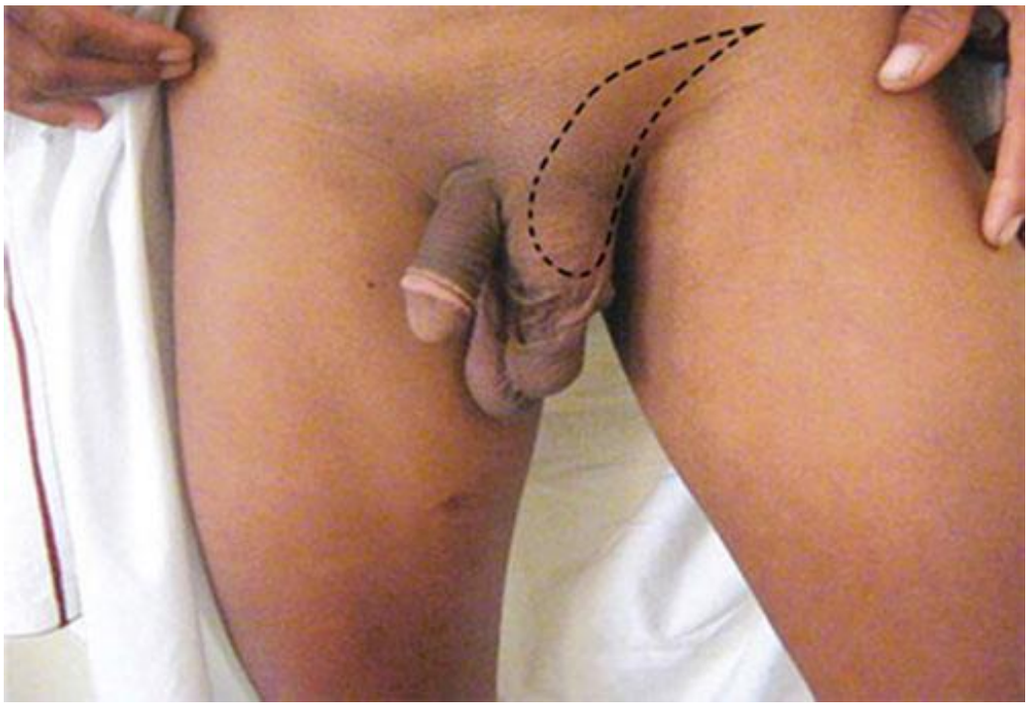
P001

Q001

Given above is a picture representing venipuncture of peripheral vessel

1. Which is the vein most commonly used for venipuncture in the upper limb? (0.5 marks)
2. Mention two reasons as to why this vein is preferred the most? (1 mark)
3. Which is the most preferred vessel for venous access in the lower limb? (0.5 marks)
4. Mention the site of access in the lower limb (1 mark)
5. Name the technique used for venous access in the lower limb (0.5 marks)
6. Name the structure likely to be injured in this procedure (0.5 marks)

P002

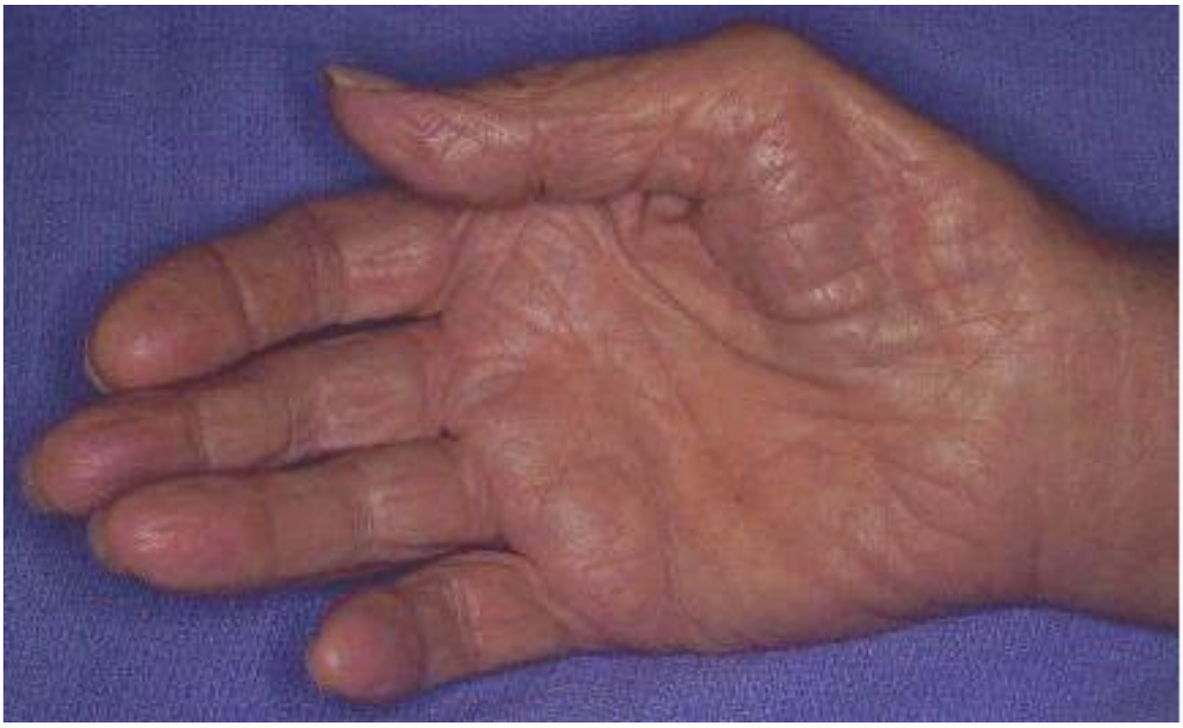


Q002

Given above is a picture representing Hernia or swelling of the groin

1. Mention the two types of hernia seen around the groin (1 mark)
2. Which bony land mark can be used to differentiate between the above two (0.5 marks)
3. In this picture , the hernial sac is seen extending into the scrotal sac. What are the two types of hernia seen extending into the scrotal sac. (1 mark)
4. Which vessel can be used to differentiate between the above two. (0.5 marks)
5. Mention the surface marking of the opening through which the hernial sac protrudes medially(1 mark)

P003

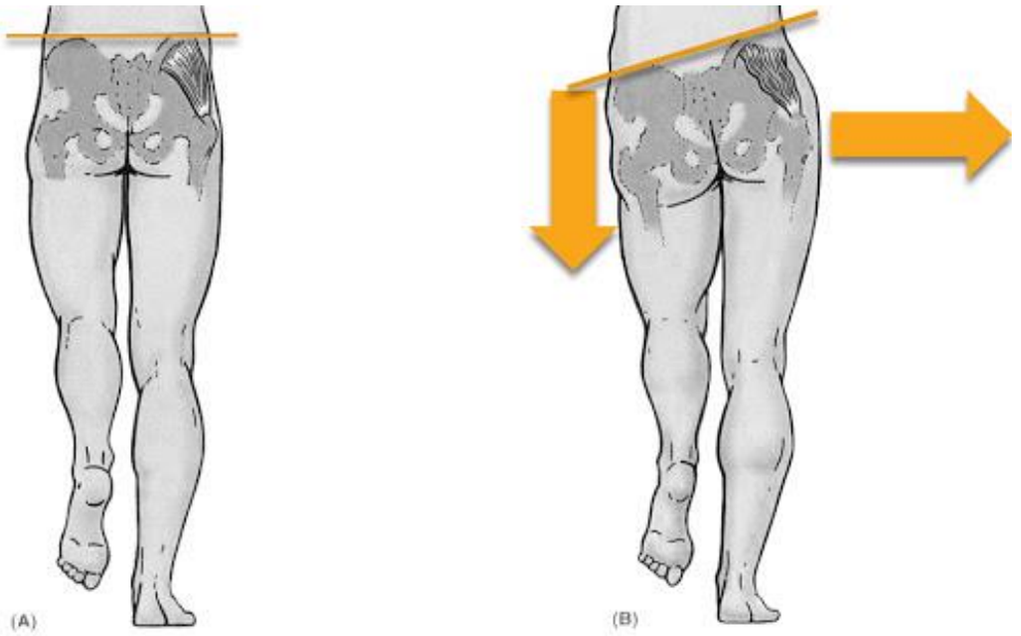


Q003

The above picture represents an anomaly where the patient is unable to oppose his thumb with wasting of muscles of thenar eminence

1. Which is the nerve likely to be injured (0.5 marks)
2. What is the deformity called as? (0.5 marks)
3. List the muscles of the hand which will be affected in this condition (1.25 marks)
4. Which is the most common syndrome that causes this deformity(0.5 marks)
5. Name the test used to clinically confirm the diagnosis (0.25 marks)

P004

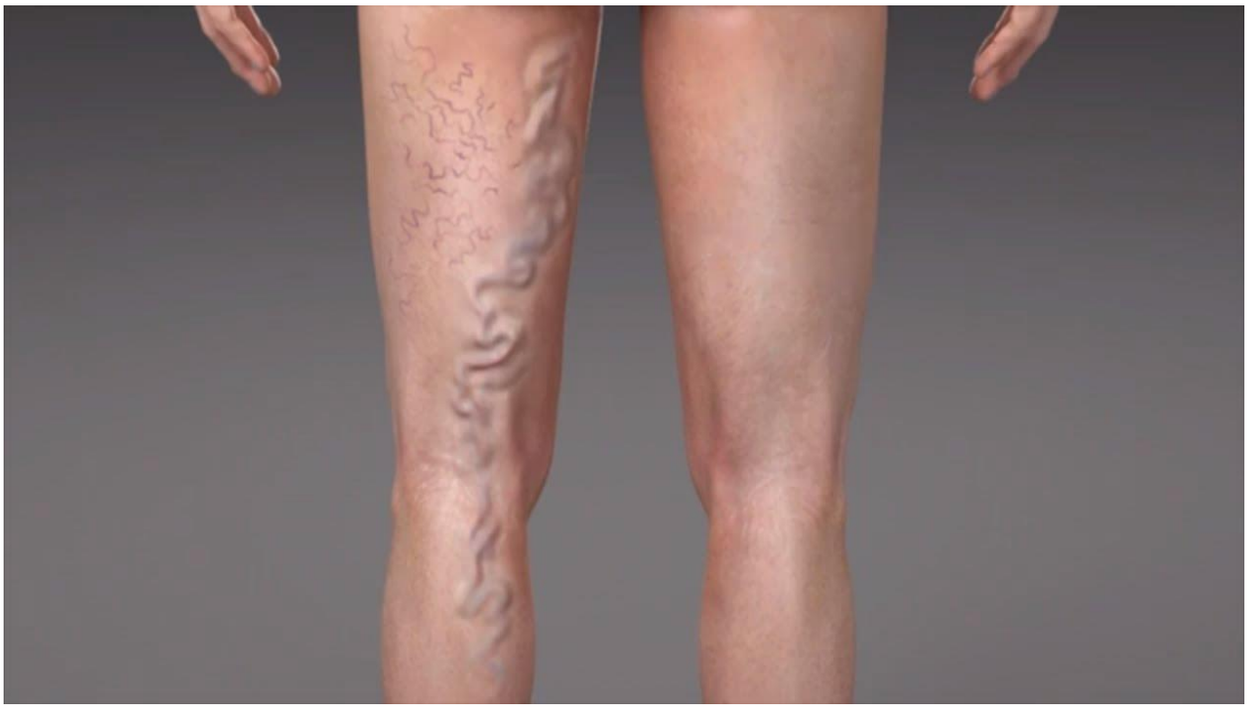


Q004

The above picture denotes a classical sign used to test integrity of a group of muscles of the lower limb

1. Mention the sign depicted? (0.5 marks)
2. Which are the muscles tested here (1 mark)
3. Mention the action of the muscles tested? (0.75 marks)
4. Mention their nerve supply(1 mark)
5. Which are the three factors necessary to maintain the integrity of the pelvis (0.75 marks)

P005

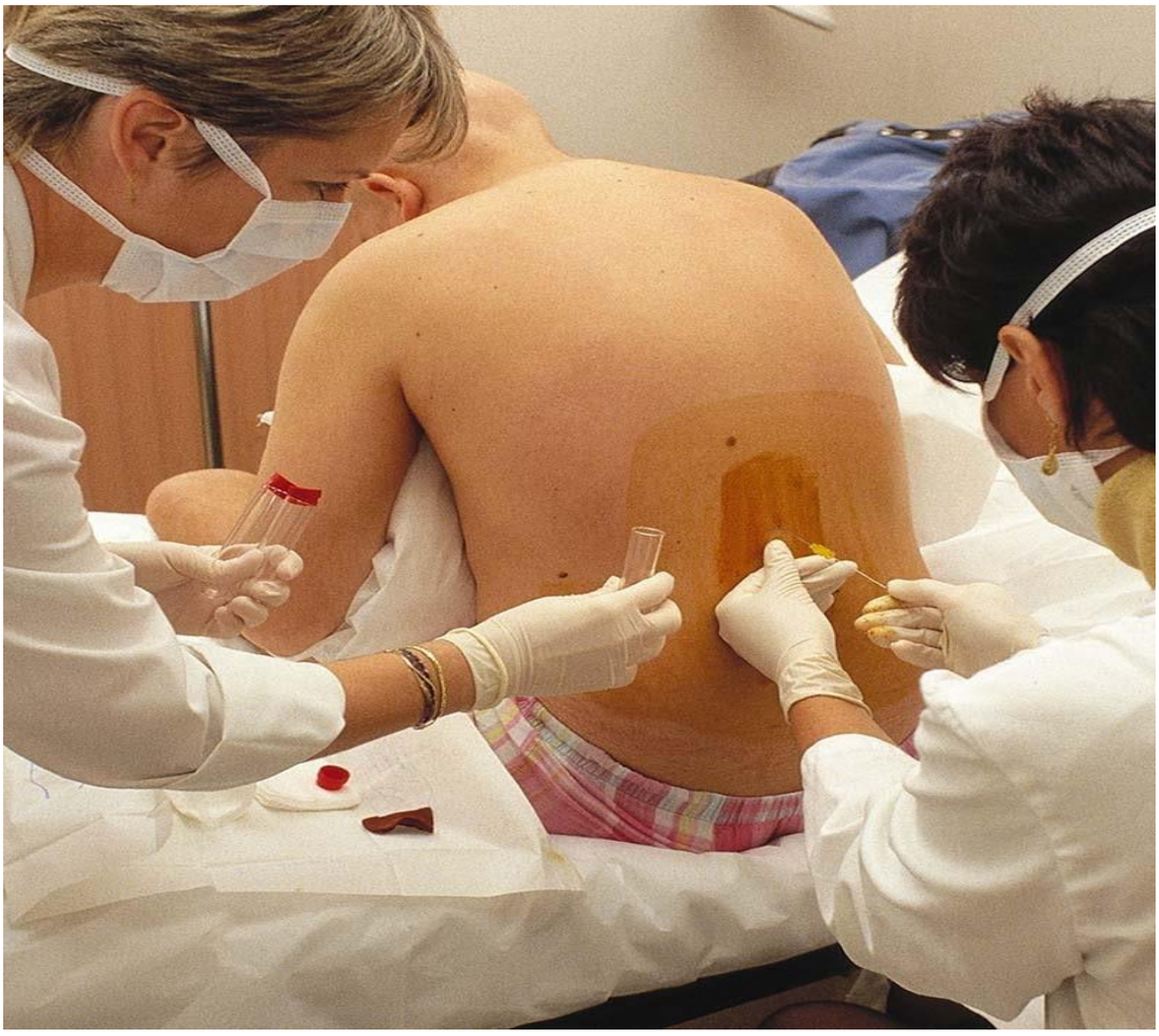


Q005

The above diagram depicts varicosity of the vein of the lower limb

1. Name the three system of veins observed in the lower limb (0.75 marks)
2. Which is the venous system likely to be affected here (0.5 marks)
3. Name the vessel affected in this situation(0.5 marks)
4. Mention two reasons to substantiate the above answer(1 mark)
5. Mention two clinical test used to identify the venous system involved (0.5 marks)
6. Name two nerves closely related to the affected vessel along its course (0.75 marks)

P006

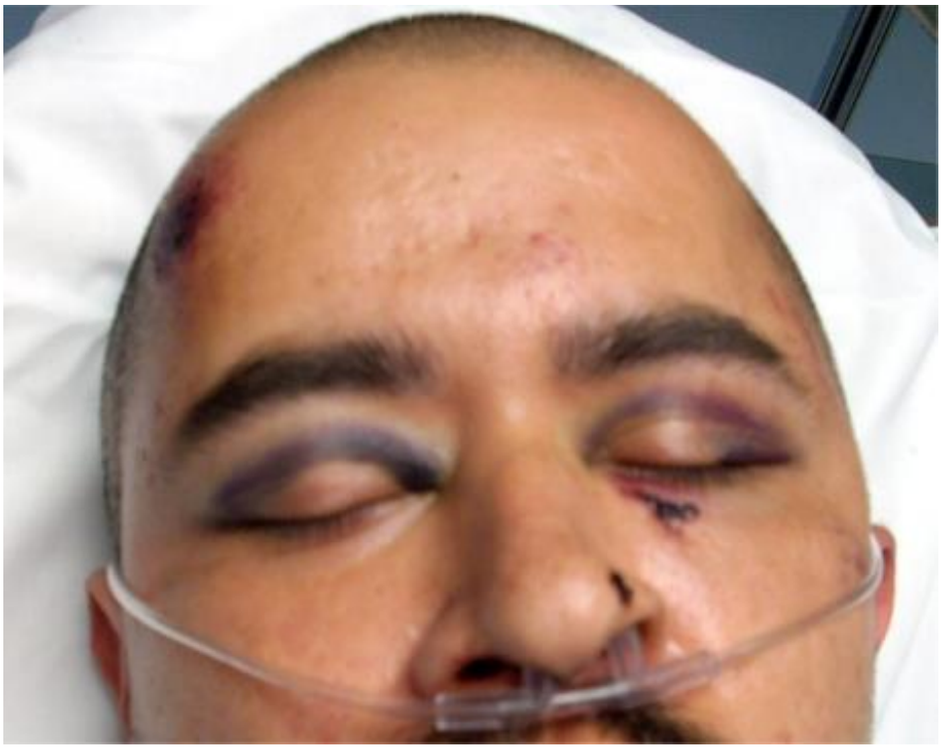


Q006

The above picture depicts the procedure of Lumbar puncture

1. Mention the vertebral level at which the CSF is accessed (0.5 marks)
2. Mention two reasons substantiating the choice of site (1 mark)
3. Name the structures which are pierced in this procedure (1.5 marks)
4. How will you clinically identify the site for lumbar puncture (1 mark)

P007

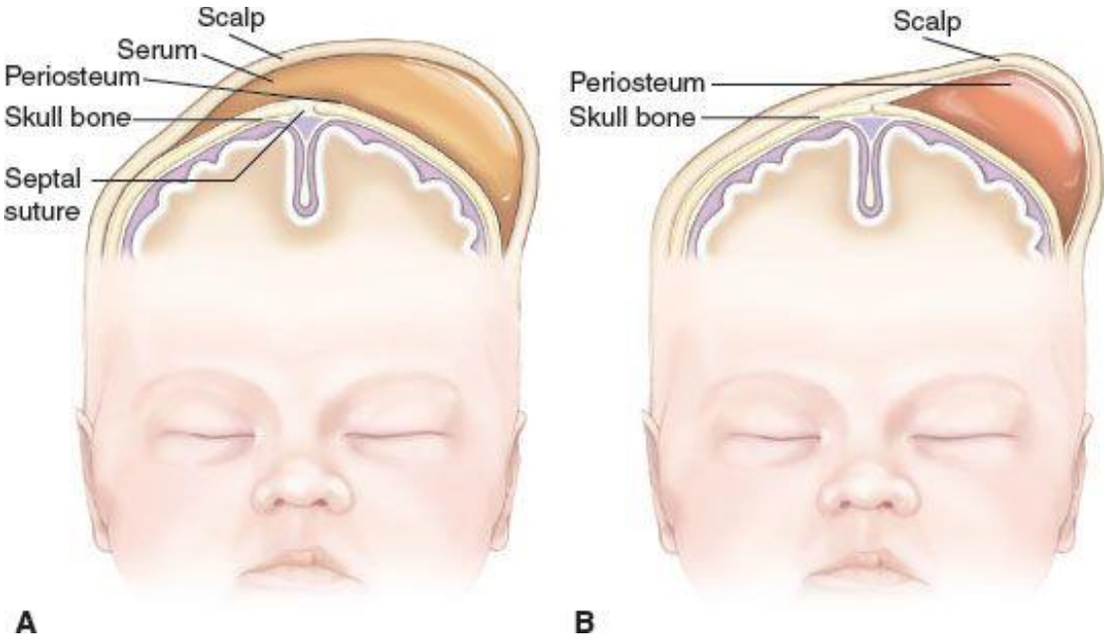


Q007

The above picture represent " Bilateral Black eye"

1. Which is the layer of the scalp from which blood gravitates into the eyelid (0.5 marks)
2. Mention the anatomical reason for this phenomenon (1 mark)
3. Name two other clinical significances of this layer (0.5 marks)
4. What is the reason for calling the fourth layer as the dangerous area of the scalp (1 mark)
5. Name the layers of scalp in order from superficial to deep(1 mark)

P008

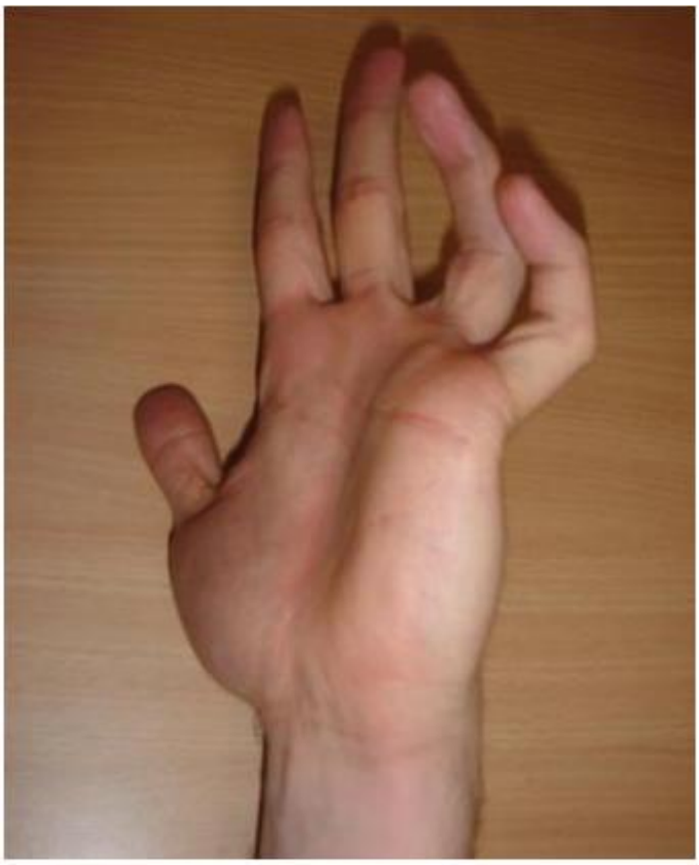


Q008

The above picture depicts two common birth injuries

1. Name the two birth injuries marked A and B (1 mark)
2. How will you differentiate between the two conditions anatomically (2 marks)
3. Which blood investigation is likely to be deranged in Disease B and why (1 mark)

P009

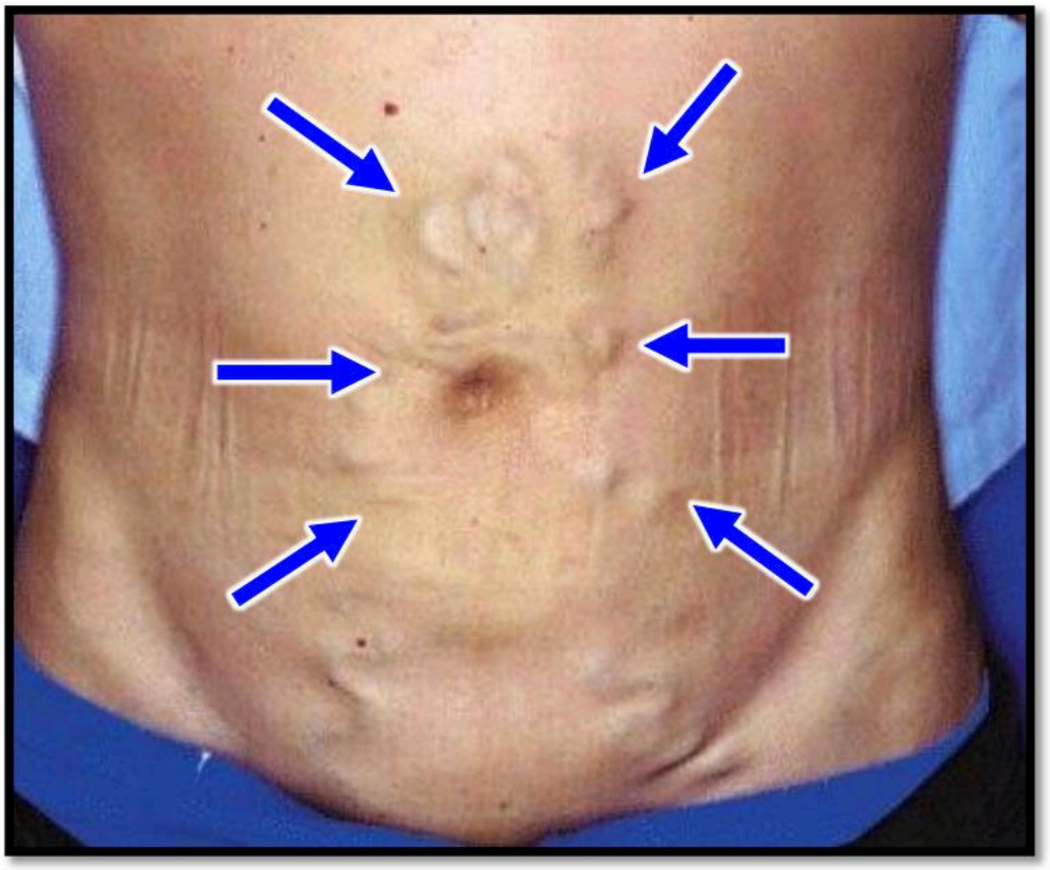


Q009

The above picture represents injury to the ulnar nerve. There is no loss of sensation over the palmar and dorsal aspect of hand over the medial half.

1. Mention the deformity shown here (0.5 marks)
2. Which is the likely site of injury in this condition? (0.5 marks)
3. Mention the reason which helped confirm the site of injury (1 mark)
4. Explain the reasons for ulnar nerve paradox noted here (1. 5 marks)
5. Name the sign that helps in identifying ulnar nerve palsy (0.5 marks)

P010



Q010

The above diagram represents Dilation of veins around the anterior abdominal wall

1. What is this clinical feature commonly called as? (0.5 marks)
2. Name the clinical condition that usually causes this? (0.5 marks)
3. Mention the vessels seen anastomosing at this site (1 mark)
4. Mention two other sites where in there can be dilatation of veins in this clinical condition (1 mark)
5. Mention two methods that can be used to measure Portal venous pressure (1 mark)

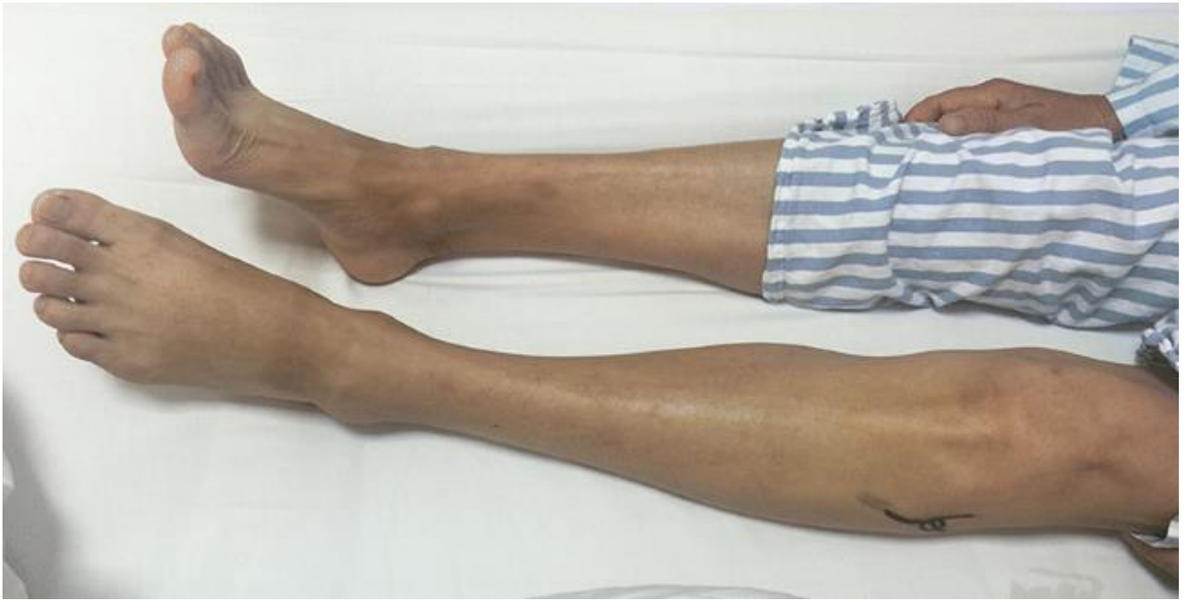
P011

Q011

The above picture represents Internal Squint

1. Name the muscle which is likely to be affected in this condition (0.5 marks)
2. How will you test for the action of the affected muscle (0.5 marks)
3. Mention the nerve supply of the affected muscle (0.5 marks)
4. Which is the most common clinical feature in Strabismus(0.5 marks)
5. Name all extra ocular muscles and mention their nerve supply (2 marks)

P012

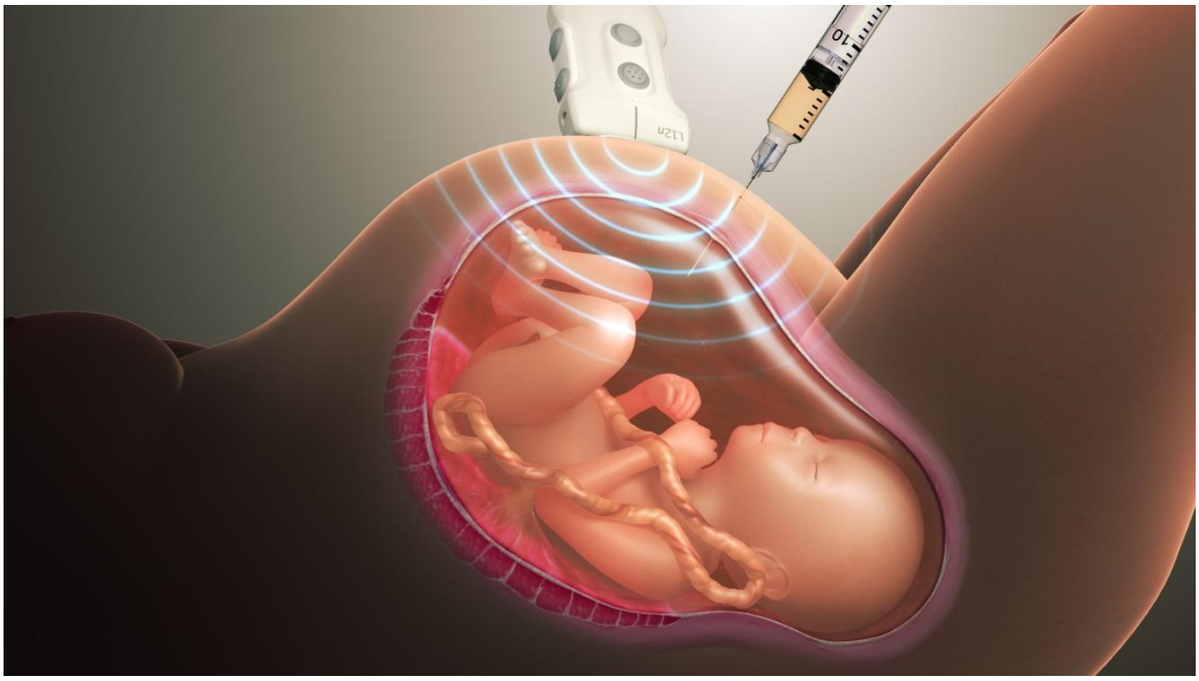


Q012

The above picture represents Foot Drop

1. Mention the nerve likely to be injured here (0.5 marks)
2. Name the two terminal branches of this nerve (1 mark)
3. Mention two common clinical conditions which may affect this nerve (1marks)
4. Name the group of muscles affected in foot drop (0.5 marks)
5. Name the movements lost in foot drop (1 mark)

P013

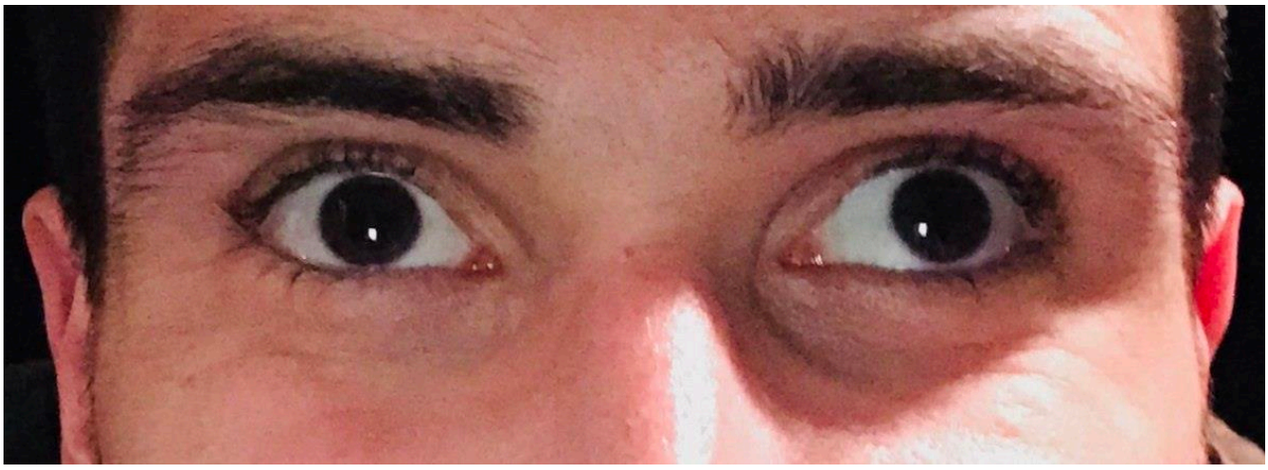


Q013

The above picture represents a prenatal test

1. Name the procedure shown in this figure (0.5 marks)
2. Name two other investigations done as part of prenatal test (1 mark)
3. Which is the time period in which this test is done (1marks)
4. What is the fluid obtained in this investigation (0.5 marks)
5. Mention two investigations that this fluid is subjected to (1 mark)

P014

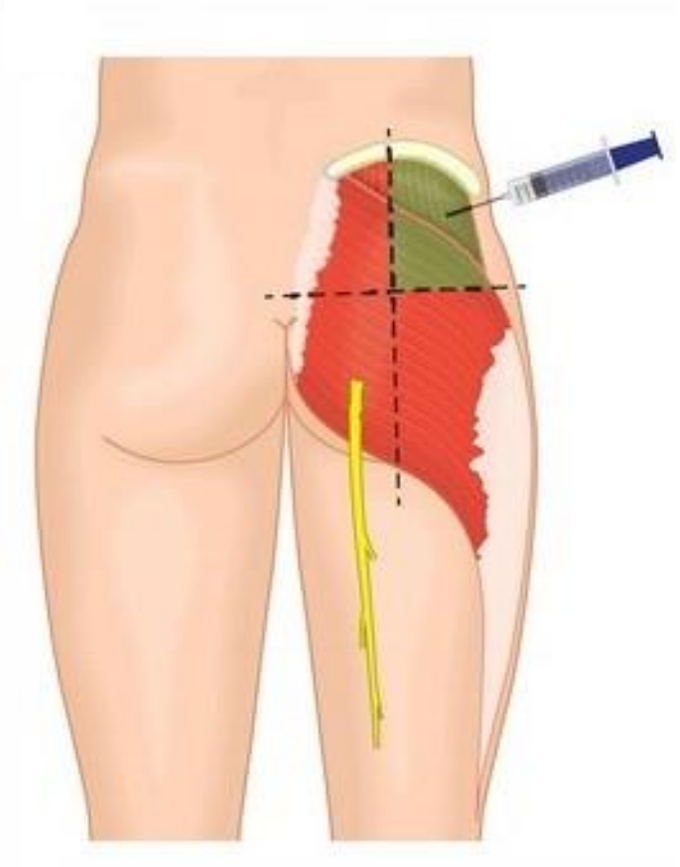


Q014

The above picture represents External Squint

1. Name the muscle which is likely to be affected in this condition (0.5 marks)
2. How will you test for the action of the affected muscle (0.5 marks)
3. Mention the nerve supply of the affected muscle (0.5 marks)
4. Which is the most common clinical feature in Strabismus(0.5 marks)
5. Name all extra ocular muscles and mention their nerve supply (2 marks)

Q015

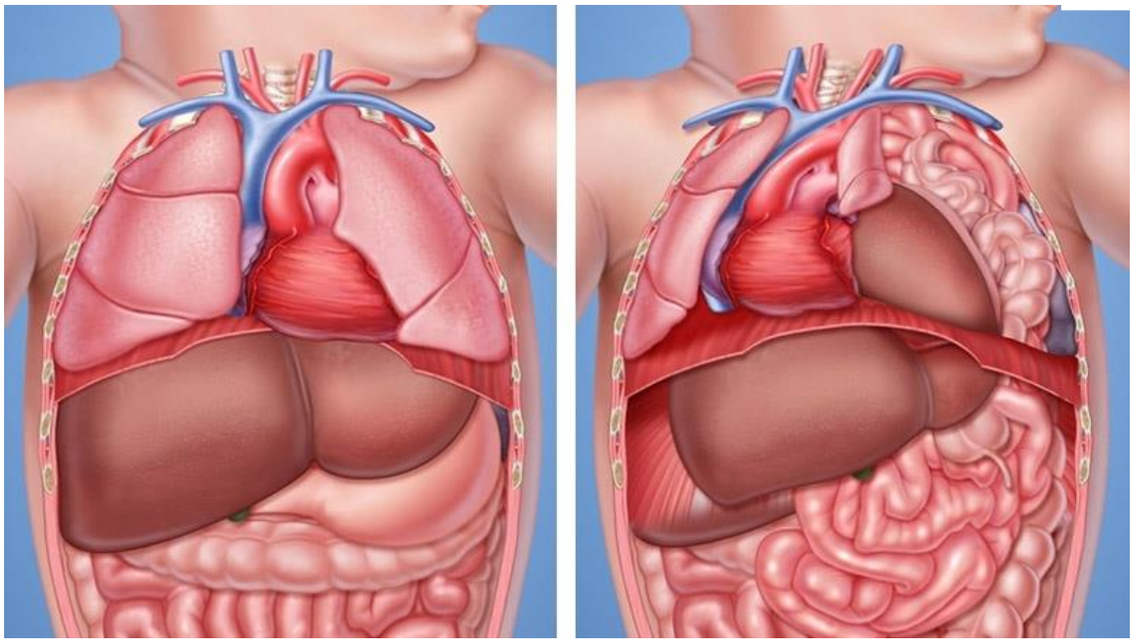


Q015

The above picture represents Intra muscular injection in the Gluteal region

1. Name two other muscles which are commonly used for intramuscular injection (1 mark)
2. Name the structures which are penetrated in this condition (1 mark)
3. Why is the upper outer quadrant the most preferred site in this scenario (0.5marks)
4. How will you clinically identify the site for injection (1 mark)
5. Mention the cutaneous supply of the site of injection (0.5 marks)

P016

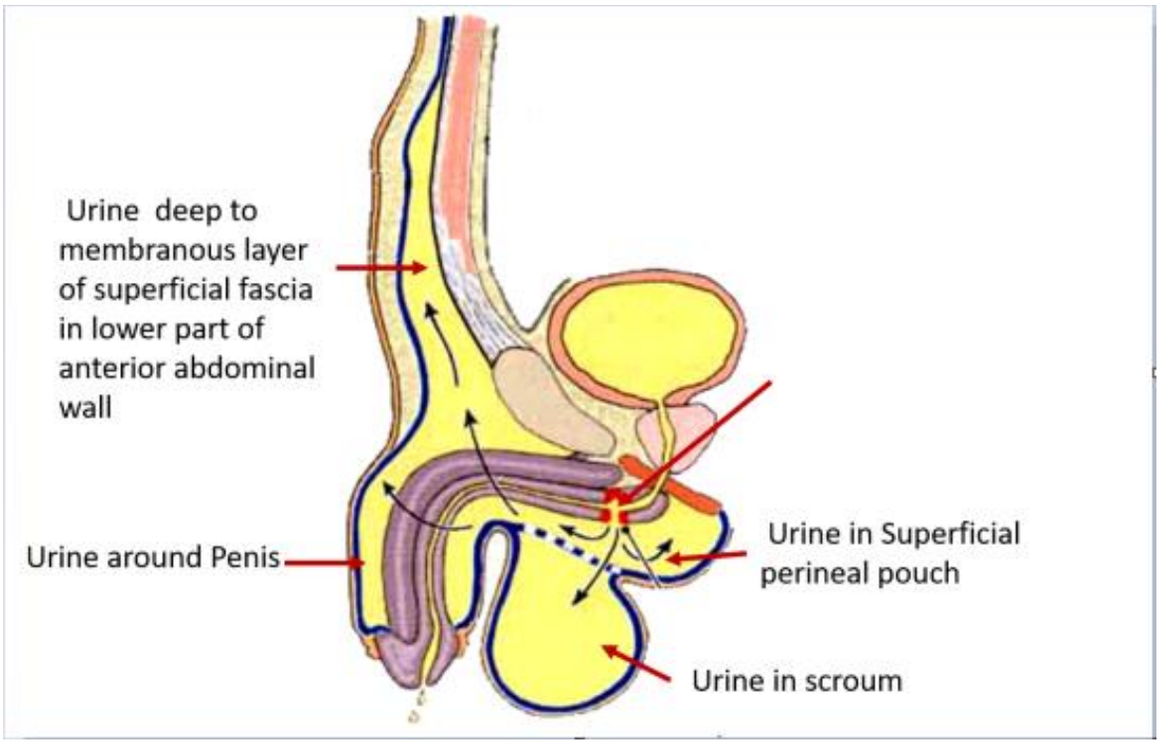


Q016

The above picture represents a congenital Diaphragmatic hernia

1. Mention the parts of the diaphragm and its developmental source (1.5 marks)
2. Which is the most common defect which leads onto CDH (0.5 marks)
3. Mention the major openings of the diaphragm and their vertebral levels (1.5 marks)
4. Mention the motor nerve supply of the Diaphragm (0.5 marks)

Q017

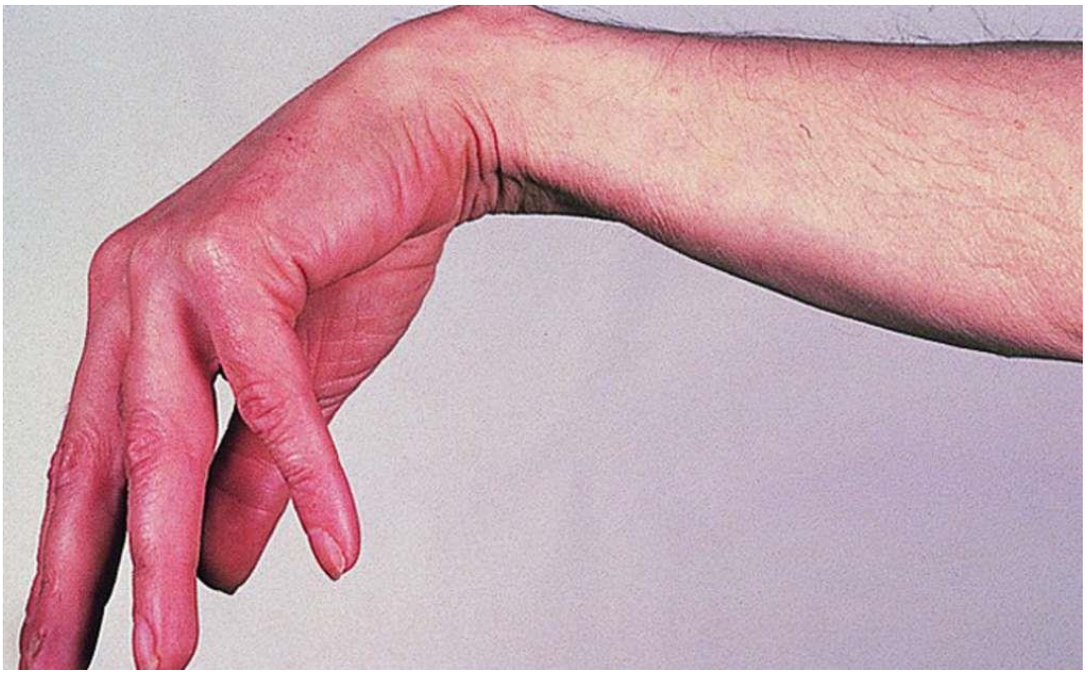


Q017

The above picture represents rupture of male urethra during a road traffic accident in a cyclist

1. Mention the parts of the male urethra (1 mark)
2. Which part of the urethra is affected in this condition(0.5 marks)
3. Name two sites into which urine extravasates and mention the anatomical reason for this extravasation (1.5marks)
4. What is the limit of extravasation of urine into the lower limb (1mark)

P018

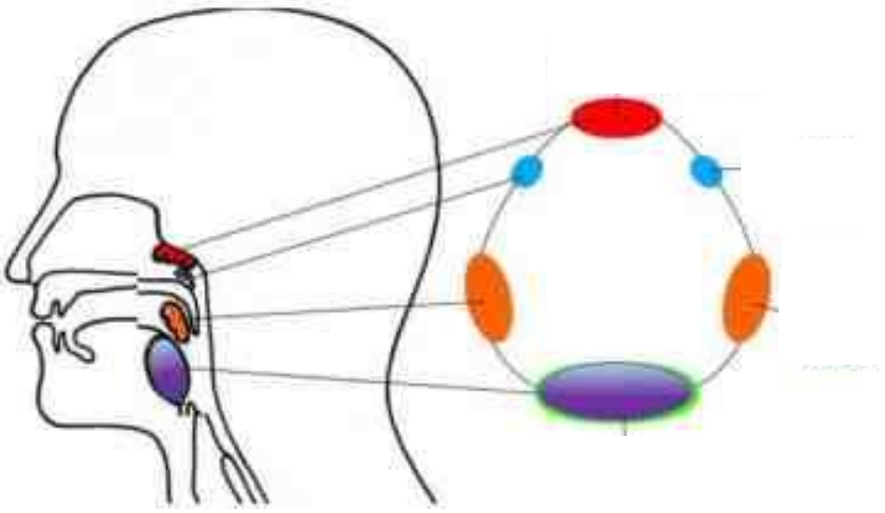


Q018

The above diagram depicts the position of the upper limb in a long nerve injury

1. Mention the clinical condition observed (0.5 marks)
2. Which is the nerve likely to be injured here (0.5 marks)
3. Mention the level of termination of this nerve (0.5 marks)
4. Which are the group of muscles affected in injury to this nerve(1 mark)
5. Name the two terminal branches of this nerve (1 mark)
6. Mention the termination of the muscular terminal branch (0.5 marks)

P019



Q019

1. Mention the components of the Waldeyer's ring (1 mark)
2. Mention the precise location of each of these components (2 mark)
3. In a five year old child with noisy breathing and snoring, which amongst this is likely to be affected (0.5 mark)
4. Mention the development of the structure labeled in Orange color (0.5 mark)

VENIPUNCTURE

1. Which is the vein most commonly used for venipuncture in the upper limb ? (0.5 marks) : Median cubital vein
2. Mention two reasons as to why this vein the most preferred one ? (1 marks)

Separated from artery/underlying structures by bicipital aponeurosis
Supported by bicipital aponeurosis and perforator connecting it to deep veins

3. Which is the most preferred vessel for venous access in the lower limb? (0.5 marks)

Great saphenous vein

4. Mention the site of access in the lower limb (1 marks)

At the ankle, about 2.5cm anterior to medial malleolus

5. Name the technique used for venous access in the lower limb (0.5 marks)
   Saphenous cut down / Venous cut down
6. Name the structure likely to be injured in this procedure (0.5 marks)
   Saphenous nerve

HERNIA

1. Mention the two types of hernia seen around the groin (1 marks)
   Inguinal and femoral hernia
2. Which bony land mark can be used to differentiate between the above two (0.5 marks) : Pubic tubercle
3. In this picture , the hernial sac is seen extending into the scrotal sac. What are the two types of hernia seen extending into the scrotal sac. (1 marks)
   Direct and indirect inguinal hernia
4. Which vessel can be used to differentiate between the above two. (0.5 marks)
   Inferior epigastric artery
5. Mention the surface marking of the opening through which the hernial sac protrudes medially(1 marks)
   Superficial inguinal ring – surface marking

APE THUMB

1. Which is the nerve likely to be injured (0.5 marks) : Median nerve
2. What is the deformity called as? (0.5 marks) : Ape thumb deformity
3. Name the muscles of the hand which will be affected in this condition (1.25 marks)
   Abductor Pollicis Brevis, Flexor Pollicis Brevis, Opponens Pollicis Brevis, 1st and 2nd lumbricals
4. Which is the most common syndrome that causes this deformity(0.5 marks)
   Carpal tunnel syndrome
5. Name the test used to clinically confirm the diagnosis (0.25 marks) : Pen test

TRENDELENBURG SIGN

1. Mention the sign depicted? (0.5 marks) : Trendelenburg sign
2. Which are the muscles tested here (1 marks)
   Gluteus medius and Gluteus minimus
3. Mention the action of the muscles tested? (0.75 marks)
   Abduction and Medial Rotation of hip joint
4. Mention their nerve supply(1 marks) : Superior gluteal nerve
5. Which are the three factors necessary to maintain the integrity of the pelvis(0.75 marks): Normal Gluteus medius and minimus, Normal hip joint, Intact neck of femur

VARICOSE VEIN

1. Name the three system of veins observed in the lower limb (0.75 marks)
   Superficial, deep and perforators
2. Which is the venous system likely to be affected here (0.5 marks)
   Superficial venous system
3. Name the vessel affected in this situation(0.5 marks)
   Great saphenous vein
4. Mention two reasons to substantiate the above answer(1 marks)
   The vessel is seen over the medial aspect and crosses the popliteal fossa to drain into the thigh region
5. Mention two clinical test used to identify the venous system involved (0.5 marks)
   Tournique test, Trendelenberg's test
6. Name two nerves closely related to the affected vessel along its course (0.75 marks)
   Medial femoral cutaneous nerve, Saphenous nerve

LUMBAR PUNCTURE

1. Mention the vertebral level at which the CSF is accessed (0.5 marks)
   L3-L4 interspinous space
2. Mention two reasons substantiating the choice of site (1 marks)

Spinal cord terminates at the level of lower border of L1, large lumbar cistern, wider intervertebral space

3. Name the structures which are pierced in this procedure (1.5 marks)

Skin, superficial fascia, supraspinous ligament, interspinous ligament, ligamentum flavum, spinal dura, arachnoidmater.

4. How will you clinically identify the site for lumbar puncture (0.5 marks)
   Identify the iliac crest. The line passing through the supracristal plane passes through the spine of L4

BLACK EYE

1. Which is the layer of the scalp from which blood gravitates into the eyelid (0.5 marks)

Loose areolar tissue layer/ Subaponeurotic layer

2. Mention the anatomical reason for this phenomenon (1 marks)

Connective tissue layer of scalp is continuous with the loose connective tissue of eyelids and orbit/ no bony attachment for aponeurotic layer anteriorly

3. Name two other clinical significances of this layer (0.5 marks)

. Caput Succadaneum, Safety valve hematoma

4. What is the reason for calling the fourth layer as the dangerous area of the scalp (1 marks) Thrombosis of intracranial venous sinuses as a result of spread of infection through valveless emissary veins present here
5. Name the layers of scalp in order (1 marks)
   Skin, Connective tissue layer, Aponeurotic layer, Loose connective tissue layer, Pericranium

CLAW HAND

1. Mention the deformity shown here (0.5 marks) : Claw hand
2. Which is the likely site of injury in this condition? (0.5 marks) : Wrist
3. Mention the reason which helped confirm the site of injury (1 marks)
   The palmar and dorsal cutaneous branches of hand which supply the medial aspect of hand is spared. This arises at midforearm level and 5cm proximal to flexor retinaculum.
4. Explain the reasons for ulnar nerve paradox noted here (1. 5 marks)
   If ulnar nerve is injured at the elbow, clawing of the fingers is less because medial half of FDP also get paralysed. If the ulnar nerve is injured at the wrist clawing of fingers is more as intact FDP flexes the digits more.
5. Name the sign that helps in identifying ulnar nerve palsy (0.5 marks) : Froment's sign

CAPUT MEDUSAE

1. What is this condition called as? (0.5 marks)
   Caput medusae
2. Name the clinical condition that usually causes this? (0.5 marks)

Portal hypertension

3. Mention the vessels seen anastomosing at this site (1 marks)

Paraumbilical veins with systemic veins around umbilicus

4. Mention two other sites where in there can be dilatation of veins in this clinical condition (1 marks) : Lower end of oesophagus, Anal canal
5. Mention two methods that can be used to measure Portal venous pressure (1 marks)
   a) Direct method – splenic puncture
   b) Indirect method- Recording the hepatic vein pressure under radiographic control.

INTERNAL SQIUNT

1. Name the muscle which is likely to be affected in this condition (0.5 marks)

Lateral Rectus

2. How will you test for the action of the affected muscle (0.5 marks)

The subject is asked to move the eye laterally along the horizontal plane

3. Mention the nerve supply of the affected muscle (0.5 marks) : Abducent nerve
4. Which is the most common clinical feature in Strabismus(0.5 marks) : Diplopia
5. Name all extra ocular muscles and mention their nerve supply (2 marks)

All extraocular muscles except lateral rectus and superior oblique by occulomotor nerve. Lateral rectus by abducent nerve and Superior oblique by Trochlear nerve

WRIST DROP

1. Mention the clinical condition observed (0.5 marks) : Wrist drop
2. Which is the nerve likely to be injured here (0.5 marks) : Radial nerve
3. Which are the group of muscles affected in injury to this nerve(1 marks)

Extensor group of muscles

4. Name the two terminal branches of this nerve (1 mark)

Superficial and deep branches

5. Mention the level of termination of this nerve (0.5 marks)
   In front of lateral epicondyle of humerus
6. Mention the termination of the muscular terminal branch (0.5 marks)

As pseudoganglion in the fourth compartment of extensor retinaculum

CAPUT SUCCEDANEUM & CEPHALOHEMATOMA

1. Name the two birth injuries marked A and B (1 marks)
   Caput succedaneum & cephalohematoma
2. How will you differentiate between the two conditions anatomically (2 marks)
   Cephalhematoma does not cross suture lines. Caput succedaneum shows diffuse swelling of scalp.
3. Which blood investigation is likely to be deranged in Disease B and why (1 marks)
   Serum bilirubin is elevated, as there is haem breakdown from theblood collected in the scalp

EXTERNAL SQUINT

1. Name the muscle which is likely to be affected in this condition (0.5 marks)
   Medial rectus
2. How will you test for the action of the affected muscle (0.5 marks)

The subject is asked to move the eye medially in the horizontal plane

3. Mention the nerve supply of the affected muscle (0.5 marks) : Occulomotor nerve
4. Which is the most common clinical feature in Strabismus(0.5 marks) : Diplopia
5. Name all extra ocular muscles and mention their nerve supply (2 marks)
   All extraocular muscles except lateral rectus and superior oblique by occulomotor nerve.Lateral rectus by abducent nerve and Superior oblique by Trochlear nerve

FOOT DROP

1. Mention the nerve likely to be injured here. (0.5 marks) : Common Peroneal nerve
2. Name the two terminal branches of this nerve (1 marks)

Superficial and deep branches

3. Mention the two common clinical conditions in which this nerve is affected (1marks) : Fracture of neck of fibula , Thickening of peripheral nerve in Leprosy
4. Name the group of muscles affected in foot drop (0.5 marks)

Extensor group of muscles, Peroneal muscles

5. Name the movements lost in foot drop (1 marks)
   Dorsiflexion of foot, Eversion of foot

AMINOCENTESIS

1. Name the procedure done in this figure (0.5 marks)
   Aminocentesis
2. Name two other investigations done as part of part of prenatal test (1 marks)

Ultra sound scan, Chorionic villus biopsy, Maternal blood sampling, PUBS (Percutaneous Umbilical Blood Sampling)

3. Which is the time period in which this test is done (1marks)

Between 14 & 16 weeks

4. What is the fluid obtained in this investigation (0.5 marks) : Amniotic fluid
5. Mention two investigations that this fluid is subjected to (1 marks)

Karyotyping, Lecithin-Sphingomyelin ratio- to assess fetal lung maturity

INTRAMUSCULAR INJECTION

1. Name two other muscles which are commonly used for intramuscular injection (1 marks): Deltoid, Vastus lateralis
2. Name the structures which are penetrated in this condition (1 marks)

Skin, Superficial fascia, Gluteal aponeurosis, Gluteus medius

3. Why is the upper outer quadrant the most preferred site in this scenario (0.5 marks) : Risk of injury to sciatic nerve
4. How will you clinically identify the site for injection (1 marks)
   Place the patient in supine or lateral position(on their side). Place the heel or palm of your hand on the greater trochanter, with the thumb pointed towards the umbilicus; extend the index finger to the anterior superior iliac spine and spread the middle finger pointing towards the iliac crest. Insert the needle into the V formed between index and middle fingers.
5. Mention the cutaneous supply of the site of injection (0.5 marks)

Lateral cutaneous branch of Iliohypogastric and subcostal nerve

CDH

1. Mention the parts of the diaphragm and its developmental source (1.5 marks)
   Central tendon- Septum transversum, Cupola - paired dorsolateral portion- Pleuroperitoneal membrane, Dorsal mesentery of esophagus
2. Which is the most common defect which leads onto CDH (0.5 marks)
   Posterolateral defect of Bockdalek
3. Mention the major openings of the diaphragm and their vertebral levels (1.5 marks)
   Vena caval opening- T8, Oesophageal opening- T10, Aortic opening- T12
4. Mention the motor nerve supply of the Diaphragm (0.5 marks)
   Phrenic nerve

RUPTURE OF BULBAR URETHRA

1. Mention the parts of the male urethra (1 marks)
   Prostatic part, Membranous part, Bulbar part, Spongy or penile part
2. Which part of the urethra is affected in this condition(0.5 marks)
   Bulbar part
3. Name two sites into which urine extravasates and mention the reason for this (1.5 marks)
   Deep to membranous layer of superficial fascia of anterior abdominal wall and in the scrotal sac ; The superficial perineal pouch is open anteriorly with the fascia Colle being continous with fascia Scarpa and the layer of Dartos muscle
4. What is the limit of extravasation of urine into the lower limb (1mark)
   Holden's line

WALDEYER'S RING

1. Mention the components of the Waldeyer's ring (1 mark)

Nasopharyngeal tonsil, tubal tonsil, palatine tonsil, lingual tonsil

2. Mention the precise location of each of these components (2 mark)
   Nasopharyngeal tonsil- roof of nasopharynx, tubal tonsil-posteriorsuperior to the tubal opening, palatine tonsil- tonsillar fossa, lingual tonsil- posterior 1/3 of dorsum of tongue
3. In a five year old child with noisy breathing and snoring which amongst this is likely to be affected (0.5 mark)
   Adenoid – Nasopharyngeal tonsil
4. Mention the development of structure labeled in Orange color (0.5 mark)
   Palatine tonsil- from endoderm of ventral part of 2nd pharyngeal pouch