ERB’S PALSY

a) Identify the clinical condition (1)
- ERB’S PALSY

b) Give the site of injury(1)
- Upper trunk (C5 & C6) of Brachial plexus- ERB’S POINT

c) Mention any 3 disability(3)
- loss of abduction and lateral rotation of arm
- loss of flexion and supination of forearm
- biceps and supinator jerks lost
- loss of sensation over lower part of deltoid
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CLINICAL MODULE -2

VENEPUNCTURE

a) Identify the procedure(1)
   - Venepuncture

b) Name the Ideal site(1)
   - Median cubital vein

c) Give any 3 indications for the above procedure(3)
   - Intravenous injections
   - Withdrawal of blood
   - Blood transfusion
a) Identify the procedure(1)

- Examination of blood pressure (palpation method)

b) Name the structure examined in this procedure(1)

- Brachial artery

c) Give the relations of the structure examined(3)

- Medially, in upper part brachial artery is related to ulnar nerve and basilica vein, lower part to median nerve
- Laterally, in upper part related to coracobrachialis, biceps, median nerve, at elbow to tendon of biceps
a) Identify the clinical condition (1)
   - Radial nerve palsy with wrist drop

b) Mention the site of injury (1)
   - Radial nerve at spiral groove

c) Name any 3 muscles paralysed (3)
   - Extensor digitorum
   - Extensor indicis
   - Extensor digiti minimi
   - Extensor pollicis longus
   - Extensor carpi radialis longus & brevis
   - Extensor carpi ulnaris
a) Identify the condition (1)
   - Dislocation of shoulder joint

b) Which nerve is most commonly injured in this condition (1)
   - Axillary nerve

c) Name any 3 structures giving stability to this region (3)
   - Rotator cuff: Tendons of supraspinatus, infraspinatus, teres minor, subscapularis
   - Coracoacromial arch
   - Long head of biceps tendon
   - Glenoid labrum
a) Identify the clinical condition(1)
   - Varicose veins

b) Name the structure involved(1)
   - Great saphenous vein

c) Give any 1 cause for the condition(1)
   - Incompetency of valves
   - Prolonged standing

d) Name any 2 tests to recognize the site of defect(2)
   - Trendelenburg test
   - Perthe’s test
a) Identify the condition (1)
   - Dislocation of hip

b) Mention the types of above condition (1)
   - Congenital
   - Acquired

c) Name 3 structures giving stability to this joint (3)
   - Acetabular labrum
   - Capsular ligament
   - Iliofemoral ligament
   - Pubofemoral ligament
   - Ischiofemoral ligament
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CLINICAL MODULE – 8

FOOT DROP

a) Identify the clinical condition(1)
   - Foot drop

b) What is the cause for this condition(1)
   - Injury to common peroneal nerve

c) Name any 3 muscles involved(3)
   - Tibialis anterior
   - Extensor hallucis longus
   - Extensor digitorum longus
   - Peroneus tertius
a) Identify the procedure.(1)
   -Coronary artery catheterization

b) Give any two indications for the above procedure.(2)
   - Coronary artery stenting
   - Coronary angiography,
   -intravascular ultrasonography,
   -measurement of cardiac output (CO),
   -detection and quantification of shunts,
   -endomyocardial biopsy,
   - measurements of myocardial metabolism

c) Discuss the anatomical basis for the above procedure.(2)
   -
a) Identify the clinical condition (1)
   - Rectal prolapse

b) Brief about the interior of the structure involved (2)
   - Temporary folds - longitudinal
   - Permanent folds - HOUSTON’S VALVES - 4 in number

c) Mention the anterior relations of the structure involved (2)
   - Upper 2/3 of rectum - rectovesical/ rectouterine pouch, coils of small intestine, sigmoid colon
   - Lower 1/3 of rectum - base of urinary bladder, ureter, seminal vesicles, ampullae of vas deferens, prostate/ vagina
a) Identify the clinical condition(1)
   - Prolapse of uterus

b) Mention the normal position of the structure involved(1)
   - Anteversion and antiflexion

c) Give any 3 supports of the structure involved(3)
   o **Muscular** - Pelvic diaphragm
     - Perineal body
     - Urogenital diaphragm
   o **Fibromuscular** - Transverse cervical ligament (of Mackenrodt)
     - Pubocervical ligament
     - Uterosacral ligament
     - Round ligament
   o **Visceral** - Urinary bladder
     - Uterine axis
a) Identify the clinical condition(1)
   - Haemorrhoids

b) Mention the types of the above condition(2)
   - External /false piles-Below pectinate line
   - Internal-true piles-Above pectinate line

c) Discuss the anatomical basis for the above condition(2)
   - Internal – saccular dilatations of tributaries of superior rectal vein
   - External – dilatation of tributaries of inferior rectal vein
a) Identify the procedure(1)
   - Per rectal prostate examination

b) Name the structures examined(2)
   - Prostate
   - Rectum
   - Anus
   - Seminal vesicle
   - Perineum
   -

c) Give any two indications for the above procedure(2)
   - Prostate cancer
   - Benign prostate hypertrophy
   - Haemorrhoids
   - Rectal tumors
PORTAL HYPERTENSION

a) Identify the clinical condition(1)
   - Portal hypertension showing caput medusae

b) Discuss the anatomical basis for the above condition(1)
   - Obstruction to portal vein leads to increase in portal venous pressure > 40mm Hg, leading to enlargement of collateral channels

c) Mention any 3 sites involved in above condition(3)
   Sites of portocaval anastomosis

<table>
<thead>
<tr>
<th>SITE</th>
<th>PORTAL VEINS</th>
<th>SYSTEMIC VEINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>oesophagus</td>
<td>Left gastric vein</td>
<td>Eosophageal veins into azygoes vein</td>
</tr>
<tr>
<td>umbilicus</td>
<td>Paraumbilical vein</td>
<td>Superficial epigastric vein</td>
</tr>
<tr>
<td>Mid anal canal</td>
<td>Superior redtal vein</td>
<td>Middle &amp; inferior rectal vein</td>
</tr>
<tr>
<td>intrahepatic</td>
<td>Left branch of portal vein</td>
<td>Inferior rectal vein</td>
</tr>
<tr>
<td>retroperitoneal</td>
<td>Right, middle, left colic vein</td>
<td>Renal vein, suprarenal vein, gonadal vein</td>
</tr>
</tbody>
</table>
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CLINICAL MODULE – 16

APPENDICITIS

a) Identify the clinical condition(1)
   - Appendicitis

b) Mention the point of tenderness(1)
   **Mc Burney’s point** - junction of medial 2/3\textsuperscript{rd} and lateral 1/3\textsuperscript{rd} of line extending from umbilicus to anterior superior iliac spine

c) Mention the various positions of the involved structure(3)
   - Paracolic -11 o’clock
   - Retrocolic-12 o’clock
   - Splenic- 2 o’clock
   - Promonteric-3o’clock
   - Pelvic- 4 o’clock
   - Midinguinal- 6 o’clock
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CLINICAL MODULE -16

UMBILICAL HERNIA

a) Identify the given clinical condition.(1)
   - Umbilical hernia

b) What is the embryological remnant leading to the above condition.(2)
   - A patent umbilical ring at birth is responsible for umbilical hernias

c) What is physiological hernia?(2)
   At 8 weeks gestational age the intestine elongates and moves outside of the embryonic abdomen herniating into the base of the umbilical cord, due to rapid growth of the cranial end of the midgut and the large size of the developing liver and kidneys. At 10-11 weeks the abdomen enlarges and the intestines return to the abdominal cavity.
INGUINAL HERNIA

a) Identify the given clinical condition(1)
   - Inguinal hernia

b) Is it reducible or irreducible?(1)
   - It is reducible

c) What is the anatomical defect related with this.(3)
   - 'patent process vaginalis
a) Identify the given clinical condition(1)
   - Undescended testis

b) What is the embryological basis for the above condition(2)
   - Testis develops from genital ridge in the lumbar region and descends to scrotum at birth.
   - Failure of descent of testis - Cryptorchidism

c) List the coverings of the involved structure(2)
   - Tunica vaginalis
   - Tunica albuginea
   - Tunica vasculosa
a) Name the structure examined (1)
   - Spleen

b) Mention any 2 functions of the above organ (2)
   - Largest lymphoid organ
   - Removal of worn-out RBCs
   - Erythropoiesis in foetal life
   - Production of immunoglobulin M
   - Store & release RBC’s into circulation

c) Mention the ligaments supporting the above structure(2)
   - Gastroplenic ligament
   - Lienorenal ligament
EXAMINATION OF LIVER

a) Name the structure examined (1)
   - Liver

b) Give the blood supply to the above structure (1)
   - Arterial blood is supplied by Hepatic artery, venous blood by portal vein
   - Venous drainage by Hepatic veins

c) Mention any 3 ligaments supporting the above structure (3)
   - False ligaments: Falciform ligament
     - Coronary ligament
     - Right triangular ligament
     - Left triangular ligament
     - Lesser omentum
   - True ligaments: Ligamentum teres hepatis
     - Ligamentum venosum
a) Identify the procedure.(1)
   - Pleurocentesis

b) List the structures pierced in the above procedure.(2)
   - Skin, superficial fascia, serratus anterior, intercostal muscles, endothoracic fascia, parietal pleura.

c) Give the location for performing the above procedure and reason for it.(2)
   - Needle is inserted into lower part of intercostal space along the upper border of the rib to avoid injury to intercostal nerve and vessels which runs in costal groove along lower border of rib.
a) Identify the given condition(1)
   - Patent ductus arteriosis

b) Discuss the embryological basis for the above condition(3)
   - Ductus Arteriosis is the vascular connection between the pulmonary artery and the aortic arch that allows most of the blood from the right ventricle to bypass the fetus' lungs, which are fluid-filled and compressed.

When the newborn takes his first breath, the lungs open and pulmonary vascular resistance decreases, and causes closure of Ductus arteriosis

c) Mention the compound maintaining the patency of the above structure (1)
   - Prostaglandin
a) Identify the moving structure. (1)
   - Thyroid gland

b) What is the cause for the movement of the structure on deglutition. (2)
   - The false capsule is thickened to form ligament of Berry which connects medial surface of lateral lobe of the gland with the cricoid cartilage and these attachments are responsible for deglutition

c) Name the coverings of the above structure (2)
   - True capsule and false capsule
a) Identify the given clinical condition (1)
   - Parotid tumour
b) Name the coverings of the involved structure (1)
   - True capsule and false capsule
c) Name 3 structures piercing the involved structure (3)
   - Facial nerve, External carotid artery, retromandibular vein
a) Identify the given clinical condition (1)
   - Tonsillitis
b) Give the blood supply to the involved structure (2)
   - Anterior tonsillar artery, posterior tonsillar artery, superior tonsillar artery, inferior tonsillar artery
c) Mention any 3 histological salient features of the above structure (1)
   - Masses of lymphoid tissue
   - Epithelial crypts
   - Lining - Non-keratinised stratified squamous epithelium
a) Identify the given clinical condition(1)  
   - Parkinsonism
b) What is the cause for this condition(1)  
   - The primary lesion is degeneration of the neuromelanin-containing neurons in the brainstem, particularly those in the pars compacta of the substantia nigra.
c) Mention any 3 clinical features of this clinical condition(3)  
   - Resting tremor, rigidity, akinesia, and impairment of postural reflexes
a) Identify the given clinical condition(1)
   - Bell’s Palsy
b) What is the cause for this condition(1)
   - Injury of facial nerve below the stylo-mastoid foramen
c) Mention any 3 clinical features of this clinical condition(3)
   - Transverse wrinkles of forehead disappear
   - Drooping of eyebrows
   - Nasolabial fold disappears
   - Angle of mouth remains motionless on affected side
translocation

a) Identify the chromosomal aberration (1)
   - Translocation

b) What are its types (2)
   - Reciprocal translocation
   - Robertsonian translocation

c) Which are the common chromosomes involved in the above condition (2)
   - Chromosome -13, 14, 21
a) Identify the clinical condition (1)
   - Down’s syndrome
b) Mention of the karyotype of the above clinical condition (1)
   - Trisomy 21
   - 46,XX,t(14;21)]
   - 45,XX,t(21;21)(q10;q10)]
c) Mention any 3 clinical features of the above clinical condition (3)
   - Simian crease
   - Mongolian idiocy
   - Mental retardation
KLINEFELTER’S SYNDROME

a) Identify the clinical condition (1)
   - Klinefelter’s syndrome

b) Mention of the karyotype of the above clinical condition (1)
   - 47, XXY (or XXY)

c) Mention any 3 clinical features of the above clinical condition (3)
   - Tall stature
   - Gynecomastia
   - Affected males are often infertile
a) Identify the clinical condition (1)
   - Turner’s syndrome
b) Mention of the karyotype of the above clinical condition (1)
   - 45,X
c) Mention any 3 clinical features of the above clinical condition (3)
   - Short stature
   - Webbed neck
   - Broad chest (shield chest) and widely spaced nipples
   - Streak gonads