing surfaces are medial malleolus and talar shelf
- d. The proximal fibula articulates with the shaft
- e. Has the intercondylar eminence on the anterior surface

F - What the?

T

F - malleolus is stabilising factor

F - More a syndesmosis

F - on superior surface

ANATOMY

Central Nervous System - Circulation

1. Regarding the blood supply of the cerebral cortex
p466 Lasts, p895 old Moores, p927NM
 - a. Largest branch is anterior F – middle
 - b. Anterior, Middle, Posterior branches of the ICA F - posterior comes of basilar
 - c. Posterior communication artery connects middle cerebral artery and posterior cerebral artery T
 - d. ?basilar artery is branch of internal carotid F - vertebral
 - e. middle cerebral is contralateral arm, leg and speech areas F - Not leg. contralateral motor + sensory to everything but leg, foot, perineum and speech and auditory
 - f. anterior cerebral is contralateral leg, micturition and defecation T - contralat leg, foot, perineum, micturition, defecation
 - g. middle cerebral is ipsilateral arm, face and vision F - not ipsi or vision
 - h. posterior cerebral is ipsilateral vision F – Contralat
 - i. anterior cerebral is contralateral leg, auditory and speech F - auditory and speech by MCA,
2. Cerebral circulation
 - a. anterior/ middle/ posterior cerebral arteries are terminal branches of ICA F - PCA from basilar
 - b. anterior cerebral artery is most common site of embolisation F – MCA
 - c. anterior cerebral artery supplies the motor and sensory control of urination and defecation T - and leg, foot, perineum
3. Which is true of the circle of Willis?
 - a. ACA is the most direct branch F - MCA is
 - b. ACA, PCA, MCA all come off the ICA F - PCA off the basilar
 - c. Most emboli go to the PCA F – MCA
 - d. MCA supplies the opposite head, arm and sensory T
 - e. posterior cerebral is a branch of the internal carotid F - from basilar
 - f. anterior cerebral is the largest branch of the internal carotid F – MCA
 - g. middle cerebral supplies motor but not sensory cortex F - supplies both
 - h. internal carotid gives off ophthalmic artery T
 - i. anterior communicating unites middle and anterior cerebral F
4. The blood supply to the spinal cord p530NM
 - a. There are no anastomoses between anterior and posterior spinal arteries F
 - b. The radicular arteries are constant in number and origin F
 - c. The posterior spinal artery is usually a branch of the posterior cerebellar or vertebral arteries T
5. Which of the following is outside the blood-brain barrier
 - a. Anterior pituitary F
 - b. Posterior pituitary T - P465 LASTS , ganong 618
(circumventricular organs: posterior pit, hypothalamus(median eminence), OVLT, SFO, Area postrema and pineal gland are outside the BBB).
Blitz + Adam disagree but comes straight from the book

ANATOMY

Central Nervous System – Upper

6. Wernicke's encephalopathy involves
Do they mean Wernicke's aphasia?
 - a. receptive dysphasia T – ganong 274
 - b. expressive dysphasia F

7. Regarding the speech centres p458 Lasts
 - a. Broca's area is on the left side in most left handed people T - is on the left side in R handed and MOST L handed
 - b. Broca's area is posterior F - it is anterior in the inferior frontal gyrus
(Wernicke's is posterior in the superior and middle temporal gyri)
 - c. Wernicke's area controls motor response F – receptive
 - d. Damage to Broca's area produces motor aphasia T - (aka expressive) Blitz and Adam reckon this is the better answer
 - e. Damage to Wernicke's area produces expressive aphasia F - receptive

8. Regarding the medulla oblongata
 - a. It is the part of the brainstem between the pons and spinal cord T - Midbrain to pons to medulla lasts p 468
 - b. Is largely within the middle cranial fossa F - extends through the foramen magnum to the level of atlas
 - c. Is supplied by anterior inferior cerebellar artery F - Vertebral, basilar, PICA lastsp 475

9. The dorsal column pathways synapse in the
 - a. Thalamus F
 - b. gracile and cuneate nuclei T - They lie in the medulla. Lasts p485
 - c. cerebellum F

10. The midbrain
 - a. is largely in the middle cranial fossa F - Most in posterior cranial fossa p469 Lasts
 - b. is supplied by the anterior inferior cerebellar artery F - posterior cerebral and superior cerebellar
 - c. lies between pons and upper spinal cord F - this is the medulla
 - d. contains the oculomotor nuclei T
 - e. contains the trigeminal nuclei F - in the pons

11. Regarding the lateral ventricles
 - a. choroid plexus extends into the canal T - if they mean it extends into the interventricular foramen (lasts p461)
 - b. posterior horn in the temporal lobe F - Posterior in occipital lobe, anterior in frontal lobe. Inferior temporal lobe
 - c. Something about inferior horn
 - d. Something about white matter

12. Cerebrospinal fluid communicates with the subarachnoid space via the... Pg 889 to 891
 - a. 4th ventricle T - Via magendie and luschka foramina
 - b. 3rd ventricle F
 - c. subarachnoid granulations F
 - d. choroid plexus F
 - e. tela choroidia F
 - f. arachnoid granulations F
 - g. lateral ventricle F
 - h. dural sinuses F

CSF produced by choroids plexus in lateral, and 3rd, and 4th ventricles.
Flow: lateral ventricles, through interventricular foramina, to 3rd ventricles, through cerebral aqueduct, to 4th ventricles, through median and lateral apertures, to subarach space

7. Corneal sensation synapses in which ganglion
 - a. Ciliary F
 - b. Otic F
 - c. Geniculate F
 - d. trigeminal T – it does
 - e. pterygopalatine F

ANATOMY

8. The submandibular ganglion Pg 1101 tble 9.4

- a. Receives fibres from the superior salivatory nucleus
- b. has a motor (parasympathetic) root that is carried with the facial nerve
- c. has a sympathetic root whose fibres carry on to supply the ciliary muscle of the eye
- d. has a sensory root whose cell bodies lie in the ganglion of the seventh cranial nerve
- e. distributes to the nasal mucosa
- f. is not involved in the salivation reflex

T

T - as written in table

F - supply submandibular and sublingual glands and appear to be secretomotor.
Ciliary ganglion has parasymp fibres that supply ciliary muscle and sphincter pupillae of eye

F - Somatosensory cell bodies lie in ganglion of CN V3 (fifth).

There are no sensory cell bodies near CN VII

F - pterygiopalatine ganglion parasymp fibres supply blood vessels of the nasal cavity

F - secretomotor

Overall:

Location: suspended from lingual nerve by two short roots lying on hyoglossus muscle inf to submand duct

PNS root: Parasymp fibres join facial nerve and leave in its chorda tympani branch which unites with the lingual nerve

Go to subling and submand glands

SNS root: Symp fibres from superior cervical ganglion come from plexus on facial artery

Go to subling and submand glands and are secretomotor

9. Cell bodies for the motor supply of the trigeminal nerve lie

- a. Hypothalamus
- b. midbrain
- c. posterior to cerebral aqueduct
- d. cerebral cortex
- e. floor of third ventricle

F

T – in pons

F

F

F

10. Cell bodies for the motor supply of the facial nerve lie

The motor nuclei of the facial nerve are found in the p472 Lasts (aka facial nucleus)

- a. Hypothalamus
- b. Midbrain
- c. floor of third ventricle
- d. Medulla oblongata
- e. Tectum
- f. Cerebellum
- g. pons

F

F

F

F

F

F

T - p472 LASTS

11. Which is a direct connection from vestibular nucleus

- a. Oculomotor nerve
- b. Medial longitudinal fasciculus
- c. Lateral lemniscus
- d. Vestibulospinal tract
- e. Medial geniculate body

F

F

F

T - correct

F

12. Where do cell bodies with efferent taste fibres from the anterior tongue lie

- a. otic ganglion
- b. geniculate ganglion
- c. trigeminal ganglion
- d. submandibular ganglion

F

T – CNVII

F

F

ANATOMY

13. Regarding the ciliary ganglion

- a. contains sympathetic fibres from the upper cervical trunks
- b. Cell bodies in superior cervical ganglion
- c. Receives branches from lingual nerve
- d. Something about CN VII

F
? – could be true
F

NOTE: Some notes on the ciliary ganglion: 2mm diam, lies on the lateral side of the optic nerve. Three roots enter its posterior end

1. Sensory root from nasociliary nerve passes through *without* relay to supply eye but not the conjunctiva
2. Sympathetic root from the internal carotid plexus passes through *without* relay supplying ciliary body carrying vasoconstrictor supply to vessels of the eye
3. Parasymp root from EW nucleus RELAY in the ganglion going to ciliary body for accommodation and sphincter pupillae

14. A Horner's syndrome can result from interruption of all tract/areas except

- a. T1 something
- b. Brainstem
- c. Post-sympathetic fibres

15. Regarding the CNS

- a. The tentorium cerebelli separates the right and left halves of the cerebellum
- b. The temporal lobe occupies the middle cranial fossa
- c. The falx cerebri separates the occipital lobes from the cerebellum
- d. Central sulcus separates occipital from parietal lobes
- e. Occipital lobe is posterior to the lateral sulcus

F - it forms the roof (p911 Moore), falx separates R from L
T

F - separates R from L cerebral hemispheres

F - separates frontal from parietal

F - occipital separated from parietal by occipito-parietal sulcus

- Anterior fossa
 - Formed by frontal bone anteriorly, ethmoid in the middle, sphenoid post
 - Contains Frontal lobes
- Middle fossa
 - Formed by sella turcica of sphenoid plus lateral parts
 - Contains pituitary, lateral parts support the temporal lobes
- Posterior fossa
 - Formed mostly by occipital bone
 - Contains cerebellum, pons, and medulla

ANATOMY

Central Nervous System – Cord and tracts

13. Transection of anterolateral spinal cord results in...
(phys notes and lasts)

- a. ipsilateral weakness, hyperreflexia hypertonia
- b. Ipsilateral loss of pain
- c. Ipsilateral loss of temperature
- d. Contralateral loss of vibration

T - Ipsi weakness since corticospinal tracts decussate in medullary pyramids
F - contralateral because spinothalamic tract decussate in spinal cord immediately
F - since spinothalamic columns decussate immed in the spinal cord
F - because dorsal columns decussate by synapsing in the gracile and cuneate nuclei

14. Considering a complete spinal transection:

- a. C1-C3 – quadriplegia and no respiration
- b. T10-L1 – loss of thigh movements
- c. L2-L3 – loss of most of the leg movements

T
T - since they are below it
T - Yes Fuuuck
Yes, this question was as ambiguous as you're thinking

15. The posterior columns transmit which of the following?
Lasts p 482, 484

- a. tendon stretch, vibration
- b. afferent pain and temperature
- c. afferent tendon stretch impulses
- d. motor tracts

T
F – spinothalamic
T
F - corticospinal

16. Which of the following are not involved in the control of posture and movement

- a. Tractus solitaries
- b. Lateral reticulospinal tract
- c. Medial reticulospinal tract
- d. Vestibulospinal tract
- e. Spinocerebellar tracts

T - It is involved in sending impulses from chemo and stretch receptors
F - Extra pyramidal
F – extrapyramidal
F - extrapyramidal
F - Cerebellum therefore posture

17. Identify the layers pierced when performing a lumbar puncture in the correct order

- Skin
- Superficial then deep fascia
- Supraspinous lig
- Interspinous lig
- Lig Flavum
- (Extradural space)
- Dura
- (Subdural space)
- Arachnoid mata
- Subarachnoid space/lumbar cistern – CSF

ANATOMY

Head & Neck – Nerves

1. Gag reflex
 - a. Vagus for efferent and afferent F
 - b. Glossopharyngeal for afferent, vagus for efferent T - p383Lasts
 - c. Hypoglossal for afferent, vagus for efferent F
 - d. Maxillary for afferent, vagus for efferent F
 - e. The glottis is closed F - it is elevation of the soft palate and contraction of pharyngeal muscles p383NM
 - f. it is mediated by vagal receptors T - glossopharyngeal are afferents, vagus is efferent

2. The afferent path of the sneeze reflex is mediated by the
 - a. ophthalmic nerve T - Nothing specific in any fucking book or internet re afferent pathway BUT p1017 NM: Superior portion of mucosa from ophthalmic nerve, inferior portion from maxillary nerve...saunders agrees
 - b. maxillary nerve T - see above
 - c. mandibular nerve F
 - d. vagus nerve F
 - e. glossopharyngeal nerve F

3. Nerve and face/muscle pairings
 - a. Levator palpebrae and CN VII F - CNIII oculomotor
 - b. Superior oblique and CN IV T

4. Regarding the optic pathways p971 NM
 - a. combined inferior rectus and superior oblique gives lateral gaze F - gives direct downward gaze
 - b. Abducent paralysis makes eye turn down and out F - Makes it turn in
 - c. Superior rectus makes eye turn up and out F - up and in
 - d. Trochlear paralysis, eye cannot look downwards when turned out F - Cannot look down when eye is turned in apparently p397 Lasts
 - e. Combined superior rectus and inferior oblique causes vertical upward gaze T
 - f. superior oblique and inferior rectus move the eye downwards T
 - g. superior oblique action in full abduction is minimal F
 - h. SR and SO move the eye vertically upwards (? or down) F - Doesn't make sense should be SR+IO = vertically up

5. After an operation for tonsillectomy, a patient complains of loss of taste from the posterior tongue, which nerve is damaged
 - a. Hypoglossal F
 - b. Glossopharyngeal T
 - c. Lingual F

6. Which is a branch of the mandibular nerve p1096 old Moore
 - a. Zygomaticotemporal F - maxillary nerve
 - b. Infraorbital F - maxillary nerve
 - c. Infratrochlear T - from ophthalmic branch of CNV but not in book

7. Which nerve is contained within the carotid sheath?
 - a. Vagus T

8. Which receives afferents in the sneeze reflex
 - a. Otic ganglion F
 - b. Trigeminal ganglion T - Google says this one....
 - c. Ciliary ganglion F

ANATOMY

9. Which of the following is not a branch of the ophthalmic nerve
- a. Supraorbital F
 - b. Supratrochlear F
 - c. Infraorbital T - from the maxillary n along with zygomaticotemporal and zygomaticofacial p940 Moore
 - d. External nasal F
 - e. Infratrochlear F
 - f. Lacrimal F
10. All the following are branches of the ophthalmic division of the trigeminal nerve EXCEPT
- a. lacrimal nerve F
 - b. infraorbital nerve T - Comes from mandibular nerve and exits via inferior orbital fissure to supply sensation to skin beneath eye, inf eyelid, lateral nose p940NM
 - c. supraorbital nerve F
 - d. infratrochlear nerve F
 - e. supratrochlear nerve F
11. Which of the following is a branch of the mandibular nerve
- a. infraorbital nerve F
 - b. external nasal nerve F
 - c. zygomaticofacial nerve F
 - d. auriculotemporal nerve T - p940NM
 - e. zygomaticotemporal nerve F
12. Which of the following is a branch of the maxillary nerve
- a. zygomaticotemporal nerve T - together with zygomaticofacial and infrorbital
13. Facial innervation p940NM
- a. infratrochlear nerve T - V1 - Middle bit above nose
 - b. infraorbital nerve T - V2 - under eye
 - c. nasolacrimal nerve T - V1. Lacrimal is to tip of nose
14. Nerve supply of the head and neck; which is correct
- a. cranial nerves 2,3,4 F - cervical nerves 2,3,4
 - b. a branch from the cervical plexus ?T - Well, greater auricular nerve and lesser occipital are branches of cervical plexus
 - c. abducent nerve F - NB: Facial or trigeminal nerves where NOT an option
15. The infratrochlear nerve supplies the p940NM
- a. upper incisors F - by alveolar nerves from maxillary nerve
 - b. labial gum F - by buccal n from maxillary n
 - c. bridge over the nose T - from ophthalmic n
 - d. upper lip F - infraorbital n from maxillary n
 - e. skin of the lower eyelid F - Infraraorbital nerve from maxillary nerve
16. Which nerve supplies the vertex of the scalp p940NM
- a. greater occipital F - scalp of occipital region (from posterior rami of C2)
 - b. third occipital F - lower occipital and suboccipital (from posterior ramus of c3)
 - c. Auriculotemporal (mandibular nerve) F - Anterior to auricle, post 2/3rds of temporal region, skin of tragus (from
 - d. Supraorbital T - From ophthalmic nerve
 - e. Supratrochlear F - Medial aspect of superior eyelid and anteromedial forehead

ANATOMY

17. Corneal sensation synapses in which ganglion

- a. Pterygopalatine
- b. Geniculate
- c. Otic
- d. ciliary
- e. Trigeminal

F

F

F

T – not sure p972NM

T – best answer. Adam and blitz say (e) which could be true because lasts p 395 says that the nasociliary nerve passes through the ciliary ganglion *without relay*

ANATOMY

Head & Neck – Muscles

18. Which muscle controls vocal cord abduction in the larynx
p1096NM

- a. Aryepiglottic
- b. posterior cricoarytenoid
- c. transverse arytenoids
- d. lateral cricoarytenoid
- e. Cricothyroid

F – not involved in vocal cord movement
T - abductor
F - Aids as a sphincter
F – Adductor
F – Tensor

19. Which isn't involved with vocal cord movement?

- a. Posterior cricoarytenoid
- b. Cricothyroid
- c. Vocalis
- d. Thyroarytenoid
- e. Aryepiglottics

F – abductor
F – tensor
F - fine movement
F – relaxer
T – p1045 old Moores, p1096NM

20. Which is true of swallowing ?

- a. It is entirely voluntary
- b. The oropharyngeal portion is voluntary
- c. Peristalsis speeds as the bolus descends
- d. The voluntary stage commences as food enters the oesophagus
- e. It is initially voluntary then involuntary

F
F
F
F
T - p493 Ganong

21. In the eye: p971 NM

- a. The extraocular muscles attach to the tendinous ring
- b. SO attaches to the ethmoid
- c. Lacrimal gland occupies the fossa on the medial sides

F - Not all. All the recti do but the inf and sup oblique don't
F - No to sphenoid
F - in the superolateral part. The lacrimal duct is medial

ANATOMY

Head & Neck – Circulation

22. Regarding veins in the skull
- a. do not follow arteries T
 - b. lie subdurally F - P467 Lasts, run in subarach space then cross subdural space to drain into nearest available venous sinus of the dura mater
 - c. great cerebral vein drains into cavernous sinus F - drains to straight sinus
23. Where does the superior cerebral vein lie
- a. deep in the sulci T – probably. See p467 Lasts
 - b. between the dura and the skull F - this is the sinuses
 - c. in the arachnoid mater T – according to blitz and adam but not sure
 - d. in the margins of the falx F - this is the sinuses
 - e. with the superior cerebral artery F - they don't follow arteries
24. regarding internal jugular
- a. runs from angle of jaw to proximal end of clavicle T
 - b. runs deep to two heads of sternocleidomastoid T - in its inferior 1/3rd
 - c. medial to artery F - lateral to it
 - d. runs in close proximity to thoracic duct. F - it drains into confluence of L subclavian and LIJ p204 Lasts
25. All the following are branches of the external carotid EXCEPT
- a. lingual artery F
 - b. facial artery F
 - c. ascending pharyngeal artery F
 - d. hypoglossal artery T
 - e. superior thyroid artery F
26. Something about the blood supply to the scalp being supplied by branches of the external carotid artery
- a. Arteries run in 2nd layer of the scalp from external AND internal carotid arteries:
 - External:* superficial temporal artery, occipital artery and posterior auricular artery
 - Internal:* supratrochlear, supraorbital (both from ophthalmic artery)
27. The following regarding Kiesselbach's plexus is true p956 Moore
- a. Located at posteroinferior wall of the nasal septum F – anteroinferior portion of nasal septum
 - b. Supplied by branches of maxillary and mandibular artery F – supplied by greater palatine A and ethmoidal A. Maxillary A gives sphenopalatine A which supplies lateral wall
 - c. Supplied by branches of the ophthalmic and maxillary artery F
 - d. Supplied by branches of the ECA and ICA F – Just branches of the External Carotid A
28. Which of the following statements is correct with regard to the nasal blood supply – Pg 956 Moore
- a. Kiesselbach's area is a plexus of vessels on the lateral wall prone to epistaxis F - plexus on nasal SEPTUM commonly involved in chronic epistaxis
 - b. the major contributor to nasal blood supply is the sphenopalatine artery T - Lasts supports the answer word for word
 - c. the nasal blood supply is solely by branches of the internal carotid arteries F - branches of external carotid involved along with sphenopalatine A, ant and post ethmoidal A, greater palatine A, sup labial A and lateral nasal branches of facial A.
 - d. the blood supply enters principally through the cribriform plate F – also enters via branches of maxillary A and others.
 - e. blood supply to the nasal septum is poor F - that is where Kiesselbach's plexus is so rich blood supply. Made up of anastomosis between sphenopalatine A, ant and post ethmoidal A, greater palatine A, superior labial A and lateral nasal branches of the facial A.

ANATOMY

Head & Neck – Spaces and Triangles

29. Which is NOT found in the posterior triangle of the neck?

- | | |
|------------------------------------|---|
| a. Branches of the cervical plexus | F - found in the posterior triangle |
| b. Occipital lymph nodes | T - Old Moore says that cervical and subclavian LN are in this triangle p1004 |
| c. Accessory nerve | F |
| d. Cervical plexus | F - Adam says this is right |
| e. Inferior belly of omohyoid | F |
| f. Transcervical vessels | F - Blitz says this |
| g. Branches of brachial plexus | T |

30. All the following are boundaries of the named triangle EXCEPT

- | | |
|---|---|
| a. mandible and submental triangle | F - it is formed with anterior belly of digastrics, midline and hyoid bone (or as per moore; unpaired therefore both anterior bellies of digastrics with hyoid bone) p1065 NM |
| b. mandible and anterior triangle | T - with midline and SCM |
| c. mandible and digastric triangle (aka submandibular triangle) | T - with ant and post bellies of digastric |
| d. sternocleidomastoid and carotid triangle | T - with posterior belly of digastric and superior belly of omohyoid |
| e. sternocleidomastoid and anterior triangle | T - with clavicle and Trapezius |

31. All the following are contents of the posterior triangle EXCEPT

- | | |
|--------------------------------|---|
| a. accessory nerve | T |
| b. cervical plexus | T |
| c. inferior belly of omohyoid | T |
| d. transverse cervical vessels | T |
| e. occipital lymph nodes | F - since they are def posterior the anterior border of trapezius p1058NM (adam and blitz aren't sure but they think the cervical plexus because the actual plexus doesn't sit in the posterior triangle but its branches do.) So take your pick! |

32. Which of the following is NOT contained in the carotid triangle
Pg101,1014

- | | |
|--------------------------------------|--|
| a. superior thyroid vein | F - probably is in the carotid triangle |
| b. posterior auricular artery | T - branch of the external carotid A and origin is superior to posterior belly of digastric m so NOT in the carotid triangle |
| c. external laryngeal nerve | F - is in carotid triangle |
| d. superior root ansa cervicalis | F - is in carotid triangle |
| e. bifurcation common carotid artery | F - is in carotid triangle |
- Posterior triangle – occipital triangle and supraclavicular triangle
Anterior triangle – submandibular triangle, submental triangle, carotid triangle, muscular triangle

33. Question regarding the carotid sheath

- | | |
|--|------------------------------------|
| a. Nerve not between artery and vein, | F – always between artery and vein |
| b. thinnest on side of arteries | F – thinnest on side of veins |
| c. contains Common carotid artery | T |
| d. Contains Internal carotid artery | T |
| e. Contains internal jugular vein | T |
| f. Does not contain Vagus nerve | F – does contain the vagus |
| g. Does not contain Nodes, | F |
| h. carotid sinus nerve, sympathetic nerve fibres | T |

ANATOMY

Head & Neck – Bones and foramina

34. Which bone makes up part of the roof of the orbit p959 NM

- a. Sphenoid
- b. Maxilla
- c. Lacrimal
- d. Ethmoid
- e. Temporal

T - lateral part
F – floor
F - Medial wall
F - medial wall
F - Not involved

35. What runs through the foramen spinosum p900NM

- a. ICA
- b. Maxillary br trigeminal
- c. Mandibular br trigeminal
- d. Middle meningeal artery

F – lacerum
F - Foramen rotundum
F - Foramen ovale
T - Meningeal nerve

36. Which vessel supplies a branch which passes through the foramen spinosum

- a. maxillary artery

T - middle meningeal A from Maxillary A and meningeal branch of CNV3 p900 NM

37. What exits the stylomastoid foramen

- a. middle meningeal artery
- b. accessory nerve
- c. facial nerve
- d. artery to stapedius
- e. hypoglossal nerve

F
F
T
F
F

38. Which does not travel through the jugular foramen

- a. hypoglossal nerve
- b. accessory nerve
- c. inferior petrosal sinus
- d. glossopharyngeal nerve
- e. vagus nerve
- f. jugular vein

T - hypoglossal canal/foramen
F
F
F
F
F

39. A fracture through the roof of the maxillary sinus might result in sensory loss to the

- a. tympanic membrane
- b. lacrimal gland
- c. upper molar teeth
- d. upper incisors and canine teeth
- e. skin overlying the zygomatic bone

F
F
T
F
F

40. A fracture through the floor of the maxillary sinus may cause

- a. Loss of sensation of the upper molars
- b. Loss of sensation of the canines and incisors

T - p1022 NM
F - MAYBE YES IF they mean upper via disruption to maxillary nerve CNV2 which supplies the superior alveolar nerves which go to all top teeth (front incisors supplied by infraorbital nerve which becomes an alveolar n which is also a branch of CNV2) But if they mean upper plus lower; Can't be this one since lower jaw teeth are innervated by inf alveolar nerve from mandibular nerve CNV3

41. Which of the following enters into the inferior meatus of the nose

- a. frontal sinus
- b. ethmoidal sinus
- c. maxillary sinus
- d. nasolacrimal duct
- e. auditory tube
- f. inferior alveolar nerve

F - middle meatus
F - superior meatus
F
T – p1015 NM
F
F

ANATOMY

42. The alar ligaments connect the

- a. bodies of the axis to foramen magnum
- b. dens to foramen magnum
- c. adjacent vertebral bodies posteriorly
- d. tips of adjacent spinous processes
- e. adjacent laminae

F - from dens

T - p506NM

F - this is the posterior longitudinal ligament

F - this is the supraspinous ligament

F - This is the ligamentum flava

43. Nasal Cavity

- a. floor – cribriform plate
- b. roof is frontonasal/ethmoid
- c. medial wall: nasal septum
- d. lateral wall: Sup, mid, inf conchae

F – Floor is the palatine processes of the maxilla

F – also sphenoid

T

T

44. Regarding teeth: p994 Moore

- a. Premolars have more than 3 cusps
- b. Deciduous teeth between 1 – 3 years
- c. Something with roots and apical foramen

F - 2cusps (molars have three or more cusps)

F - 1-2yrs

The root canal transmits the nerves and vessels to and from the pulp cavity via the apical foramen.

ANATOMY

Thorax – Nerves

1. Phrenic nerve p125 instant anatomy, p188 Lasts
 - a. Strives to reach midline at all levels F
 - b. Medial relations identical F - completely different (R related to venous structures, L related to arterial structures)
 - c. Only supplies own side of diaphragm T
 - d. Arises from C6 F - C3,4,5 (mainly C4)
 - e. Both give off recurrent laryngeal nerve F - No from Vagus
2. Which one of the following statements concerning a typical intercostal nerve is INCORRECT – Pg 100new moore
 - a. it is a mixed spinal nerve T
 - b. it passes in the neurovascular plane between the internal intercostal and innermost intercostal muscles T
 - c. its collateral branch has no cutaneous distribution F – Wrong it does
 - d. in its course around the body wall the nerve lies below the vein and the artery T
 - e. the main nerve itself has an anterior terminal branch T - it has an anterior cutaneous branch

Thorax – Muscles

3. In the chest wall p176 Lasts for intercostals space p93, 97 NM
 - a. the neurovascular bundle lies between the external and internal intercostals F - it lies between the internal intercostals and the transversus
 - b. the transversus muscle lies between the internal and external intercostals F - it goes ext interc, int interc and innermost intercostal muscles
 - c. the intercostal artery lies between the nerve and vein T - VAN from sup to inf
 - d. the intercostal artery is more superficial than the vein F
 - e. runs nerve vein artery F - Nerve inferior, then artery, then vein superiorly
 - f. b) runs above rib F - below
 - g. c) runs under inferior border T

ANATOMY

Thorax – Circulation

4. Regarding the right coronary artery p156NM

- a. course through the left auricle and infundibulum
- b. supplies 60% of AV nodes
- c. usually has a posterior interventricular branch
- d. supplies 30% of SA nodes
- e. 50% of AV nodes are supplied by the RCA
- f. 50% of SA nodes are supplied by the RCA
- g. arises from posterior sinus
- h. wrong course

F - this is the LCA. The RCA goes between the R aortic sinus and pulm trunk. RCA gives arises from the R aortic sinus of the ascending aorta and passes to the R side of the pulm trunk running in the coronary groove. The L goes between the L auricle and the pulmonary trunk.
F - Says 80% in Moore (via posterior IV artery)
T - the artery which gives off the Post interventricular branch is the dominant branch. This occurs from the R in 67% of people
F - Says 60% in Moores
F - 80%
F - 60%
F - from R sinus
Course is to R of pulmonary trunk, running in coronary groove

5. Coronary arteries p156 NM, 196 Lasts

- a. The right arises from the posterior coronary sinus
- b. There are arteriolar anastomoses between the terminations of the left and right coronary arteries
- c. The left supplies the conducting system in the majority of patients
- d. right arises from the posterior coronary sinus
- e. left supplies the conducting system in most patients
- f. right supplies the posterior descending branch in most patients
- g. there are no arteriolar anastomoses between left and right

F - R aortic sinus

T - They are considered end-arteries although collaterals do occur...

F - RCA supplies SA in 60%, AV in 80%

F - from the R coronary sinus

F - Not best answer: It supplies the IVS but the AV node is 80% and SA node is 60% of time by RCA (via the anterior interventricular)

T

F

6. Regarding Internal Mammary artery p178 Lasts (le the internal thoracic artery)

- a. Descends straight down 1cm medial to border off sternum
- b. Branch of 2nd part of subclavian artery
- c. Gives off two intercostal branches
- d. Runs with companion vein which drains into brachiocephalic

F - 1cm lateral to border of sternum

F - 1st part

F - Gives off two anterior intercostals at EACH intercostals space then at the costal margin gives off superior epigastric and musculophrenic
T - x2 venae comitantes accompany it and drain into brachiocephalic vein.

Summary: Internal intercostals comes of the first branch of the subclavian artery and descends 1cm lateral to the sterna border. It gives of two anterior intercostals arteries at each intercostals space and splits into the superior epigastric and musculophrenic arteries at the costal margin. It runs with x2 venae comitantes which drain into the brachiocephalic vein

ANATOMY

7. Which one of the following statements concerning the relations of the arch of the aorta is INCORRECT
Pg 143, 145
- a. the ascending aorta arches backwards to reach the body of the fourth thoracic vertebra
 - b. the arch is crossed on its left side by the phrenic and vagus nerves
 - c. the left recurrent laryngeal nerve passes upwards on the left side of the arch of the aorta
 - d. ends by becoming the thoracic aorta posterior to the 2nd left sternocostal joint
 - e. the trachea lies on the right side of the arch of the aorta

T - as per paragraph below

T - picture, difficult to tell but left side looks like phrenic and vagus are close to aortic arch.

F - Pg 150 loops around subclavian on right; on left runs around arch of aorta and ascends in tracheo-oesophageal groove – so runs upward on right side of aorta

T

T

The arch of the aorta, the curved continuation of the ascending aorta begins posterior to the 2nd right sternocostal joint and the level of the sternal angle and arches superoposteriorly and to the left. The arch of the aorta ascends anterior to the right pulmonary artery and the bifurcation of the trachea to reach it's apex at the left side of the trachea and oesophagus, as it passes over the root of the left lung. The arch descends of the left side of the body of T4 vertebrae.

ANATOMY

Thorax – Organs

8. What is true of the anatomy of the trachea? P1098 NM and Wiki

- a. It is 20cm long and bifurcates below the manubrium sternum?
- b. it starts at the level of the cricoid cartilage
- c. it is 5cm diameter in the adult
- d. bifurcates just below manubrium
- e. bifurcates just below the sternal angle
- f. starts at level of C4
- g. drains to axillary lymph nodes
- h. is supplied by glossopharyngeal nerve
- i. is marked at it's lower end by the sternal angle
- j. enters the thoracic inlet slightly to the left
- k. commences below the cricoid at the level of C5
- l. bifurcates below level of lower border of lower manubrium
- m. trachealis muscle aids swallowing

F - 10cm long and bifurcates at T4/T5 which is at the level of the manubriosternal joint
T - starts just below the level of the cricoid cartilage p 187 lasts
F - 10cm long
T - at the level of T4 (starts at C6)
F - AT the sterna angle
F - C6-T4
F - deep cervical, pre/paratracheal nodes
F - vagus and recurrent laryngeal
T
F - Pretty much midline
F - this is C6
T - at the manubrio sternal jt (T4/5)
F - It lines the gap between the cartilage rings posteriorly.
It acts to constrict the trachea and thereby increase velocity of flow in coughing

9. The oesophagus is narrowest at:

- a. level of cricopharyngeous
- b. C6
- c. At cardiac orifice
- d. C4

T - p201 Lasts
F
F
F

10. The oesophageal opening in the diaphragm is at

- a. T6
- b. T8
- c. T10
- d. T12
- e. L1

F
F - SVC + R phrenic
T - + vagus
F - Aorta + azygous and hemiazygous, thoracic duct
F

11. What travels through the diaphragm with the oesophagus p328 NM

- a. right vagus
- b. azygous vein
- c. hemiazygos vein
- d. greater splanchnic nerves
- e. thoracic duct
- f. posterior vagal trunk
- g. sympathetic trunks
- h. thoracic duct
- i. phrenic nerves
- j. vagus nerve

T - at T10
F - with aorta T12
F - but not sure if it goes through
F - goes separately through
F - with aorta T12
T - at T10
F
F
F - with IVC at T8
T

Summary:

T8: IVC + terminal branches of the R phrenic n and lymphatics,
T10: Oesophagus + vagus (way to remember: it is CNX and goes through diaphragm at T10...), L gastric vessels, lymphatics
T12: (it is actually an opening posterior to the diaphragm) Aorta, thoracic duct, azygous and hemiazygous

ANATOMY

12. Which one of the following structures passes posterior to the root of the right lung – p90, 100, 149, 150 Moores

- a. hemiazygous vein
- b. right vagus nerve
- c. right phrenic nerve
- d. thoracic aorta
- e. right recurrent laryngeal nerve

F - on left side drains into left subclavian vein Pg 90

T

F - passes anterior to root of right lung Pg 149

F - posterior to root of Left lung

F - does not go low enough on right, hooks around subclavian vein

13. With regard to the bronchopulmonary segments, the following are true except p125 NM

- a. There are approximately 10 segments in each lung
- b. The lingula is divided into upper and lower segments
- c. Fibrous septa separate the segments
- d. segmental bronchus with pulmonary vein

T - 10 in the R, 8-10 in the L p125 NM

T - p209 Lasts

T

F - really segmental bronchus+ a tertiary branch of pulm artery.

Drained by intersegmental v

SUMMARY:

- Separated from adjacent tissue by septa

- Supplied independently by a segmental bronchus and a tertiary branch of the pulm artery

- Drained by intersegmental veins which lie in the connective tissue btwn adjacent segments

- They are pyramidal in shape with the apex facing the lung root

- The largest subdivision of a lobe

- Named according to the segmental bronchi supplying them

14. The most superficial structure in the thoracic inlet is the

- a. vagus nerve
- b. superior vena cava
- c. right subclavian artery
- d. left subclavian artery
- e. thoracic duct

F

T - p 183 Lasts p85 NM

F

F

F - Summary: Thymus, veins, vagus, arteries, airway, git, lymph

15. The diaphragm

- a. has the oesophageal opening opposite the T8 vertebrae
- b. is supplied by C4, 5, 6
- c. has a major role in expiration
- d. has a vena caval opening at T10
- e. has an aortic opening opposite T12

F - this is SVC

F - C3,4,5

F - it is a passive process in normal respiration

F - this is T8

T

16. Which muscle is NOT used in forced expiration

- a. transversus abdominis
- b. rectus abdominis
- c. diaphragm
- d. external oblique
- e. internal oblique

F

F

T

F

F - **NB OBLIQUES is a distractor: don't confuse with external intercostals (in forced insp) and int intercostals (in forced exp).

Both obliques are used in forced expiration

17. Which vessel passes directly behind the right hilum

- a. right phrenic nerve
- b. right vagus nerve
- c. azygous vein
- d. internal mammary artery
- e. hemi-azygous vein
- f. aorta

F

T - This one is prob true too

T - p184 NM

F

F

F

18. The breast

- a. Is a modified sebaceous gland
- b. Is supplied by the lateral thoracic artery and IMA
- c. Overlies pec minor and part of lat dorsi
- d. Drains predominately to subclavian nodes

F - I thought it was a modified sweat gland

T - and intercostals

F - pec major 2/3, 1/3 over pec major

F - Mainly axillary nodes

ANATOMY

Abdomen & Pelvis – Nerves

1. Referred pain from pancreatitis is at what level
- a. T7/8
 - b. L1/2
 - c. T3/4
 - d. T12/L1
- T - T6-T9 accord to Moore p324
F
F
F

Abdomen & Pelvis – Lymphatics

2. Superficial inguinal lymph nodes drain all of the following except
- a. anterior thigh
 - b. base of penis
 - c. testis
- F
F
T - they are drained by paraaortic nodes due to their embryological origin
3. Which lymph nodes drain the lower anal canal
- a. External iliac
 - b. Deep inguinal
 - c. Para-aortic
 - d. Superficial inguinal
 - e. Internal iliac
- F
F
F
T - inferior to the pectinate line p448NM
F - this is superior to the pectinate line
4. Concerning lymphatic drainage of the viscera:
- a. The pectinate line is a watershed
 - b. All the abdominal skin drains to the inguinal nodes
 - c. The rectum drains to the para-aortic nodes
- T - inferior to it to superficial inguinal LN's, superior to it to internal iliac nodes
F - p212 NM
F - Superior portion to pararectal to sacral to inferior mesenteric nodes.
Inferior portion to internal iliac

Abdomen & Pelvis – Spaces

5. What goes through the lesser sciatic foramen
- a. Piriformis
 - b. pudendal nerve
 - c. Sup gemelli
 - d. Obturator internus
 - e. internal pudendal artery
 - f. superior gluteal artery
 - g. inferior gluteal artery
 - h. pudendal artery
- F
T
F
T - Tendon of obturator internus does
T - and also goes through greater p384NM
F
F
F – only true if it is internal pudendal
Summary of structures passing through the lesser sciatic foramen:
Tendon of obturator internus
Internal pudendal artery
Nerve to obturator internus
Pudendal nerve
I am pretty sure that the pudendal nerve, pudendal artery, tendon of obt internus and nerve to obturator internus all go through...
nb) this question seems to be one we have never got the right answer for over the years. I think Last's doesn't make it clear.
6. Which does not pass through the transpyloric plane
- a. splenic vein
 - b. tips of the 9th costal cartilages
 - c. lower border of L1
 - d. Spleen
 - e. superior mesenteric artery
- T - (from Saunders)
F - ? it does
F - It does
F - Hilum of
F - It does
Remember transpyloric plane = L1

ANATOMY

Abdomen & Pelvis – Circulation

7. With regard to the abdominal aorta, what is correct? P340NM

- a. It is palpable above the transpyloric line in line with the intertrochanteric line
- b. It has the sympathetic chain adjacent to it on the right
- c. the splenic vein lies under the SMA
- d. Renal arteries originate at T12
- e. The surface marking is from just above the transpyloric plane to a point just below and to the left of the umbilicus
- f. The splenic vein crosses the aorta just below the origin of the superior mesenteric artery
- g. surface markings are from the transpyloric plane to just left of the mid point between ASICs

F - Intertrochanteric line is lateral so not right. The surface markings are the 2.5cm above the transpyloric plane in the midline to a point 1-2cm below and to the L of the umbilicus

F - on the L

F - the SMA lies under the splenic vein... who the fuck cares!? P266 Lasts

F - L1 (New Moore p 339, other books say L2...). can't be t12 because it STARTS at T12 (ends at L4)

T - 2.5cm above the transpyloric plane (L1) in the midline to a point 1-2 cm below and to the left of the umbilicus p340NM, Lasts p268

F - it lies superior to the SMA (fig 5.42 Lasts)

T - pretty much. From 2.5cm above the TP plane (ie at T12) to a point inferior and slightly to the left of the umbilicus (ie L4) which corresponds to the highest point of the iliac crests.

8. Branches of the abdominal aorta include all of the following EXCEPT

- a. the deep circumflex iliac artery
- b. the suprarenal artery
- c. the inferior mesenteric artery
- d. the inferior phrenic arteries
- e. the lumbar arteries

T

F

F

F

F - Pneumonic: I Can't Stop My Randy Goat Licking It's Massive C...

9. The highest branch of the abdominal aorta is the

- a. right suprarenal artery
- b. coeliac trunk
- c. left renal artery
- d. left gonadal artery
- e. superior mesenteric artery

F - L1 . It is above the L suprarenal but below the celiac trunk p339 NM

T - at T12!!!! P339NM

F - L1

F - L2

F - L1

10. All of the below are tributaries of the portal vein EXCEPT

- a. right gastroepiploic v
- b. left gastroepiploic v

F - to the superior mesenteric vein which drains to portal...

F - to splenic which drains to portal...

11. The main vessel supplying the body of the pancreas is the p287 NM

- a. superior pancreaticoduodenal artery
- b. splenic artery
- c. left gastric
- d. left gastroepiploic
- e. inferior pancreaticoduodenal

F - head of pancreas

T - p286 NM lasts p 262

F

F

F - head of pancreas

12. Superior pancreaticoduodenal vein drains into

- a. left gastric vein
- b. portal vein
- c. splenic vein
- d. superior mesenteric vein
- e. IVC

F

T - p238 Lasts, Inferior pancrduo joins SMV

F

F

F

13. All the following are veins which drain the stomach EXCEPT

- a. Gastroepiploic
- b. Gastroduodenal
- c. right gastric
- d. left gastric
- e. short gastric

F

T - This one

F

F

F

ANATOMY

14. Regarding the testicular blood supply

- a. division of the testicular artery results in testicular infarction F
- b. testicular artery has numerous anastomoses with the cremasteric artery F
- c. pampiniform plexus is a superficial plexus surrounding the testicular artery T

ANATOMY

Abdomen & Pelvis - Organs

15. Which is true of the Spleen?
- a. notch is located..... (?post/sup/.....)
 - b. it has T12 – L2 innervation and pain is referred to the lower chest and upper flank
16. Which is not true of the stomach
- a. completely invested by peritoneum T
 - b. cardia situated at T12 F - T11 accord to moore p 259
 - c. pyloric opening at L1 T
 - d. aorta to the left of lesser curve F - to the R
 - e. supplied by branches of the coeliac trunk T
17. What runs through the panniculus adiposis
- a. veins and cutaneous nerves T - from blitz et al
 - b. hepatic artery F
 - c. portal vessels F
18. Regarding the appendix, which is incorrect lasts p 249, NM 273
- a. The position of its base is fixed in relation to the caecum T
 - b. It opens onto the caecum 2cm below the ileocaecal valve T - posterior wall 2cm below (lasts...)
 - c. The appendicular artery is usually a branch of the ileocolic artery T
 - d. It may be 6-28cm long F - 6-10cm
 - e. It has a mesentery T - the mesoappendix
 - f. usually lies retrocaecal in health F - ileocaecal in health accord to Lasts
 - g. drains to inguinal nodes F - ileocolic to superior mesenteric nodes
 - h. has no mesentery F - it has a mesoappendix
 - i. has a tip constant in relation to the caecum F - it is the base which is constant
 - j. opens into the caecum 2 cm below the ileocaecal valve T - (answer derived from Lasts not moore)
 - k. The tip is in constant relation to McBurney's point F
 - l. Enters the anterior wall of the caecum F - posteromedial 2cm below ileocaecal junction
 - m. Usually retrocaecal in health F - Depends. Lasts says retroileal. Moore says retrocaecal
19. Where does the appendix lie in health
- a. Retroileal p 249 Lasts T
20. Which is true of colon
- a. ascending is longer than descending Lasts p250, NM p279 F - Asc 15cm, TV 45cm, Desc 30cm, Sigmoid <45cm long
 - b. only part suspended on mesentery is transverse colon F - 25% have short mesentery accord to adam
 - c. marginal artery is weakest at hepatic flexure F - No at the left colic flexure aka splenic flexure (marginal artery are the anastomotic branches near the inner margin of the whole colon)
 - d. lymphatic drainage is via superior and inferior mesenteric LN T
21. The internal anal sphincter p447
- a. is skeletal muscle F - I think they mean striated; no it is not
 - b. has longitudinal fibres F - circular layer
 - c. has no bony attachment T

ANATOMY

22. Regarding the relations of the ureter, which is incorrect
p280 Lasts, p313NM

- a. cross the vas deferens in males
- b. medial to the transverse processes of lumbar spine
- c. cross the genitofemoral nerve
- d. cross the SI joint
- e. narrowest at the PUJ

F – crossed by the vas deferens

T

T

T

?T - Narrow at PUJ, VUJ and where they cross the SIJ into the pelvis

Summary: 25cm long, Pass inferiorly on Psoas Major under the peritoneum, crosses in front of the genitofemoral nerve, the gonadal vessels cross in front of the ureter, it leaves the psoas at the bifurcation of the common iliac, goes over the SI joint and enters the pelvis, the vas def goes over it

X-ray: Medial to the tips of the TV processes of the lumbar vertebrae and crosses the pelvic brim at the SIJ

23. The ureters. Lasts p280

- a. The PUJ is the widest diameter
- b. Are dependant on innervation from the renal pelvis for peristalsis
- c. Lie lateral to the transverse processes of the lumbar vertebrae

T - (saunders agrees)

F - they have intrinsic pacemaker ability

F - just medial

24. Regarding the urethra

- a. Is 20cm long
- b. Does a right angle bend in spongy part of urethra membranous
- c. Narrowest point is at prostate
- d. Narrowest point is at navicular fossa
- e. Runs in corpus cavernosum

T - In males yes, females a measly 4cm lasts p312

F - Mine doesn't....There is a 90 degree turn from the spongy to the

F - ext meatus

F - ext meatus

F - spongiosum

25. Regarding the testicle p228 NM, p222Lasts

- a. It has no parasympathetic supply
- b. Appendix is inferior
- c. Vas deferens in somewhere
- d. Epididymus is somewhere else
- e. Drains to paraaortic and inguinal nodes
- f. The pampiniform plexus is a superficial venous plexus surrounding the testicular artery
- g. The testicular artery has numerous anastomoses with the cremasteric artery

T - Can't find it in books but Blitz reckons it has vagal supply. Best answer.

F - Do they mean epididymus which is posterolateral

F

F

F - paraaortic only

T - p228 NM best answer (Blitz, adam, saunders agree)

T - It anastomoses with artery to vas def AND cremasteric artery (but they are not sufficient to maintain supply to the testes (Saunders don't agree)

- h. Division of the testicular artery results in testicular infarction F - No will cause atrophy, not infarction

26. The duodenum

- a. is a retro-peritoneal structure
- b. is 25cm in length
- c. lies between the levels of L2-L4
- d. in it's 4th part lies to the right of the aorta

F - Partially only: the 4th isn't

T

F - L1-L3

F - to the L

27. Which of the following the appendix is UNTRUE

- a. it has a base constant in relation to the caecum
- b. it has it's own mesentery
- c. it is formed by teneae coli convergence
- d. varies in length between 2 and 25 cm
- e. it always lies retro-ileal in prescence of disease

T

T

T - ?

T - Apparently can be

F

28. The ureters p280 Lasts

- a. widest in diameter at the PUJ
- b. innervated by sympathetic nerves T12-L1
- c. lie lateral to the tips of the lumbar transverse processes
- d. depend on innervation from the pelvis for peristalsis

T - (saunders)

F - T10-11 (accord to Moore it would be TRUE: t11-L2...

F - just medial

F - have independent pacemakers

ANATOMY

29. The ureters p280 Lasts

- a. cross the gonadal vessels
- b. cross over the vas deferens
- c. are crossed by the genitofemoral nerve
- d. pass under the cover of the psoas muscle
- e. lie lateral to the lumbar transverse processes

- F - it is crossed by the gonadal vessels
- F - It is crossed by the vas def (ie vas def is above it)
- F - crosses in front of it
- F - lie on it
- F - just medial

30. Which of the following is correct regarding the pancreas

Pg 257 to 259

- a. the head is palpable in the epigastric region
you wouldn't feel it.
- b. the body and tail are left and inferior to the transpyloric level
- c. the posterior surface is covered by peritoneum
- d. the neck overlies the L1/L2 vertebrae
vertebrae
- e. the head lies superior and right of the transpyloric plain

- F - it's retroperitoneal so unless there is a massive calcified tumor in it surely
- F - superior to transpyloric plane (L1)
- F - anterior surface of neck is covered with peritoneum
- F - overlies the superior mesenteric vessels, body passes over aorta and L2
- F - inferior to L1

ANATOMY

Comparative Anatomy of a Child

1. Which bone in a child is the same size as adult at birth?
 - a. Middle ear T
 - b. Squamous bone F
 - c. Ethmoid bone F
 - d. Lacrimal bone F
 - e. Parietal bone F

2. Regarding ossification centres
 - a. Capitate is last to ossify – 10 years F - No first (@2yrs CRITOE)
 - b. Medial epicondyle fuses at 20 years F - Would have thought earlier because critoe (ie begins at 6 yrs)
 - c. 2 centres of radius ossify by 15years T - by exclusion
 - d. pisiform ossifies by 1years F - start at hamate at 2 yrs and work clockwise. Pisiform is last in wrist at 12years
 - e. clavicle is the last bone to ossify F - it is the FIRST long bone to begin to ossify (starts in utero)

3. The first bone to ossify is the
 - a. Humerus F
 - b. Mastoid F
 - c. clavicle T
 - d. ethmoid F
 - e. sphenoid F

4. Which bones form the borders to the anterior fontanelle in a child?
 - a. 2 frontals, 2 parietals T - posterior is 1 occipital and two parietal
 - b. 1 frontal, 2 parietals and squamous bones F
 - c. 2 frontal, 2 temporal and occipital F
 - d. 1 frontal, 1 parietal, 2 frontal F

5. Regarding the newborn skull, which is false? P903 NM
 - a. Has a similar size face to the adult F - Vault is large in proportion to the face when compared to adult p31 Moore
 - b. It has similar vertical proportions to the adult T
 - c. The bones of the vault ossify in membrane and the bones of the base in cartilage F
 - d. The anterior fontanelle has as its borders, frontal, parietal, temporal, sphenoid bones F - frontal x2 + parietal x 2
 - e. The posterior fontanelle has as its borders, occipital, parietal, temporal bones F - Occipital x 1, parietal x 2
 - f. Ant. fontanelle palpable at 3 years F - closes at 9-16months. But lasts and moore say 18months
 - g. Ant. fontanelle "longest" T
 - h. Ant. fontanelle persists in 8% F - but in 8% a remnant of the anterior suture (metopic suture) does. Persistence of the anterior fontanelle is MUCH lower

6. Concerning the anatomy of infants, which is FALSE?
 - a. spinal cord ends at L1/L2 F - ends lower L3

7. Baby face ?p903NM
 - a. Growth of maxillary sinuses most important factor that increases length ?
 - b. Deciduous teeth appear after major face growth? F - Prob not since they appear at roughly 6/12
 - c. frontal sinus? T - There are no mastoids at birth (therefore CNVII at risk by forceps delivery). During the first year the mastoid processes form as the SCM's develop on pull on the petromastoid part of the temporal bones
 - d. mastoid process pulled out by sternocleidomastoid

ANATOMY

ANATOMY

5. Injury to the disc between C5/C6 (?disc bulge); pain is referred to
 - a. Lateral arm
 - b. Lateral forearm and thumb
 - c. Medial arm
 - d. Index finger and forearm
6. Which is true regarding deep fascia?
 - a. It doesn't help venous return
 - b. It doesn't allow muscles to expand
 - c. No deep fascia over the face
 - d. It runs freely over bone
 - e.
7. Which of the following is not a branch of the Basilar artery?
 - a. Posterior Cerebral artery
 - b. Anterior inferior Cerebellar artery
 - c. Vertebral art
 - d. Pontine branches
 - e. Anterior spinal art
8. The plantar aponeurosis
 - a. Emerges from the posterior portion of the calcaneus
 - b. Is between the 1st and 2nd muscle layers
 - c. Attaches to all 5 metatarsals
 - d.
 - e.
9. Injury to the wrist with impaired thumb abduction; which other deficit is present?
 - a. Apposition of thumb to index finger (not sure re this stem)
 - b. Unable to oppose thumb and little finger
 - c. Absent sensation on dorsal side of 1st web space
 - d.
 - e.
10. Mid shaft humerus fracture. Which is INCORRECT
 - a. Extension of the elbow is possible
 - b. ?transient paralysis (not sure of this stem)
 - c. Able to extend interphalangeal joints of fingers
 - d.
 - e.
11. Which of the following pass superficial to the extensor retinaculum of the ankle?
 - a. Deep peroneal nerve
 - b. Superficial peroneal nerve
 - c. Peroneus tertius
 - d. Extensor digitorum
 - e.
12. Which of the following is NOT innervated by the tibial portion of the sciatic nerve
 - a. Short head of biceps femoris
 - b. Semitendinosus
 - c. Adductor magnus
 - d. Semimembranosus
 - e. Long head of biceps femoris
13. Movements of subtalar joint
 - a. Inversion / eversion (repeat)
 - b.
 - c.

ANATOMY

- d.
 - e.
14. Where is the motor nucleus of CN V located?
- a. Medulla
 - b. Pons
 - c. Midbrain
 - d.
 - e.
15. Regarding the falx cerebri
- a. Unsure re stems...
 - b.
 - c.
 - d.
 - e.
16. Regarding the trachea
- a. Is 1.5cm wide
 - b. Contains trachealis
 - c. Is a fibrocartilagenous tube
 - d. Extends from the epiglottis to the R+L bronchi
 - e. Has brachiocephalic trunk on the L
17. The superior mesenteric artery
- a. Is 3 cm below the Coeliac trunk
 - b. Supplies the gut from the point of entry of the common bile duct to the splenic flexure
 - c.
 - d.
 - e.
18. Which of the following muscles inverts and dorsiflexes the foot/ankle?
- a. Tibialis anterior
 - b.
 - c.
 - d.
 - e.
19. Regarding the circle of Willis
- a. Anterior cerebral artery is the largest branch
 - b. Posterior communicating artery connects the PCA and the MCA
 - c.
 - d.
 - e.
20. There is loss of which movement if the greater tuberosity is removed from the humerus
- a. Abduction and lateral rotation
 - b.
 - c.
 - d.
 - e.
21. The ureters
- a. 40cm long
 - b. Pass close to the proximity of the vaginal fornix
 - c. Innervated by L2,3
 - d. Crosses anterior to the Vas Deferens
 - e. Is intraperitoneal
22. Which isn't a branch of the external iliac
- a. Ovarian artery
 - b.
 - c.

ANATOMY

- d.
 - e.
23. Regarding CSF
- a. Provides cushioning for the brain
 - b. 1000ml/day is produced
 - c. Produced by the brain
 - d. Absorbed by the choroid plexus
 - e.
24. Which layer is NOT pierced when performing an LP?
- a. Posterior longitudinal ligament
 - b. Ligamentum flavum
 - c. Interspinous lig
 - d. Supraspinous lig
 - e. Dura mater
25. Lymphatic drainage of the posterior tongue drains directly to
- a. Submandibular LN's
 - b. Submental LN's
 - c. Superior deep cervical LN's
 - d. Inferior deep cervical LN's
 - e.
26. With respect to the lymphatic drainage of the abdomen
- a. The pectinate line is a watershed area (repeat)
 - b. ?Skin of abdomen
 - c. Follows venous drainage of viscera
 - d.
27. With regard to scalp wounds
- a. They gape due to the aponeurosis
 - b. Cause massive bleeding due to the anastomosis
 - c. The fourth layers (loose connective tissue) provides a good barrier for infection
 - d. They don't gape due to?
 - e.
28. The dorsal scapular nerve (nerve to rhomboids)
- a. Arises from C6
 - b. Supplies levator scapulae
 - c. Passes between scalenus medius
 - d. Is at risk of damage due to superficial course through the rhomboids
 - e.
29. Damage to the ipsilateral cervical chain will cause
- a. Ptosis
 - b. Ipsilateral sweating
 - c. Ipsilateral mydriasis
 - d. Ipsilateral facial pallor
 - e. Effects of skeletal fibres on levator palpebrae superioris (unsure of wording of this stem)
30. All of the following drain to superficial inguinal nodes EXCEPT
- a. Testes (repeat)
 - b.
 - c.
 - d.
 - e.
31. The following about the breast is true
- a. Blood supply is mainly lateral thoracic and internal thoracic arteries
 - b. Modified sebaceous gland
 - c. Nipple is supplied by T6
 - d. Breast covers lat dorsi and pec minor (that wouldn't look good)

ANATOMY

- e.
- 32. The cavernous sinus
 - a. Transmits all branches of CN V
 - b. ICA in the walls (unsure of this stem)
 - c.
 - d.
 - e.
- 33. Which of the following passes through the lesser sciatic foramen?
 - a. Piriformis
 - b. Superior gluteal artery
 - c. Superior gluteal vein
 - d. Inferior gemelli
 - e. Obturator externus
- 34. Regarding the ulna artery
 - a. Pulse is felt under ?
 - b. Common interosseous is its largest branch
 - c. Deep to FCU
 - d. Ulna nerve is on the radial side of the ulna artery
 - e.
- 35. Which of the following DOESN'T attach the pectoral girdle to the trunk?
 - a. Lat dorsi
 - b. Subclavius
 - c. Trapezius
 - d. Teres major
 - e. Serratus anterior
- 36. Which artery supplies the trochanteric anastomosis?
 - a. Obturator art
 - b. Internal pudendal
 - c. Superior gluteal branches
 - d. Anterior/posterior circ femoral (ascending branches)
 - e.
- 37. Damage to the median nerve at the elbow will NOT effect
 - a. Supinator
 - b. Pronator teres
 - c. FDP
 - d. FDS
 - e.
- 38. Which of the following muscles DOESN'T affect the vocal cords?
 - a. Posterior cricoarytenoid
 - b. Cricothyroid
 - c. Vocalis
 - d. Aryepiglottics
 - e.
- 39. Which is the narrowest portion of the oesophagus?
 - a. At the level of the cricopharyngeus
 - b.
 - c.
 - d.
 - e.
- 40. Eye movements
 - a. ? repeat
 - b.
 - c.
 - d.

ANATOMY

e.

41. The manubrium

- a. Lies at T3/4
- b. Transthoracic plan is here
- c. Something about SVC at 4th rib (unsure re stem)
- d.
- e.

42. Anterior fontanelle is formed by

- a. 2 frontal/2 parietal
- b. 2 frontal/sphenoid/ethmoid
- c. 2 parietal/2 temporal
- d.
- e.

ANATOMY MCQ 2008 GOLD

Sympathetic trunk (basically read the whole section of the ANS and location of symp trunk!)

- a. Arises from base of skull to ? T12
- b. Pre-synaptic cell bodies are located in the ganglia
- c. White rami commitantes runs from C1 to C7
- d. Grey commitantes run from T1 – L5
- e. Inf cervical/thoracic? passes to stellate ganglion

Parasympathetic system

- a. supplies viscera, trunk and limbs
- b. innervates adrenal glands
- c. only has 2 cell bodies in CNS
- d. essentially has no fibres ? (something like that – prob wrong)
- e. Pre/post synaptic fibres of the vagus run to the parotid ganglion (We put this one)

Regarding joints

- a. permits gliding or sliding movements (correct one)
- b. Pivotal joints are multi-axial
- c. Hinge joints are multi-axial
- d. Surface is concave

Regarding pectoralis major

It is a powerful lateral rotator

Regarding serratus anterior

It arises from 6 fleshy slips

It is supplied by dorsal scapular nerve

It protracts the scapula

Regarding the brachial artery

It starts at the inferior border of teres major

Foot

- a. Neurovascular runs between 2nd and 3rd layers
- b. Medial plantar artery forms the deep plantar arch
- c. S1 segment supplies all the foot muscles
- d. (2 others that we thought were wrong)

Venous drainage

- a. Superficial sagittal sinus site in the free edge of cerebral falx
- b. Cavernous sinus lies medial to the ICA
- c. (3 others that we thought wrong)

ANATOMY

Saphenous vein

- a. lies behind the medial malleolus
- b. does not communicate with the deep veins above the knee
- c. has no valves (+/- above the knee?)
- d. empties into the femoral vein laterally
- e. it inserts into the femoral vein 3.75cm lateral and superior to the pubic tubercle

2 questions on comparative anatomy of head!

Which of the following is true regarding the infant skull

- a. Anterior fontanelle is composed of frontal, parietal and temporal bones
- b. Posterior fontanelle is composed of occipital, parietal and temporal bones
- c. Paranasal sinuses are present at birth but small
- d. The bones of the skull have ossified by birth

Regarding age changes in the face of a child

- a. Most of the vertical growth of the face is attributed to the sternocleidomastoids pulling on the bone
- b. Most of the growth of the vertical face is in the maxillary sinus
- c. Mandible is fused by ? 3 years
- e. face and cranial vault are similar proportions to adult

Teeth (they had a freakin question on the teeth!)

- a. nerve and vessels go through the apical foramen
- b. deciduous teeth erupt btw 6 months and 3 years
- c. crown is covered by cement
- d. something about enamel

Avulsed greater tubercle of humerus leads to inability of (repeat)

- a. lateral rotation and abduction
- b. other combinations

Movements of scapula (correct pairings of muscle and movement)

- a. Serratus anterior and protraction (correct)
- b. rhomboids and depression
- c. pec major and ? protraction
- d. ? superior fibres of trapezius and retraction

Axilla – which is incorrect?

- a. Axillary vein lies lateral to nerves of brachial plexus
- b. Axillary vein is not in a sheath
- c. Anterior and posterior walls converge laterally at the intertubercular groove of the humerus
- d. (2 other correct ones we thought)

Brachial plexus – which is incorrect?

- a. Thoracodorsal nerve comes off the roots of C5, C6, C7
- b. Long thoracic nerve comes off roots of C5, C6, C7
- c. Dorsal scapular nerve comes from C5 root
- d. Nerve to subclavius comes from C5 and C6
- e. (another correct one)

Regarding the tibial collateral ligament?

- a. cord-like structure attaching to the medial condyle
- b. pes anserinus arises deep to it separated from it by the popliteus bursa
- c. blends in with the capsule

ANATOMY

- a. Posterior cruciate is weaker than the ACL
- c. Best approach for aspiration knee joint is from medial side.
 - Septic arthritis may be caused by pre-patellar bursitis
 - Gastrocnemius bursa communicates with knee joint
 - Haemarthrosis can occur from a torn cruciate ligament rupturing the middle genicular artery

What is incorrect?

- a. IM injection at the superolateral quadrant of the buttock is best to avoid the sciatic nerve.
- b. Supplied by both superior and inferior gluteal nerve (we put this one)
- c. Supplied by both superior and inferior gluteal arteries
- d. strong anti-gravity muscle

Medial muscles of the thigh

- a. supplied by obturator artery
- b. myotomes for all muscles in this compartment was L4-L5
- c. cause mainly flexion of hip
- d. medial intermuscular septum attaches to fascia lata

Adductor canal

- a. Femoral artery (or vein?) always lies btw the saphenous nerve and the femoral vein (? artery)
- b. Femoral vein lies medial to the femoral artery at the adductor hiatus
- c. Roof partly formed by gracilis
- d. Adductor longus (Something I thought was wrong)

Trachea

- a. is a fibrocartilaginous tube
- b. 1.5 cm diameter
- c. goes from epiglottis to R) and L) bronchi

Relations

- a. R) vagus goes behind root of R) lung
- b. L) vagus goes behind root of L) lung
- c. L) phrenic crosses posterior to arch of aorta
- d. L) recurrent laryngeal nerve runs in the groove btw trachea and esophagus

Lymphatics of the arm

- a. superficial run with arteries
- b. deep run with veins
- c. don't run with the vessels at all
- d. drainage from thumb goes to lateral humeral LN
- e. (something that we thought was wrong)

Lumbar plexus (learn!)

Regarding the ventricular system

- the lateral ventricle drains via the interventricular foramen to the 4th ventricle
- the inferior horns are larger than the posterior horns
- the inferior horns lie in the temporal lobe
- the lateral ventricle does not have choroidal cells

CSF

- 1000mL is made daily
- venous pressure has no effect on CSF pressure

Kiesselbach (nose) plexus – learn what forms it

- formed by branches of ICA and ECA
- formed by branches of maxillary and mandibular arteries
- formed by branches of mandibular and ophthalmic arteries
- inf and sup ethmoid supply the plexus

ANATOMY

Regarding the testis

- lymphatic drainage is to the lumbar and inguinal LN
- epididymis is located posteromedial to testis
- vas deferens is in direct contact with the pelvic peritoneum
- vas deferens is medial to the epididymis
- appendix of testis is superior/inferior ? to testis

Spinal cord transection

- C1 – C3 results in quadriplegia and loss of respiration (This is the right answer)
- C3 – C5 (or somewhere in lower cervical spine) results in paraplegia
- T10 – L1 results in loss of thigh function
- L2 – L3 (around there) results in loss of leg function
- something else with loss of respiration

Coronary arteries

- L) CA supplies most of conduction system (that was the answer I put)
- R) or L) comes from posterior aortic sinus
- another R ? or L comes from posterior sinus??

Regarding Parkinson's

- the severity of the motor deficit correlates with the degree of dopamine deficiency
- 60% get dementia
- there are no familial inheritance predispositions, such as autosomal recessive or dominant
- Dopamine antagonists do not cause Parkinsonism

After a tonsillectomy there may be loss of sensation from posterior tongue, resulting from injury to what nerve?

- glossopharyngeal
- facial
- trigeminal
- vagus
- hypoglossal

What doesn't go through the jugular foramen?

- hypoglossal nerve
- CN 9
- CN 10
- CN 11

Posterior interosseous nerve supplies

- anconeus
- ECRL
- ECRB
- ECU

Which one structure runs with the deep fibular nerve?

- post tibial artery
- superficial fibular artery
- ant tibial artery
- ant interosseous artery
- fibular artery

Regarding the AC joint

- costoclavicular ligament is not important in stability
- is a synovial joint (I put this one down)

Subclavius

- attaches to the 2nd costal cartilage
- stabilizes the clavicle with upper limb mvts

The typical thoracic rib

- has 2 articular facets in the head
- articulates with vertebra below

ANATOMY

length of neck increases as you go down

What attaches to the coracoid process?

- pec major
- long head biceps
- trapezoid ligament (I put this one)
- subclavius
- something else that appeared wrong

Layers of LP – in correct sequence

- skin, supraspinous lig, interspinous lig, ligamentum flavum, dura, arachnoid
- skin, interspinous lig, supraspinous lig, ligamentum flavum, dura, arachnoid
- skin, ligamentum flavum, interspinous lig, supraspinous lig, dura, arachnoid
- skin, supraspinous lig, interspinous lig, ligamentum flavum, arachnoid, dura
- skin, supraspinous lig, interspinous lig, post longitudinal lig, dura, arachnoid

What is not diagnostic for carpal tunnel syndrome?

- there is loss of sensation thenar eminence
- there is wasting of thenar eminence
- pt can still flex thumb
- pain is relieved with surgical release
- can't oppose thumb

Regarding the male urethra

- narrowest at the prostatic urethra
- Internal urethral sphincter is at the membranous part
- widest at the external urethral meatus
- 11 ? 15 cm (a bit short for my liking hehe)
- has a double curvature in the non-erect state

Femoral triangle

- Femoral artery enters thigh halfway btw ASIS and pubic tubercle
- Femoral nerve lies between sartorius and pectineus
- Femoral nerve lies in the femoral sheath

What is not in the posterior triangle? (repeat – and from Lasts!)

- Cervical plexus
- transverse cervical vessels
- occipital lymph nodes
- spinal accessory nerve
- brachial plexus

What does not go through the lesser sciatic foramen?

- obturator internus tendon
- superior pudendal artery
- internal pudendal nerve

(remember what goes through the greater and lesser sciatic foramen)

Deep fascia

- is absent in the face
- passes over bone
- prevents venous return
- allows muscular expansion
- contains connective tissue with fat?

Blood supply to the body of the pancreas is by

- superior pancreaticoduodenal
- inferior pancreaticoduodenal
- splenic artery
- left gastric
- gastro-epiploic

ANATOMY

Injury to the common peroneal nerve at the neck of the fibula causes everything except
loss of sensation over the foot with sparing of the 1st webspace
flaccid paralysis of dorsiflexion
unopposed inversion
high stepping gait
flaccid paralysis of eversion

Internal mammary (thoracic) artery
supplies 2 anterior intercostal branches at each intercostal space
runs medial to the edge of sternum

Radial artery
runs deep (between?) to the heads of supinator
runs deep to the insertion of pronator teres tendon
runs deep to the tendons of APL and EPB
runs deep to the insertion of FPL
is the larger terminal part of the brachial artery

Regarding the anatomical snuffbox, which is incorrect
Cephalic vein runs in it
you can feel the scaphoid and trapezium between the base 1st metacarpal and the radial styloid process
you can palpate the terminal branches of the radial nerve over the tendons of EPL? (one of the tendons)
the boundaries are formed by EPB on one side and EPL and APL on the other side

Regarding Flexor digitorum profundus
It is supplied wholly by the median nerve
It is a powerful forearm flexor/muscle? (I put this one)
It arises from the olecranon and the anterior surface of the radius
The interossei come off its tendons
It has its own separate sheath

Occipitofrontalis muscle (something about it)

Occipital scalp sensation of nerves and blood supply

Regarding the appendix
It is retrocaecal in the absence of disease
Its position at McBurneys Point is constant when inflamed
Has no mesentery
lymphatic drainage is to inguinal LN

Which of the following does NOT contribute to the medial longitudinal arch of the foot
Talus
Navicular
three medial cuneiforms
base of three medial metatarsals
cuneiform