

Anatomy

1. Regarding anterior choroidal artery syndrome, all are true except?

- A. Hemiparesis
- B. Hemisensory loss
- C. Predominant involvement of anterior limb of internal capsule
- D. Homonymous hemianopia

1. Ans. C. Involvement of anterior limb of internal capsule

Ref. KEITH & MOORE CLINICAL ANATOMY

Posterior limb of internal capsule is supplied by the anterior choroidal artery

Anterior choroidal artery territory stroke features:

- Complete Hemiplegia
- Hemianesthesia
- Homonymous hemianopia

Anatomy of the Internal Capsule		
Division	Major Communication Tracts	Blood Supply
Anterior limb	- Tracts between the frontal lobe and pons (brainstem) - Tracts between the thalamus and prefrontal cortex - Tracts between the thalamus and cingulate gyrus	- Lenticulostriate arteries (branches of the middle cerebral artery) - Recurrent artery of Heubner (branch of the anterior cerebral artery)
Genu	- Tracts between the motor cortex in the frontal lobe and the cranial nerve nuclei in the brainstem (aka: corticobulbar tract)	- Lenticulostriate arteries (branches of the middle cerebral artery) - Recurrent artery of Heubner (branch of the anterior cerebral artery)
Posterior limb	- Tracts between the motor cortex of frontal lobe and anterior horn of spinal cord (aka: corticospinal tract) - Medial lemniscus tract (a continuation of the dorsal columns), which carries information about light touch, vibration, and pressure sensation from the body and spinal cord. - Anterolateral (aka: spinothalamic) tract, which carries pain and temperature information	- Lenticulostriate arteries (branches of the middle cerebral artery) - Anterior choroidal artery (branch of the internal carotid)

2. Surgeon removes a part of liver to the left of falciform ligament. Which segment the surgeon has removed

A. 1 & 4a

B. 2 & 3

C. 1 & 4b

D. 1 & 3

2. Ans. b.2 & 3

Reference: Sabiston Surgery 18th

Resection of segments II and III is a commonly performed sublobar resection and is often referred to as a *left lateral segmentectomy* and *left lateral sectionectomy* or *left lobectomy*. *Left lobe* is that part of liver to **the left of the falciform ligament**.

Extra edge:

Nomenclature for Most Common Major Anatomic Hepatic Resections

SEGMENTS	COUINAUD, 1957	GOLDSMITH AND WOODBURN, 1957	BRISBANE, 2000
V-VIII	Right hepatectomy	Right hepatic lobectomy	Right hemi-hepatectomy
IV-VIII	Right lobectomy	Extended right hepatic lobectomy	Right trisectionectomy
II-IV	Left hepatectomy	Left hepatic lobectomy	Left hemi-hepatectomy
II, III	Left lobectomy	Left lateral segmentectomy	Left lateral sectionectomy
II, III, IV, V,	Extended left	Extended left lobectomy	Left trisectionectomy

SEGMENTS	COUINAUD, 1957	GOLDSMITH AND WOODBURNE, 1957	BRISBANE, 2000
VIII	hepatectomy		

3. Which of the following passes through foramen magnum?

- A. Internal Carotid Artery B. Sympathetic chain C. Hypoglossal Nerve D. Vertebral Artery

3. Ans. D. Vertebral Artery

Ref. Gray's 40th ed., B.D.C. 4th ed.

The **foramen magnum** is a large opening in the occipital bone of the cranium. It is one of the several oval or circular apertures in the base of the skull (the foramina), through which the medulla oblongata (an extension of the spinal cord) enters and exits the skull vault.

Apart from the transmission of the medulla oblongata and its membranes, the foramen magnum transmits the spinal accessory nerve, **vertebral arteries**, the anterior and posterior spinal arteries, the membrana tectoria and alar ligaments.

Extra Edge-

Foramen	Structure Passing through it
Hypoglossal canal	Hypoglossal nerve & artery
F.Spinosum	Middle meningeal artery & vein, meningeal branch of mandibular nerve
Jugular Foramen	Cranial nerve 9,10,11, Inferior petrosal sinus, Internal jugular vein
F.Ovale	Mandibular nerve, Accessory meningeal artery, Lesser petrosal nerve, Emissary vein
F.Rotundum	Maxillary artery
Mandibular foramen	Inferior alveolar nerve & vessels
Carotid Canal	Internal Carotid Artery

4. Deoxygenated blood is not seen in

- A. Pulmonary artery B. Umbilical artery C. Umbilical vein D. Right heart

4. Ans. c. Umbilical vein

Ref. Ganong Physiology 23rd ed., Dutta 6th ed.

Heart assumes normal four chambered configuration by end of 6 weeks of Intrauterine life.

For exchange of gas Fetus depends on Placenta While Neonate depends on Lungs.

OXYgenated Blood from placenta → Umbilical Vein → Portal Vein → Ductus Venosus → IVC

→ Right Atrium → From here blood is divided in 2 streams by Crista dividenda (inferior margin of Septum Secundum)

Stream 1

One third of blood goes to Fossa ovalis → left atria → Left ventricle → Ascending aorta for distribution to coronaries, head & upper limb.

Stream 2

Two third of blood get mixed with SVC blood and it goes to → RV → pulmonary trunk → ductus arteriosus → Descending aorta → lower body

In fetal circulation LV & RV works in parallel i.e. L V supplies upper body & R V supplies lower body.

5. All of the following are pneumatic bones except?

- A. Frontal B. Ethmoid C. Mandible D. Maxilla

5. Ans. C. Mandible

Pneumatic bones:

Pneumatic bones can also be categorized under the irregular bones because they are also irregular in shape but since there is a difference between the two that is characteristically very important therefore they are often classified separately. The characteristic difference is the presence of large air spaces in these bones which make them light in weight and thus they form the major portion of skull in the form of sphenoid, ethmoid and maxilla. Besides making the skull light in weight they also help in resonance of sound and as air conditioning chambers for the inspired air.

4. Lower subscapular nerve (C5,C6)
 5. Radial nerve (C5-T1).

8. Main blood supply of neck of femur?

- A. Lateral circumflex femoral artery
 C. Profunda femoris artery B. Medial circumflex femoral artery
 D. External Iliac Artery

8. Ans. B. Medial circumflex femoral artery**9. Right isomerism is?**

- A. Asplenia B. Two spleens C. One spleen D. Polysplenia

9. Ans. A. Asplenia

10. Urethral crest is situated in:

- A. Prostatic urethra B. Membranous urethra C. Penile urethra D. Bulbar urethra

10. Ans. A. Prostatic urethra

11. What is the type of joint seen at Growth plate-

- A. FibroCartilaginous B. Primary cartilagenous
 C. Secondary cartilagenous D. Gomphosis

11. Ans. B. Primary cartilagenous

12. Which among the following is not a component of hypogastric sheath?

- A. Broad ligament of uterus B. Transverse cervical ligament
 C. lateral ligament of uterus D. lateral ligament of bladder

12. Ans. A. Broad ligament of uterus

13. All are seen in the floor of 3rd ventricle except?

- A. Infundibulum B. Oculomotor nerve C. Mammillary body D. Optic Stalk

13. Ans. D. Optic Stalk

14. Lines of blaschko are:

- A. Lymphatics B. Blood vessel C. Nerves D. Lines of development

14. Ans. D. Lines of development

15. All of the following are affected in low radial nerve palsy except?

- A. Extensor carpi radialis longus B. Extensor carpi radialis brevis
 C. Finger extensors D. Sensation on dorsum of hand

15. Ans. A. Extensor carpi radialis longus

16. Site not affected in posterior cerebral artery infarct is?

- A. Midbrain B. Pons C. Thalamus D. Striate cortex

16. Ans. B. Pons

17. Bifurcation of Common carotid artery is palpated at?

- A. Upper border of cricoid cartilage B. Upper border of thyroid cartilage
 C. Hyoid bone D. Cricothyroid membrane

17. Ans. B. Upper border of thyroid cartilage

18. In L5 root involvement, which among the following is not affected?

- A. Thigh adduction B. Knee flexion C. Knee extension D. Toe extension

18. Ans. A. Thigh adduction

19. Muscular component of dorsal aorta develops from?

- A. Septum transversum B. Paraxial mesoderm

19. Ans. B. Paraxial mesoderm

20. Diaphragm develops from all except:

20. Ans. B. Dorsal mesocardium

21. Posterior relations of head of pancreas are all except?

- A. Common bile duct B. First part of duodenum
C. Right crus of Diaphragm D. Inferior vena cava

21. Ans. B. First part of duodenum

22. Which of the following is not supplied by the anterior division of mandibular nerve (V3) ?

- A. Temporalis B. Medial pterygoid C. Lateral pterygoid D. Masseter

22. Ans. B. Medial pterygoid

Physiology

1. Basal metabolic rate is closely associated with?

- A. Lean body mass B. Body surface area C. Daily activity D. Food Intake

1. Ans. A. **Lean body mass** > B. Body surface area

Both options A and B seem correct ($BMR = 3.52 \times \text{body weight}^{0.75}$). If there are two individuals with the same surface area but one has a higher lean body mass then the one with a greater lean body mass will have a higher BMR.

Basal Metabolic Rate (BMR), and the closely related **resting metabolic rate (RMR)**, is the amount of daily energy expended by humans and other animals at rest. Rest is defined as existing in a neutrally temperate environment while in the post-absorptive state. (Inactive digestive system ,which requires about 12 hours of rest)

BMR normally averages about 65 to 70 cal/ hr in average 70kg male.

As BMR is energy expended at rest so option C & D are ruled out.

2. Mineralocorticoid receptor is not present in?

2. Ans. A. Liver

The **mineralocorticoid receptor** (or MR, MLR, MCR), also known as the **aldosterone receptor** or **nuclear receptor subfamily 3, group C, member 2, (NR3C2)** is a protein that in humans is encoded by the *NR3C2* gene that is located on chromosome 4q31.1-31.2

MR is expressed in many tissues, such as **the kidney, colon, heart, central nervous system (hippocampus), brown adipose tissue and sweat glands**. In epithelial tissues, its activation leads to the expression of proteins regulating ionic and water transports (mainly the epithelial sodium channel or ENaC, Na^+/K^+ pump, serum and glucocorticoid induced kinase or SGK1) resulting in the reabsorption of sodium, and as a consequence an increase in extracellular volume, increase in blood pressure, and an excretion of potassium to maintain a normal salt concentration in the body.

3. The primary action of NO in GIT is?

3. Ans. C. **GI smooth muscle Relaxation**

NO, also k/a EDRF (endothelial derived relaxation factor), is synthesized by the endothelial cells in response to a number of stimuli. **The NO that is formed by the endothelial cells diffuses to the smooth muscle cells, where it acts via cGMP to produce vascular smooth muscle relaxation.**

Action of NO in the gut: During peristalsis initiated by stretching of the gut wall by the contents of the small intestine, there occurs a ring of contraction behind the food and an area of relaxation in front of it. The relaxation produced in the anterograde direction is due to activation of neurons that secrete NO, VIP, and ATP, all of which produce relaxation.

NO causes Relaxation of smooth muscle via Non Adrenergic Non cholinergic action.

4. Main site of water absorption is:

- A. Jejunum B. Colon C. Ileum D. Stomach

4. Ans. A. Jejunum

Daily total water input into the GI tract is approximately 9000ml

2000ml is ingested daily and 7000ml from endogenous secretions.

5500ml is reabsorbed in the jejunum, 2000ml in the ileum, 1300ml in the colon and the remaining 200ml appears in the stool.

5. Small air way has laminar flow because?

- A. Reynold number more than 2000 B. Diameter is very small
C. The linear Velocity of Airflow in Small Airway is extremely low D. Total cross sectional area low

5. Ans. C. The linear Velocity of Airflow in Small Airway is extremely low

The onset of turbulence under ideal conditions can be predicted by calculating the Reynold's number (Re):

$$Re = D v d / V$$

Where D = diameter, v = mean velocity, d = density, V = viscosity

Reynold's Number greater than 3000 → Turbulent Flow.

Reynold's Number less than 2000 → Laminar Flow.

Velocity of flow is inversely proportional to total cross sectional area; since the total cross sectional area of small airways is large the velocity of flow is low. **When the velocity of flow is low Reynold's number is less and so is tendency for turbulence.**

Capillaries have highest cross sectional area so maximum turbulence.

6. Orthopnoea in Congestive heart failure develops due to?

- A. Reservoir function of pulmonary veins B. Pooling of blood in lower limb veins
C. Pulmonary Hypertension D. Systemic Hypertension

6. Ans. A. Reservoir function of pulmonary veins

Ref: Harrison 17th edi pg 1446

Orthopnea is Sensation of breathlessness in recumbent position ,relieved by sitting or standing.it is caused by An increase in venous return associated with recumbent position.

Orthopnoea is usually a later manifestation of HF than is exertional dyspnoea. It results from **redistribution of fluid from the splanchnic circulation and lower extremities into the central circulation during recumbency**, with a resultant increase in pulmonary capillary pressure.

7. Nucleus involved in papez circuit-

- A.Pulvinar B.VPL Nucleus C.Intralaminar D.Anterior NU. Of thalamus

7. Ans.d.Anterior NU. Of thalamus

8. All the following are true about phagocytosis except-

- A.Amoeba & other protozoans lives thier life out of it. B.Used to ingest particles < 0.5microns in size
C..Used to ingest particles > 0.5microns in size D.Digestion occurs within phagolysosomes

8. Ans.B.Used to ingest particles < 0.5microns in size

Biochemistry

1. Thiamine deficiency causes decreased energy production because?

- A.it is required for the process of transamination
B.it is co-factor in oxidative reduction
C.it is co-enzyme for transketolase in pentose phosphate pathway
D.it is co-enzyme for pyruvate dehydrogenase & alpha ketoglutarate dehydrogenase

1. Ans. D.it is co-enzyme for pyruvate dehydrogenase & alpha ketoglutarate dehydrogenase

2. What factor is responsible for deciding whether an antibody will remain membrane bound or get secreted?

- A. Carbohydrate content B. Class switching C. Differential RNA splicing D. Surface charge

2. Ans. C. Differential RNA splicing

3. **Vitamin K is involved in the post translational modification of?**

- A. Glutamate B. Aspartate C. Tyrosine D. Tryptophan

3. Ans. Glutamate

4. **Which among the following is not a cause of fasting hypoglycemia?**

- A. Glucagon excess B. Glucose 6 phosphatase deficiency
C. Cirrhotic liver damage D. Glycogen synthase deficiency

4. Ans. A. Glucagon excess

5. **Cell fusion is an innovative method of preparing specific antibodies. Technique to induce cell fusion includes following all except?**

- A. Attaching inactive viral particle on cell membrane B. Adding ethylene glycol
C. Applying a small electric current D. Reducing the viscosity of the membrane

5. Ans. D. Reducing the viscosity of the membrane

6. **Urea cycle occurs in:**

- A. Liver B. Intestine C. Brain D. Kidney

6. Ans. A. Liver

7. **Which of the following change in a vector used to increase the yield of protein produced in recombinant protein synthesis?**

- A. Inducible promoter B. Genes for protease inhibitors
C. Translation initiation D. Translation and transcription termination

7. Ans. A. Inducible promoter

8. **Two plants are grown. One to express green fluorescent pigment & Other express Fire fly luciferase containing media. Which plant will glow in the dark?**

- A. Both plants will glow B. Neither will glow
C. Plant expressing green fluorescent pigment will glow D. Plant expressing firefly luciferase will glow

8. Ans. D. Plant expressing firefly luciferase will glow

9. **A patient who was given primaquine develops hemolysis. The probable cause may be**

- A. Glucose 6 phosphate dehydrogenase deficiency B. Glucose 6 phosphatase deficiency
C. Alpha keto glutarate dehydrogenase deficiency D. Pyruvate Kinase Deficiency

9. Ans. A. Glucose 6 phosphate dehydrogenase deficiency

10. **Transfer of an amino group from an amino acid to an alpha keto acid is done by?**

- A. Tranaminases B. Aminases C. Transketolase D. Decarboxylase

10. Ans. A. Tranaminases

Q.11 Which of the following statements about high density lipoproteins (HDL) is false-

- A. HDL increases oxidation of LDL B. HDL reduces foam cell production by LDL
C. HDL is best predictor of CAD D. HDL helps to clear lipids from atherosclerosis

11. Ans. A. HDL increases oxidation of LDL

PATHOLOGY

1. **which of the following helps in generating oxygen burst in the neutrophils ?**

- A. superoxide dismutase B. NADPH oxidase C. peroxidase D. Glutathione reductase

1. Ans. B. NADPH oxidase

2. **Which is not an autoimmune disease?**
 A. SLE B. Grave's disease C. Myasthenia gravis D. Sickle cell disease
 2. Ans. D. Sickle cell disease
3. **An 8 year old boy completed 8 out of 10 day course of cefaclor. Now he developed a generalized erythematous rash which is mildly pruritic and lymphadenopathy. Diagnosis is?**
 A. Kawasaki disease B. Type 3 hypersensitivity C. Anaphylaxis D. Infectious mononucleosis
 3. Ans. B. Type 3 hypersensitivity
4. **Which among the following is the hallmark of acute inflammation?**
 A. Vasoconstriction B. Stasis
 C. Vasodilation and increase in permeability D. Leukocyte margination
 4. Ans. C. Vasodilation and increase in permeability
5. **Some antigen was injected into a rabbit. What antibody will it produce initially?**
 A. IgG B. IgM C. IgA D. IgD
 5. Ans. B. IgM
6. **Principle organelle involved in the execution of apoptosis is?**
 A. Nucleus B. Lysosome C. Mitochondria D. Endoplasmic reticulum
 6. Ans. C. Mitochondria
7. **Psammoma bodies are seen in all except?**
 A. Follicular carcinoma thyroid B. Papillary carcinoma thyroid
 C. Cystadenocarcinoma D. Meningioma
 7. Ans. A. Follicular carcinoma thyroid
8. **Not a predisposing factor for atherosclerotic plaque formation?**
 A. ApoE B. Alpha 2-macroglobulin C. Oxidised LDL D. Increased homocystiene
 8. Ans. B. Alpha 2-macroglobulin
9. **Most potent activator of T cells?**
 A. B cells B. Follicular dendritic cells C. Mature dendritic cells D. Macrophages
 9. Ans. C. Mature dendritic cells
10. **True about platelet function defect?**
 A. Normal platelet count with prolonged bleeding time
 B. Thrombocytopenia with prolonged bleeding time
 C. Normal bleeding time with normal platelet number
 D. Normal platelet count with decreased bleeding time
 Ans. A. Normal platelet count with prolonged bleeding time
11. **All are true about blood coagulation except?**
 A. Factor 10 in a part of both intrinsic and extrinsic pathway
 B. Extrinsic pathway is activated by contact with plasma and negatively charged proteins
 C. Calcium is very important for coagulation
 D. Intrinsic pathway can be activated in vitro
 11. Ans. B. Extrinsic pathway is activated by contact with plasma and negatively charged proteins
12. **All of the following are neuronal tumours except?**
 A. Gangliocytoma B. Ganglioglioma C. Neuroblastoma D. Ependymoma
 12. Ans. D. Ependymoma

13. Which complement component is first common point between involved classical and alternate pathway?

- A. C1 B. C2 C. C3 D. C4

13. Ans. C. C3

14. All are true about xanthogranulomatous inflammation except?

- A. Presence of foamy macrophages B. Presence of tuberculous infection
C. Multinucleated giant cell D. Presence of yellow Nodules

14. Ans. B. Presence of tuberculous infection

Q.15 All are involved in generating free oxygen radical for killing of bacteria except-

- A. Superoxide Dismutase B. Fenton's reaction C. NADPH oxidase. D. Glutathion peroxidase

15. Ans. D. Glutathion peroxidase

Q.16 Which is false about Bernard Soulier syndrome-

- A. Ristocetin Aggregation is normal B. Aggregation with collagen & ADP is normal
C. Large platelets D. Thrombocytopenia

16. Ans. A. Ristocetin Aggregation is normal

Q.17 Slide fixing in pathology most commonly done by -

- A. Formaldehyde B. Alcohol C. Picric acid D. Glutaraldehyde

17. Ans. A. Formaldehyde

PHARMACOLOGY

1. Which of the following is given to treat thrombocytopenia secondary to myelosuppressive therapy -

- A. Iron Dextran B. Oprevelkin(interleukin-11) C. Tranexamic Acid D. Erythropoietin

1. Ans. B. Oprevelkin(interleukin-11)

2. True about MRSA resistance is-

- A. Due to production of Penicillinase B. Due to alteration in penicillin binding proteins
C. Plasmid mediated D. Treated with amoxicillin & clavulanic acid

2. Ans. B. Due to alteration in penicillin binding proteins

3. Treatment with INH leads to deficiency of ?

- A. Thiamine B. Niacin C. Pyridoxine D. Pantothenic acid

3. Ans. C. Pyridoxine

4. Which drug not used to control bleeding while delivery of a woman with heart disease ?

- A. Methylergometrine B. Carboprost C. Syntocin D. Misoprostol

4. Ans. A. Methylergometrine

5. All true about Fulvestrant (selective estrogen receptor downregulator)

- A. Used for treatment of advanced breast cancer
B. Also known as pure anti estrogen
C. Is slower acting, have shorter duration of action & lower safety profile than SERM
D. Administered as once monthly intramuscular injection.

5. Ans. C. Is slower acting, have shorter duration of action & lower safety profile than SERM

6. All are true about Ranolazine except?

- A. Has hypotensive effects B. 1st line antianginal drug
C. Affects glycemic control D. Induces CYP3A

6. Ans. A. Has hypotensive effects

7. Drug of choice for central diabetes insipidus is?

- A. Desmopressin B. Leuperolide C. Thiazide diuretics D. Insulin

7. Ans. A. Desmopressin

8. Integrase inhibitor approved for treatment of HIV is-

- A. Raltegravir B. Indinavir C. Lopinavir D. Tipranavir

8. Ans. A. Raltegravir

9. Which of the following antihypertensive drugs is contraindicated in a patient on lithium therapy in order to prevent toxicity?

- A. Clonidine B. Beta blockers C. Calcium channel blockers D. Diuretics

9. Ans. D. Diuretics

10. Which of the following is not an adverse effect of thalidomide?

- A. Diarrhoea B. Teratogenicity C. DVT D. Hypothyroidism

10. Ans. A. Diarrhoea

11. Amphotericin b causes deficiency of?

- A. Na B. Ca C. K D. Mg

11. Ans. C. K

12. All of the following decrease bone resorption in osteoporosis except?

- A. Alendronate B. Etidronate C. Strontium D. Teriparatide

12. Ans. D. Teriparatide

13. Which is not seen in digoxin toxicity?

- A. Biventricular tachycardia B. Proxysmal atrial tachycardia
C. Ventricular bigeminy D. Regularisation of Atrial Fibrillation

13. Ans. D. Regularisation of Atrial Fibrillation

14. Buprenorphine is?

- A. Partial agonist at mu receptor B. Partial agonist at kappa receptor
C. Full agonist at mu receptor D. Antagonist at kappa receptor

14. Ans. A. Partial agonist at mu receptor

15. Which among the following is the best inotrope drug for use in right heart failure due to pulmonary hypertension?

- A. Dopamine B. Isoprenaline C. Halothane D. Milrinone

15. Ans. D. Milrinone

16. Which among the following does not cause hyperpyrexia?

- A. MAO inhibitors B. Alcohol C. TCA's D. Amphetamine

16. Ans. B. Alcohol

17. All are true about Aprepitant except?

- A. Agonist at Nk1 B. Crosses blood brain barrier
C. Ameliorates nausea and vomiting of chemotherapy D. Metabolized by CYP3A4

17. Ans. A. Agonist at Nk1

18. Which of the following is true?

- A. Acetylcholinesterase inhibition by malathion can be reversed by increasing the level of atropine
B. Sulphonilamide inhibits folate reductase irreversibly

- C. Fluoroacetate competitively inhibits aconitase
 D. Ethanol acts by inhibiting aldehyde dehydrogenase when used in methanol poisoning

18. Ans. D. Ethanol acts by inhibiting aldehyde dehydrogenase when used in methanol poisoning

19. A schizophrenic patient started on haloperidol 2 days back, comes with complaints of torticollis and orofaciolingual movements. What is the diagnosis?

- A. Acute dystonia B. Tardive dyskinesia C. Parkinsonism D. Akathisia

19. Ans. A. Acute dystonia

20. Mifepristone is used in?

- A. Molar pregnancy B. Threatened abortion C. Fibroid D. Ectopic pregnancy

20. Ans. C. Fibroid > D. Ectopic pregnancy

21. All of the following are true about erlotinib except?

- A. Small molecular inhibitor of tyrosine kinase associated with EGFR receptors
 B. Food delays its absorption
 C. Acniform eruptions and diarrhea are its common side effects
 D. Used in non small cell lung cancer when there is no response to other chemotherapeutic agents

21. Ans. B. Food delays its absorption

22. Pulmonary toxicity is seen with?

- A. Bleomycin B. Cisplatin C. Doxorubicin D. Actinomycin D

22. Ans. A. Bleomycin

23. All are used in the treatment of hot flushes except?

- A. Tamoxifene B. Venlafaxine C. Gabapentine D. Peroxetine

23. Ans. A. Tamoxifene

24. All are true about meglitinides except?

- A. Decreases post prandial hyperglycemia
 B. Incidence of Hypoglycemia less common than sulfonylureas
 C. It decreases insulin resistance
 D. Causes stimulation of insulin release from pancreas

24. Ans. C. It decreases insulin resistance

25. Pregnant mother at 35 weeks of gestation with SLE. Which of the following drug can not be used-

- A. Prednisolone B. Methotrexate C. Sulfasalazine D. Hydroxychloroquine

25. Ans. B. Methotrexate

26. Tolerance in opioids develops to all except?

- A. Miosis B. Analgesia C. Euphoria D. Nausea and vomiting

26. Ans. A. Miosis

27. All are actions of muscarinic antagonist except?

- A. Decreases gastric secretion B. Prolongs A-V conduction
 C. Decreases tracheobronchial secretions D. Causes Contraction of radial muscles of iris

27. Ans. D. Causes Contraction of radial muscles of iris

28. Drugs used in prophylaxis of migraine are all except?

- A. Propranolol B. Flunarizine C. Topiramate D. Levetiracetam

28. Ans. D. Levetiracetam

29. Administration of which of the following drug needs alkalinization of urine?

- A. Cytosine arabinoside B. Methotrexate C. Cisplatin D. Ifosfamide

29. Ans. B. Methotrexate

30. **All of the following are true regarding diabetes mellitus except?**

- A. Type 2 diabetes patients never requires insulin
- B. Sliding scale regimen is used in hospitalized patients
- C. Low evening insulin dose prevents nocturnal hypoglycemia
- D. Regular insulin is used in treatment of gestational diabetes

30. Ans. A. Type 2 diabetes patients never requires insulin

31. All are true regarding serotonin syndrome except?

- | | |
|--|---|
| A. It is not idiosyncratic and unpredictable | B. Dantrolene is drug of choice |
| C. Can be used by SSRI | D. Features include hyperthermia & hypertension |

31. Ans. B. Dantrolene is drug of choice

MICROBIOLOGY

1. **About tetanus true is a/e**

- | | |
|--------------------------------|--|
| A. Heat resistant spores | B. 3 doses of vaccine to be given for primary prevention |
| C. Incubation period 6-10 days | D. Person to person transmission does not occur |

1. Ans. B.3 doses of vaccine to be given for primary prevention

2. **A farmer from Himachal Pradesh presents with small ulcer on leg. After few days he developed a swelling in the inguinal region which later ulcerated. What stain can be used to detect bipolar stained organisms?**

- | | | | |
|-------------------|-------------------|---------------------------|-----------------------|
| A. Albert's stain | B. Wayson's stain | C. Ziehl Neelson staining | D. MacFadyean's stain |
|-------------------|-------------------|---------------------------|-----------------------|

2. Ans. B. Wayson's stain

3. **Vectors does not transmits infection by -**

- | | | | |
|--------------|------------------|------------------------------|-----------------------------|
| A. Ingestion | B. Regurgitation | C. Rubbing of infected feces | D. Contaminated body fluids |
|--------------|------------------|------------------------------|-----------------------------|

3. Ans. A. Ingestion

4. **All are factors responsible for resurgence of malaria except**

- | | | | |
|--------------------|--------------------|----------------------|---|
| A. Drug resistance | B. Use of bed nets | C. Vector resistance | D. Development of newer strains of parasite |
|--------------------|--------------------|----------------------|---|

4. Ans. B. Use of bed nets

5. **Regarding Leptospirosis. True is-**

- | | |
|----------------------------------|--|
| A. Rats are only reservoir | B. Fluoroquinolones are drug of choice |
| C. Person to person transmission | D. Oro fecal transmission |

5. Ans. A. Rats are only reservoir

6. **Fungus causing infection in immunocompetent individuals is-**

- | | | | |
|----------------|----------------|-----------------|------------|
| 1. Aspergillus | 2. Penicillium | 3. Cryptococcus | 4. Candida |
|----------------|----------------|-----------------|------------|

6. Ans. 4. Candida

7. **A 7 month old child presents with history of bouts of cough ending with a whoop. Immunization history is not available. What is the best way to confirm the diagnosis?**

- | | | | |
|------------------------|------------------------|----------------------|--------------|
| A. Nasopharyngeal swab | B. Cough plate culture | C. Tracheal aspirate | D. Oral swab |
|------------------------|------------------------|----------------------|--------------|

7. Ans. A. Nasopharyngeal swab

8. **Aflatoxin is produced by?**

- | | | | |
|-----------------------|----------------------|---------------------|------------------|
| A. Aspergillus flavus | B. Aspergillus niger | C. Candida albicans | D. Actinomycetes |
|-----------------------|----------------------|---------------------|------------------|

8. Ans. A. Aspergillus flavus

9. **The polysaccharide capsule of following bacteria have no role in their infectivity-**
 A. Neisseria meningitidis B. Pneumococcus C. Bordetella pertussis D. Haemophilus influenza

9 Ans. C. Bordetella pertussis

10. **About Campylobacter jejuni false is-**
 A. Most common pathogenic strain to cause campylobacteriosis in india B. Polutry is main source of infection
 C. Humans are only reservoir D. Associated with GBS

10. Ans. C. Humans are only reservoir

11. **Which virus among the following is least likely to cross placenta?**
 A. Rubella B. Herpes simplex C. HIV D. HBV

11. Ans. B. Herpes simplex

12. **About yaws all are true except:**
 A. Caused by Treponema pertenue B. Transmitted non-venerally
 C. Secondary yaws can involve bones & joints D. Late stages involve heart and nerves

12. Ans. D. Late stages involve heart and nerves

13. **'C' in C reactive protein stands for:**
 A. Capsular polysaccharide in pneumococcus B. Concanavalin-a C. Calretinin D. Cellular

13. Ans. A. Capsular polysaccharide in pneumococcus

14. **A young lady presents with fever, dysuria and pain in lower abdomen. Uncomplicated acute cystitis was diagnosed. Which among the following is not true?**

- A. Nitrate test positive for urine sample
 B. E.coli colony count $< 10^3$ bacteria /ml
 C. 1 pus cell per 7 fields in wet film of patients urine
 D. 1 bacilli per oil immersion field in gram stained urine sample.

14. Ans. B. E.coli colony count $< 10^3$ bacteria /ml

15. **All are true about Parvovirus except?**
 A. <10 % spread by transplacental route B. Spread by respiratory route
 C. It is a DNA virus D. Affects erythroid progenitor cells

15. Ans. A. <10 % spread by transplacental route

16. **Sterile pyuria is present in?**
 A. Renal tuberculosis B. Chronic hydronephrosis C. Wilm's tumour D. Neuroblastoma

16. Ans. A. Renal tuberculosis

17. **Visceral larva migrans is seen in?**
 A. Strongyloides stercoralis B. Ankylostoma duodenale C. Toxocara canis D. Ascaris lumbricoides

17. Ans. C. Toxocara canis

18. **Following are true about carbohydrate antigen except?**
 A. Memory B. Poly clonal response C. Highly immunogenic D. T cell independent immunity

18. Ans. A. Memory

19. **An elderly male presents with chest pain & cough with expectoration since 15 days. The bacterium obtained from sputum grows on blood agar & shows gram positive cocci. Which is most useful test to identify organism?**

- A. Bile solubility B. Bacitracin sensitivity C. Catalase test D. oxidase test

19. Ans. A. Bile solubility

20. **A female presents with signs of meningitis. CSF shows gram positive bacilli. Most likely organism is ?**

- A. Listeria B. Haemophilus influenzae C. Pneumococcus D. Pseudomonas

20. Ans. A. Listeria

21. **A Young boy comes with history of fever and cough since two weeks. He has reduced appetite & weight loss. He is also a known case of congenital heart disease ,for which he has taken prophylaxis of penicillin. Sputum examination is normal,however bronchoscopic lavage cultured on sheep blood agar showed evidence of gram positive,aerobic,weakly acid fast branching filaments. What is likely diagnosis?**

- A. Actinomycosis B. Nocardiosis C. Aspergillus D. Mycobacterium tuberculosis

21. Ans. B. Nocardiosis

22. **Late onset endophthalmitis after intraocular lens implantation is most commonly caused by?**
 A. Staphylococcus epidermidis B. Pseudomonas C. Streptococcus pyogenes D. Propionibacterium acnes

22. Ans. D. Propionibacterium acne

23. **A sewer worker presented with fever. Lab findings revealed renal failure with increased BUN and serum creatinine. What is the most appropriate drug to give him?**

- A. Cotrimoxazole B. Erythromycin C. Ciprofloxacin D. Benzyl penicillin

23. Ans. B. Erythromycin

24. **False about pneumococcus is?**

- A. Capsule aids in virulence B. Commonest cause of otitis media and pneumonia
 C. Least likely cause of meningitis D. It is bile sensitive

24. Ans. C. Least likely cause of meningitis

25. **False about C.diphtheriae is?**

- A. Toxin production is chromosome mediated B. Damage by toxin production
 C. Toxic to heart and neurons D. More common in children

25. Ans. A. Toxin production is chromosome mediated

FMT

1. **An Infant is brought to casualty with reports of violent shaking by parents. Most characteristic injury is?**

- A. Long bone fracture B. Ruptured spleen C. Subdural hematoma D. Skull bone fracture

1. Ans. C. Subdural hematoma

2. **Gun powder on clothing can be visualized by?**

- A. Magnifying lens B. UV rays C. Infrared rays D. Dye

2. Ans. C. Infrared rays

3. **Signature fracture refers to?**

- A. Depressed skull fracture B. Suture displacement fracture
 C. Counter coupe injury D. Fracture at foramen magnum

3. Ans. A. Depressed skull fracture

4. **Rave drug is?**

- A. ecstasy B. Cocaine C. Heroin D. Amphetamine

4. Ans. A. ecstasy

5. **Sparrow marks are seen in?**

- A. Gunshot injuries
- B. Stab injury of face
- C. Vitriolage
- D. Windshield glass injury

5. Ans. D. Windshield glass injury

6. **A patient presented to the casualty with bluish pigmentation of conjunctiva, mucous membranes, nails .On examination tachycardia & hypotension after one hour of ingestion of poison.**

What is the probable poisoning-

- A. Mercury
- B. Arsenic
- C. Lead
- D. Copper

6. Ans. B. Arsenic

7. **A poison which is illuminous, translucent and waxy?**

- A. Iodine
- B. Ammonium bromide
- C. Cobra venom
- D. Yellow phosphorous

7. Ans. D. Yellow phosphorous

8. **Auto-Rikshaw ran over a child's thigh, there is a mark of the tyre tracks, it is an**

- A. Contact bruise
- B. Patterned bruise
- C. Imprint abrasion
- D. Pressure bruise

8. Ans. B. Patterned bruise

9. **Dental numbering is done by all except?**

- A. FDI two digit system
- B. Anatomic and diagrammatic charting
- C. Palmer notation
- D. Harder acrogenic method

9. Ans. D. Harder acrogenic method

PSM

1. **An investigator finds 5 independent factors presence or absence of which co-relates with the disease.what is the next study you will do?**

- A.ANOVA
- B.Multiple linear regression
- C. Multiple logistic regression
- D.Kruskal willis test

1. Ans. B.Multiple linear regression

2. **Which is not true about diet modification recommendation in high cardiovascular risk group?**

- A.Cholestrol less than 100 mg/day
- B.Avoid alcohol
- C.Fat intake 10% of total calorie intake
- D.Salt restriction less than 6 gm/day.

2. Ans. B.Avoid alcohol

3. **All the following Reforms have been proposed in world health report 2008 except-**

- A.Social reforms
- B.Leadership reforms
- C .Policy reforms
- D.Economic reforms

3. Ans. D.Economic reforms

4. **According McKeon's theory,reduction in mortality due to TB is consequence of -**

- A. Increased awareness and knowledge
- B. Medical advancement
- C. Behavioural modification
- D. Social and environmental factor

4. Ans. D. Social and environmental factor

5. **Orthotolidine test is used for assessing concentration-**

- A. Chlorine
- B. Nitrites
- C. Nitrates
- D. Fluorine

5. Ans. A. Chlorine

6. **Which of the following does not cause indoor air pollution?**

- A. CO
- B. Nitrous oxide
- C. Radon
- D. Mercury vapor

6. Ans. **B. Nitrous oxide**

7. **Most important and potential agent that can be used in bioterrorism:**

- A. Yersinia pestis B. Small pox C. Mycobacterium tuberculosis D. Clostridium botulinum

7. Ans. B. Small pox

8. **Which insect among the following is not resistant to DDT?**

- A. Musca domestica B. Phlebotomus C. Cullex fatigans D. Anopheles stephensi

8. Ans. B. **Phlebotomus**

9. **All are true about biomedical waste disposal except:**

- A. Human anatomical waste is disposed in a yellow bag B. Red bag contents can be a potential source of infection
C. Black bag is used for incineration ash D. Blue bag contents are disposed in secure landfill

9. Ans. D. Blue bag contents are disposed in secure landfill

10. **A graph of normal blood sugar level curve and diabetic blood sugar level curve was shown. An area was seen overlapping towards the normal glycemic curve. A point at 120 mg/dl was shown too. Question : what does that area represent?**

- A. True positive B. False positive C. True negative D. False negative

10. Ans. D. False negative

11. **All are part of National screening programmes except?**

- A. Diabetes mellitus B. Dental caries C. Refractive errors D. Carcinoma cervix

11. Ans. B. Dental caries

12. **Carrier state is not important in transmission of:**

- A. Measles B. Typhoid C. Polio D. Diphtheria

12 Ans. A. Measles

13. **Denominator in maternal mortality rate?**

- A. Total number of live births B. Total number of married women
C. Total number of births D. Midyear population

13. Ans. A. Total number of live births

14. **A population is divided in relevant subgroups & samples were selected randomly from these sub groups. What type of sampling was done?**

- A. Simple random sampling B. Stratified sampling C. Cluster sampling D. Systematic sampling

14. Ans. B. Stratified sampling

15. **Pearson's skewness coefficient is?**

- A. Mean-Mode/SD B. Mode-Mean/SD C. SD/Mean-Mode D. SD/Median-Mode

15. Ans. A. Mean-Mode/SD

16. **About human development index, all are true except?**

- A. Life expectancy at birth B. Life expectancy at 1 year of age C. Education D. GDP

16. Ans. B. Life expectancy at 1 year of age

17. **Efficiency of pasteurized milk is assessed by-**

- A. Phosphatase test B. Methylene Blue test C. Catalase test D. Oxidase test

17. Ans. A. Phosphatase test

18. **Which among the following is a cardioprotective fatty acid?**

- A. Palmitic acid B. Stearic acid C. Oleic acid D. Omega-3 fatty acids

18. Ans. D. Omega-3 fatty acids

19. Which is non deliberate measures for control of mosquito?

- A. Use of alkalinity causing soaps
- B. Efforts by community to prevent development of environment suitable for mosquitoes.
- C. Use of larvicides
- D. Use of bed nets for mosquito

19. Ans. A. Use of alkalinity causing soaps**20. False regarding Japanese encephalitis is:**

- A. During Epidemics 2-3 cases in a village are seen
- B. Bite from infected mosquito is always associated with disease
- C. About 70% of patients are children below 5 year age.
- D. Overt disease to inapparent cases ratio is 1:100

20. Ans. B. Bite from infected mosquito is always associated with disease

21. Arthropod transmitted disease not found in india?

- | | | | |
|--------------------|-----------|-----------------|------------------|
| A. West nile fever | B. Dengue | C. Yellow fever | D. Sandfly fever |
|--------------------|-----------|-----------------|------------------|

21. Ans. C. Yellow fever

22. Most useful indicator for acute illness

- | | | | |
|-----------------------|---------------------------------|-----------------------------|-----------------------|
| A. Case fatality rate | B. Standardized mortality ratio | C. Case specific death rate | D. Five year survival |
|-----------------------|---------------------------------|-----------------------------|-----------------------|

22. Ans. A. Case fatality rate

23. Direct standardisation is used to compare the mortality rates between two countries. This is done because of the difference in:

- | | | | |
|--------------------|---------------|---------------------|-----------------|
| A. Causes of death | B. Numerators | C. Age distribution | D. Denominators |
|--------------------|---------------|---------------------|-----------------|

23. Ans: C Age distributions

ENT

1. Odontoid cells and Haller cells are associated with the following structures respectively?

- | | |
|--|--|
| A. Optic nerve and Orbital floor | B. Optic nerve and Internal carotid artery |
| C. Optic nerve and Ethmoidal air cells | D. Orbital floor and Internal carotid artery |

1. Ans. A. Optic nerve and Orbital floor

2. Pain sensation from the ethmoid sinus is carried by :

- | | | | |
|------------------|-------------------|----------------------|-----------------------|
| A. Frontal nerve | B. Lacrimal nerve | C. Nasociliary nerve | D. Infraorbital nerve |
|------------------|-------------------|----------------------|-----------------------|

3. Ans. C. Nasociliary nerve

3. A 5 year old boy while having dinner suddenly becomes aphonic and is brought to the casualty for the complaint of respiratory distress. What should be the next management?

- | | | | |
|----------------------|---------------------------|----------------------|---------------------|
| A. Cricothyroidotomy | B. Emergency tracheostomy | C. Humidified oxygen | D. Hemlich maneuver |
|----------------------|---------------------------|----------------------|---------------------|

3. Ans. D. Hemlich maneuver

4. Acoustic neuroma involves

- | | |
|--|--|
| A. Superior vestibular division of 8th cranial nerve | B. Auditory part of 8th cranial nerve |
| C. 7th cranial nerve | D. Inferior vestibular division of 8th cranial nerve |

4. Ans. D. Inferior vestibular division of 8th cranial nerve

5. Time of occurrence of secondary hemorrhage after tonsillectomy?

- | | | | |
|-----------|-----------|-----------|------------|
| A. 24 hrs | B. 12 hrs | C. 6 days | D. 12 days |
|-----------|-----------|-----------|------------|

5. Ans. C. 6 days

6. True regarding ranula?

- A. It is also known as epulis B. It is a cystic swelling in the floor of mouth
 C. It is a type of thyroglossal cyst D. It is a type of mucus retention cyst

6. Ans. B. It is a cystic swelling in the floor of mouth

7. All are true statements regarding use of sodium fluoride in the treatment of otosclerosis except?

- A. It inhibits osteoblastic activity.
 B. Used in active phase of otosclerosis when schwartz sign positive.
 C. Has antienzymatic action on proteolytic enzymes toxic to cochlea.
 D. contraindicated in renal failure patients.

7. Ans. A. It inhibits osteoblastic activity.

8. Endolymphatic Hydrops is seen in

- | | | | |
|----------------------|----------------|--------------------|-----------------|
| A. Meniere's disease | B.Otosclerosis | C.Acoustic neuroma | D.Cholesteatoma |
|----------------------|----------------|--------------------|-----------------|

8. Ans:A Meniere's disease

OPHTHALMOLOGY

1. All are seen in Argyl Robertson pupil except?

- A. Near reflex normal B. Direct light reflex absent
 C. Consensual light reflex normal D. Visual Acuity normal

1. Ans. C. Consensual light reflex normal

2. A young patient presents to ophthalmology clinic with loss of central vision. There is no obvious family history. ERG were observed to be normal.Which is most probable diagnosis-

- | | | | |
|------------------|------------------------|-------------------------|-----------------|
| A.Best's disease | B. Stargardt's disease | C. Retinitis pigmentosa | D. Macular hole |
|------------------|------------------------|-------------------------|-----------------|

2. Ans. B. Stargardt's disease

3. Damage to nerve supplying Superior oblique muscle causes diplopia in which direction

- | | |
|-----------------------------|---------------------------|
| A. Horizontal and downwards | B. Vertical and downwards |
| C. Horizontal and upwards | D. Vertical and upwards |

3. Ans. B. Vertical and downwards

4. A patient had running nose and pain over medical aspect of eye being treated with decongestants for many days. He later developed chemosis, proptosis and diplopia on abduction of right eye with congestion of optic disc. What is the probable diagnosis?

- | | |
|-------------------------------|--------------------------|
| A. Acute ethmoidal sinusitis | B. Orbital cellulitis |
| C. Cavernous sinus thrombosis | D. Orbital apex syndrome |

4. Ans. C. Cavernous sinus thrombosis

5. A 5 yr old boy presented with leukocoria in right eye ball which is diagnosed as diffuse retinoblastoma involving the entire globe , while other eye had 2-3 small lesions in the periphery. What will be the ideal management for this patient?

- A. Enucleation of both eyes
 B. Enucleation of right eye & conservative management for the other eye
 C. Enucleation for right eye and Focal therapy for the other eye
 D. 6 cycles of chemotherapy

5. Ans. C. Enucleation for right eye and Focal therapy for the other eye

6. A tennis player gets hit by a ball on the eye, following which he has complaints of decreased vision. which of the following suggests that injury is due to trauma-

- | | | | |
|-------------------|------------------|-----------------------------|---------------------|
| A. Optic neuritis | B. Pars planitis | C. Vitreous base detachment | D. Equatorial edema |
|-------------------|------------------|-----------------------------|---------------------|

6. Ans. C. Vitreous base detachment

7. **Most common malignant cause for bilateral proptosis in children?**

- A. Lymphoblastic lymphoma B. Rhabdomyosarcoma C. ALL D. AML

7. Ans. D. AML

8. **Which of the following most commonly presents with bilateral proptosis in children?**

- A. Cavernous haemangioma B. Chloroma C. Fibrous Histiocytoma D. Pleomorphic Adenoma

8. Ans. B. Chloroma

9. **A patient presented with sudden onset of floaters and sensation of falling of a curtain in front of the eye. Which one of the following is the appropriate diagnosis?**

- A. Retinal detachment B. Eales disease C. Vitreous haemorrhage D. Macular hole

9. Ans. A. Retinal detachment

10 Ophthalmoplegic migraine is defined by-

- A. Headache with irreversible loss of ophthalmic nerve function
 B. Recurrent transient 3rd nerve palsy associated with headache
 C. Recurrent transient 3rd, 4th & 6th nerve palsy associated with headache
 D. Headache with optic neuritis

10. Ans: C. Recurrent transient 3rd, 4th & 6th nerve palsy associated with headache

11. Which of the following drug is not used for medical treatment of diabetic retinopathy?

- A. Tamoxifen B. Benfotiamine C. Pyridazinones D. Ruboxisaturin

11. Ans: A. Tamoxifen

MEDICINE

1. **A girl presented with recurrent occipital headache associated with ataxia and vertigo. Mother also has similar complaints. Most probable diagnosis is?**

- A. Vestibular neuronitis B. Basilar migraine C. Tension head ache D. Cluster head ache

1. ANs. B. Basilar migraine

2. **A 32 year old mountaineer has a hematocrit of 70%. What is the possible explanation?**

- A. Polycythemia with relative dehydration B. High altitude cerebral oedema
 C. High altitude pulmonary oedema D. Hemodilution

2. Ans. A. Polycythemia with relative dehydration

3. **Tetracycline is used in the prophylaxis of which of the following diseases?**

- A. Cholera B. Brucellosis C. Leptospirosis D. Meningitis

3. Ans. A. Cholera

4. **Punnett square is used for -**

- A. Finding genotype of offspring B. Statistical analysis
 C. Anatomical surface area of human body D. Diseased & non diseased individuals

4. Ans. A. Finding genotype of offspring

5. **Cavitation is seen in?**

- A. Mycoplasma pneumonia B. Tuberculous pneumonia
 C. Streptococcal pneumonia D. Staphylococcus pneumonia

5. Ans. C. Streptococcal pneumonia

6. In pseudohyperparathyroidism, true is?

- A. Gain of function mutation in G_{αs}
 C. Decreased inositol tri phosphate production
- B. Decreased conversion of GTP to GMP
 D. Decreased formation of cAMP

6. Ans. D. Decreased formation of cAMP

7. Difference between follicular carcinoma and follicular adenoma is?

- A. Vascular invasion B. Mitosis C. Nuclear pleomorphism D. Tubule formation
7. Ans. A. Vascular invasion

8. Which among the following is used for diagnosis of anti phospholipid antibody syndrome

- A. Beta 2 microglobulin antibody B. Anti nuclear antibody
 C. Anti centromere antibody D. Anti beta 2 glycoprotein antibody

8. Ans. D. Anti beta 2 glycoprotein antibody

9. Which is the most reliable objective sign of identifying pulmonary plethora in chest X-ray?

- A. Diameter of the main pulmonay artery >16mm
 B. Diameter of the left pulmonay artery >16mm
 C. Diameter of the descending Right pulmonay artery >16mm
 D. Diameter of the descending Left pulmonay artery >16mm

9. Ans. C. Diameter of the descending Right pulmonay artery >16mm

10. Necrotizing lymphadenitis is seen in?

- A. Kimura disease B. Kikuchi disease C. Hodgkin disease D. Castelman disease

10. Ans. B. Kikuchi disease

11. NARP syndrome is seen in?

- A. Mitochondrial function disorder
 C. Lysosomal storage disorder
- B. Glycogen storage disorder
 D. Lipid storage disorder

11. Ans. A. Mitochondrial function disorder

12. Superior vena cava syndrome is most commonly caused by?

- A. Lymphoma B. Small cell lung ca C. Non small cell lung ca D. Secondary tumours

12. Ans. B. Small cell lung ca

13. Which of the following is not included in parenteral nutrition?

- A. Fat B. Carbohydrate C. Fibres D. Micronutrients

13. Ans. C. Fibres

14. All are true about pheochromocytoma except?

- A. 90% are malignant
 C. They secrete catecholamines
- B. 95% occur in the abdomen
 D. They arise from sympathetic ganglions

14. Ans. A. 90% are malignant

15. Intraoperative myocardial infarction is best diagnosed by:

- A. ECG
 C. Central venous pressure
- B. Invasive arterial pressure
 D. Trans Esophageal echocardiography

15. Ans. D. Trans Esophageal echocardiography

16. ECG is poor at detecting ischaemia in areas supplied by?

- A. Left anterior descending
 C. Left coronary artery
- B. Left circumflex
 D. Right coronary artery

16. Ans. B. Left circumflex

17. A patient with history of discharge from right ear for past 1 year presented with severe ear ache. The discharge was cultured and the organism was found to be gram positive cocci .CT scan shows

ring enhancement The least likely cause is?

- A. Psuedomonas B. Streptococcus pneumoniae C. Staphylococcus D. Haemophilus influenza

17. Ans. B. Streptococcus pneumoniae

18. **A 15 day old baby came with history of seizures. Blood tests revealed Ca 5mg/dl, PO4 9mg/dl, PTH 30pg/ml (n=10-60). What is the most probable diagnosis?**

- A. Pseudohypoparathyroidism B. Vitamin D deficiency C. Hyperparathyroidism D. HIE

18. Ans. A. Pseudohypoparathyroidism

19. **Which among the following not used in diagnosis of insulinoma?**

- A. Fasting glucose test B. Xylulose test C. C peptide levels D. Insulin / glucose ratio

19. Ans.B. Xylulose test

20. **All are true about Nesidioblastosis except ?**

- A. Hypoglycemic episodes are seen B. Occurs in adults more than children
C. Histopathology shows hyperplasia of islet cells D. Diazoxide is used for treatment

20. Ans. B. Occurs in adults more than children

21. **Gold standard test for diagnosis of laryngopharyngeal reflux?**

- A. 24 hr double probe pH monitoring B. Flexible endoscopy
C. Barium swallow D. Laryngoscopy

21 Ans. A. 24 hr double probe pH monitoring

22. **Least common cause of ambiguous genitalia in a female child?**

- A. Placental steroid sulfatase deficiency B. Fetal aromatase deficiency
C. WT-4 mutation D. CAH

22. Ans. A. Placental steroid sulfatase deficiency

23. **What will you give to treat hypothyroidism in a patient with ischemic heart disease?**

- A. Low dose of levothyroxine B. Normal dose of levothyroxine
C. Do not give levothyroxine D. Thyroid extract

23. Ans. A. Low dose of levothyroxine

24. **A 35 year old female has proximal weakness of muscles, ptosis and easy fatigability. The best test to diagnose her condition is:**

- A. Muscle biopsy B. CPK C. Edrophonium test D. EMG

24. Ans. C. Edrophonium test

25. **Compliance is decreased in all except**

- A. Pulmonary congestion B. COPD C. Decreased surfactant D. Pulmonary fibrosis

25. Ans. B. COPD

26. **A 70yr old presents with intermittent jerks of recent origin, EEG showing bilateral periodic spikes. What is the most probable diagnosis?**

- A. Herpes simplex encephalitis B. Lewy body dementia C. Alzheimer's D. CJD
26. Ans. D. CJD

27. **Not a disorder of protein misfolding?**

- A. Alzheimer's disease B. Tuberculosis C. Cystic fibrosis D. CJD

27. Ans. B. Tuberculosis

28. **A 12 year old male presents with hematemesis, melena and splenomegaly. What is the most probable diagnosis?**

- A. NCPF B. Cirrhosis C. Malaria with DIC D. Extra hepatic portal venous obstruction

28. Ans. D. Extra hepatic portal venous obstruction

40. A Patient presents with high TSH & low T4, what could be the probable diagnosis?
 A.Grave's disease B.Hashimoto's disease C.Pituitary failure D.Hypothalamic failure

40. Ans:B.Hashimoto's disease

41. Blood examination of a Patient revealed low serum Ca,elevated phosphorus & elevated PTH. Which of the following investigation is least contributory to diagnosis?
 A. Urine myoglobin B. CAMP response to PTH C. Vitamin D levels D. S. Creatinine levels

41. Ans. C. Vitamin D levels

SURGERY

1. A 40yr old patient has a single kidney with an exophytic mass of 4 cm size at it's lower pole. Which among the following is the best course of action?

- A. Partial nephrectomy B. Radical nephrectomy with dialysis
 C. Radical nephrectomy with immediate renal transplant D. Observation

1. Ans. A. Partial nephrectomy

2. In a 5 year old child the burn area corresponding to the size of palm is equal to
 A. 1% B. 5% C. 10% D.20%

2. Ans. A. 1%

3. Most common site of obstruction after TURP?

- A. Navicular fossa B. Bulb C. Prostatic membranous urethra D. Bladder neck

3. Ans. D. Bladder neck

4. A young male was brought to emergency following stab injury.Patient presents with omentum protruding in the umbilical area through wound ,his vitals are stable,heart rate 80 bpm & blood pressure-110/80,.The next step in the management of the patient is:

- A.FAST B.Laparotomy C.Wound exploration & repositioning of omentum D.CECT Abdomen
 4. Ans. C.Wound exploration & repositioning of omentum

5. Renal calculi associated with proteus infection is:

- A. Uric acid B. Triple phosphate C. Calcium oxalate D. Xanthine
 5. Ans. B. Triple phosphate

6. Which of the following is a contraindication for medical treatment in gallstones?

- A. Radio opaque stones B. Radiolucent stones C. Normal functioning gall bladder D. Small stones
 6. Ans. A. Radio opaque stones

7. Which organ obtained from a cadaver is not used for transplantation?

- A. Blood vessel B. Lung C. Liver D. Bladder
 7. Ans. D. Bladder

8. A young sewage worker was brought to hospital with history of exhaustion ,abdominal pain ,vomiting ,fever & shock. His heart rate is 120/min ,respiratory rate is 30/min & blood pressure is 100/70 per minute .His clinical features are suggestive of peritonitis .What is the next step of management?

- A.Immediately take the patient for laparotomy under GA
 B. Take the patient for Diagnostic laparoscopy & then exploratory laparotomy
 C. Insert an abdominal drain under LA and then for exploratory laparotomy
 D. Resuscitate the patientwith I.V. fluid & oxygen,then shift patient for exploratory laparotomy

8. Ans. D.Resuscitate the patientwith I.V. fluid & oxygen,then shift patient for exploratory laparotomy

9. A patient with head injury on examination revealed eye opening in response to pain, inappropriate words and pain localisation. Calculate GCS?

- A. 10 B. 8 C. 12 D. 14
 9. Ans. A. 10

10. A 5 year old child presented with ballooning of perpuce while micturition. Perpuce adhesions were present. What is the best treatment for him?

- A. Adhesiolysis and dilatation B. Circumcision C. Dorsal slit D. Conservative

10. Ans. B. Circumcision

11. During TURP, surgeon takes care to dissect above the verumonten so as to prevent injury to?
 A. External urethral sphincter B. Urethral crest C. Prostatic utricle D. Trigone of bladder
 11. Ans. A. External urethral sphincter

12. Best treatment option for genuine stress incontinence?
 A. Burch colposuspension B. Kelly's procedure answer
 C. Sling operation D. Tension free vaginal taping
 12. Ans. D. Tension free vaginal taping

13. A patient presents with fever and abdominal pain. Clinical examination reveals hepatomegaly extending 4 finger breadths below the costal margin. USG & CT reveals a 4cm*5cm*4cm hypoechoic & hypodense lesion 1cm deep to liver surface. Tests for hydatid disease were -ve. Best course of action is?
 A. Resection of affected lobe B. Multiple percutaneous aspirations and metronidazole injection in right lobe
 C. Metronidazole therapy only D. Surgical drainage of abscess & metronidazole therapy

13. Ans. C. Metronidazole therapy only

14. A lady who presented with hematuria on evaluation was found to have stage 2 transitional cell carcinoma of bladder. Which of the following is true?
 A. 70% chance of requiring cystectomy in 5 yrs B. Cystoscopic fulguration required in c/o recurrence
 C. A 10 year history of beedi smoking is not a risk factor D. There is no role of chemotherapy

14. Ans. A. 70% chance of requiring cystectomy in 5 yrs

15. Medical treatment for variceal bleed is by?
 A. Octreotide B. Pantaprazole C. Desmopressin D. Somatotrophin
 15. Ans. A. Octreotide

16. A 55 year old man presents with history of 5 episodes of hematuria each lasting for about 4-5 days associated with clots in the past 5 years. What will be the best investigation to arrive at a diagnosis?
 A. Urine examination and microscopy B. X-ray KUB C. Abdominal USG D. DTPA scan
 16. Ans. A. Urine examination and microscopy

17. A 50yr old patient presents with 2 yrs h/o recurrent abdominal pain, radiating to back, relieved only by parenteral analgesic. This time pain is severe & radiating to back ,appropriate treatment procedure is?
 A.vagotomy with Gastroduodenostomy B.vagotomy with antrectomy
 C.whipple procedure D.Longitudinal pancreaticojejunostomy

17. Ans D.Longitudinal pancreaticojejunostomy

- Q.18 Multiple sebaceous cysts seen in:
 A. Gardner's syndrome B. Turcot syndrome
 C. Muir Torre syndrome D. Cowden syndrome

18. Ans:A Gardner's syndrome

- Q.19.A Patient presents with epigastric pain which radiates to the back and relieved by food, patient have history of such pain in past for which he was taking analgesics and in past 5 years 2 times operated for duodenal ulcer.Pain before & after surgery has been controlled with proton pump inhibitors. What could be probable diagnosis-

- A. Gastric ulcer B. Duodenal ulcer C. Chronic pancreatitis D. Atrophic gastritis
 19. Ans:Duodenal Ulcer

- Q.20. Patient having pain in epigastrium which radiates to back, serum amylase is normal, USG abdomen reveals gall stone and bulky pancreas.CT scan was done,which clinched the diagnosis.The scenario is suggestive of-
 A.Acute Pancreatitis B.Acute cholecystitis C.Duodenal ulcer D. Acute Appendicitis

20. Ans:A.Acute Pancreatitis

PAEDS

1. Earliest symptom of GERD which becomes pathological in an infant is?
 A. Respiratory distress B. Upper GI bleed C. Regurgitation & Vomiting D.Food bolus obstruction

1. Ans. C. Regurgitation & Vomiting

It is common for infants to spit up after a meal, **but frequent vomiting among infants may be caused by GERD (gastroesophageal reflux disease)**, the upward movement of stomach content, including acid, into the esophagus and sometimes into or out of the mouth. Older children also can be affected

In normal reflux infant just spit up after meal does not vomit & regurgitate. If vomiting & regurgitation present it is pathological sign. Respiratory distress is late sign.

2. Most important prognostic factor in congenital diaphragmatic hernia?

- | | |
|---------------------------|--|
| A. Pulmonary hypertension | B. Timing of surgery |
| C. Size of defect | D. Gestational age at which child was born |

2. Ans. Pulmonary hypertension

3. A child presented with fever, mild breathlessness & non-productive cough. She was treated with course of antibiotics and she improved over 4 days and later deteriorated again with fever and more breathlessness. Chest x ray showed hyperlucency. Pulmonary function test was suggestive of obstructive airway disease. The probable diagnosis would be-

- | | | | |
|-----------------------------|-------------------------|------------------------|-----------|
| A. Bronchiolitis obliterans | B. Alveolar proteinosis | C. Post viral syndrome | D. Asthma |
|-----------------------------|-------------------------|------------------------|-----------|

3. Ans. A. Bronchiolitis obliterans

4. Which among the following is the most common tumour associated with neurofibromatosis in a child?

- | | |
|-------------------------------------|---------------------------------|
| A. Juvenile myelomonocytic leukemia | B. Acute lymphoblastic leukemia |
| C. Acute monocytic leukemia | D. Acute myeloid leukemia |

4. Ans. A. Juvenile myelomonocytic leukemia

About 80% of JMML patients have some sort of genetic abnormality in their leukemia cells that can be identified with laboratory testing. This includes:

- **15-20% of patients with neurofibromatosis 1 (NF1)**
- 25% of patients with mutations in one of the RAS family of oncogenes (only in their leukemia cells)
- Another 35% of patients with a mutation in a gene called PTPN11 (again, only in their leukemia cells).

5. A 3.8 kg baby of a diabetic mother developed seizures 16 hours after birth. Most probable cause is?

- | | | | |
|-----------------|-----------------|-------------------|---------------------------------|
| A. Hypoglycemia | B. Hypocalcemia | C. Birth asphyxia | D. Intra ventricular hemorrhage |
|-----------------|-----------------|-------------------|---------------------------------|

5. Ans. A. Hypoglycemia

Hypocalcemia after 72 hours

6. Most common cause of meningoencephalitis in children?

- | | | | |
|--------|----------------|----------|-------------|
| A. HSV | B. Enterovirus | C. Mumps | D. Listeria |
|--------|----------------|----------|-------------|

6. Ans. Enterovirus

7. Baby born at 33 weeks with body weight 1.5 kg should be started on?

- | |
|---|
| A. oral and IV fluids |
| B. Oral nasogastric tube / alternate oral route |
| C. IV fluids and assessment. |
| D. TPN |

7. Ans. B. Oral nasogastric tube / alternate oral route

8. A 6 year old child presents with pain in hip in femoral triangle region & limitation of movements. X-ray does not reveal any abnormality. What is the next step?

- | | | | |
|--------|--------|---------------|-------------|
| A. USG | B. MRI | C. Aspiration | D. Traction |
|--------|--------|---------------|-------------|

8. Ans. MRI

Diagnosis is -Perthe's disease

9. Ideal age for surgery in unilateral undescended testis is?

- | | | | |
|-------------|-------------|--------------|--------------|
| A. 6 months | B. 12 month | C. 24 months | D. 36 months |
|-------------|-------------|--------------|--------------|

9. Ans. A. 6 months

10. Pentalogy of Fallot has which one of following entities:

- | | | | |
|--------|-------------------------|--------|--------|
| A. ASD | B. Coarctation of aorta | C. LVH | D. PDA |
|--------|-------------------------|--------|--------|

10. Ans. A. ASD

11. A child presents with abdominal pain only during passage of stools. No other symptoms like vomiting or blood in stools. There are no signs of intestinal obstruction. Most probable diagnosis is?
 A. Rectal polyp B. Intussusception C. Meckel's diverticulum D. Necrotising enterocolitis

11. Ans. A. Rectal polyp

12. coarctation of aorta most commonly associated with
 A. Bicuspid aortic valve B. PDA C. VSD D. ASD

12. Ans. A. Bicuspid aortic valve

13. A 8 days old male infant was brought in a state of dehydration and shock. Examination revealed hyper pigmentation over the body with normal external genitalia. Blood tests revealed hypoglycemia, Na - 124 mEq/L and K - 7 mEq/L. What is the probable diagnosis ?

A. Congenital adrenal hyperplasia B. Adrenal haemorrhage and shock
 C. Acute gastroenteritis with dehydration D. Hyper aldosteronism

13. Ans. A. Congenital adrenal hyperplasia

14. A neonate delivered at 38 weeks of gestation, birth weight of 2.2kg develops intolerance to feeds on 2nd day. Physical examination reveals no abnormalities. Sepsis screen is negative. And PCV is 70%. What is the next step in management?

A. IV fluid B. Presumptive treatment of sepsis C. Exchange transfusion D. Repeat sepsis screen

14. Ans: C Exchange transfusion

15. 1yr old child present with growth failure,dry skin and palpable thyroid,with low thyroid hormones and a high TSH, what is cause?

A. Thyroid Dyshormonogenesis B. Thyroid Dysgenesis
 C. Central Hypothyroidism D. TSH Receptor blocking antibody
 Ans. A. Thyroid Dyshormonogenesis

Obstet & Gyne

1. In expectant management of placenta praevia, all are done except?

A. Cervical encirclage B. Anti D administration
 C. Corticosteroids administration D. Blood transfusion

1. Ans. A. Cervical encirclage

2. Best test/Gold standard test for assessing HCG function

A. Radioimmunoassay B. ELISA C. Latex test D. Bioassay

2. Ans. A. Radioimmunoassay

3. Causes of primary amenorrhoea are all except?

A. Rokitansky syndrome B. Kallmann syndrome C. Sheehan syndrome D. Turner syndrome

3. Ans. C. Sheehan syndrome

4. Which of the following is not a contraindication for pregnancy?

A. WPW syndrome B. Pulmonary hypertension
 C. Eisenmenger syndrome D. Marfan syndrome with aortic root dilatation

4. Ans. A. WPW syndrome

5. Weight gain in pregnancy is related to all except?

A. Ethnicity B. Smoking C. Socioeconomic status D. Pre conceptional weight

5. Ans. B. Smoking

6. Regarding PCOD, all are true except?

A. High LH/FSH B. High DHEAS C. Markedly high prolactin D. Raised LH

6. Ans. C. Markedly high prolactin

7. Best marker for intrahepatic cholestasis of pregnancy is?
A. Bile acids B. Liver enzymes(AST & ALT) C. Bilirubin D. Alkaline phosphatase

7. Ans. A. Bile acids

8. Feature of obstructive azoospermia is?
A. High FSH, high testosterone B. Low FSH, high testosterone
C. High FSH, low testosterone D. Normal FSH, normal testosterone

8. Ans. D. Normal FSH, normal testosterone

9. Which of the following contraception method is contraindicated in women with epilepsy?
A. Oral Contraceptive pill B. IUCD C. Condom D. Mifepristone

9. Ans. A. Oral Contraceptive pill

10. **Low dose oral contraceptive pill contains?**

- A. Levonorgestrel B. Norgestrel C. Desogestrel D. Norethihisterone

10. Ans. C. Desogestrel

11. Mother to baby transmission of HIV can be minimised by all except?
A. Zidovudine B. HAART C. Vaginal delivery D. Avoidance of breast feeding

11. Ans. C. Vaginal delivery

12. A primigravida at 37 weeks of gestation presents with 1 cm dilated cervix which is unefaced, uterine contractions & pain suggestive of labour since 10 hrs . What is management?
A. Sedate the patient and wait B. LSCS C. Amniotomy D. Induction with membrane rupture

12. Ans. A. Sedate the patient and wait

13. A primigravida in 1st trimester had sputum positive for acid fast bacillus. What is the preferred treatment?
A. Treatment deferred till 2nd trimester B. Category 1 DOTS C. Category 2 DOTS D. Category 3 DOTS

13. Ans. B. Category 1 DOTS

14. A 45 year old lady presented with DUB & USG finding of 8mm thick endometrium. What is the next step?
A. Endometrial histopathology B. Hysterectomy C. OCP D. Follow up

14. Ans. A. Endometrial histopathology

15. Fallopian tube dysmotility is seen in?
A. Churg strauss syndrome B. Kartagener's syndrome C. Noonan syndrome D. Turner syndrome

15. Ans. B. Kartagener's syndrome

16. Best marker for open neural tube defect.
A.Acetylcholinesterase B.Pseudocholinesterase C.AFP D.HCG

16. Ans. A.Acetylcholinesterase

17. All of the following are done in management of shoulder dystocia except?
A. Maurieauceli veit maneuver B. Suprapubic pressure C. McRoberts maneuver D. Woods maneuver

17. Ans. A. Maurieauceli veit maneuver

18. Which of the following are not associated with menstrual cycle?
A. Hormonal changes B. Vaginal cytology changes C. Estrus profile D. Endometrial changes

18. Ans. C. Estrus profile

19. Confined Blood Chimerism is associated with?
A. Dichorionic diamniotic twins B. Monochorionic diamniotic twins
C. Singleton pregnancy D. Monochorionic Monoamniotic twins

19. Ans. B. Monochorionic diamniotic twins

20. Which of the following is not an evidence based treatment for menorrhagia?

- A. Ethamsylate B.OCP C.Tranexamic acid D. Progesterone

20. Ans. A. Ethamsylate

21. True regarding chlamydia is?

- A. Culture of endocervical discharge can be used for isolation of organism
 B. Patient using OCP's are at higher risk for Chlamydia infection
 C. Most of genital Chlamydia infections are asymptomatic
 D. Penicillin is drug of choice

21. Ans. B. Patient using OCP's are at higher risk for Chlamydia infection

22.. A female presents with XO genotype and Primary amenorrhoea.What is most likely diagnosis-

- A. Gonadal dysgenesis B. Androgen insensitivity syndrome. C. MRKH D.CAH

22. Ans:A Gonadal dysgenesis

DERMATOLOGY

Q.1 Pseudoisomorphic phenomenon is seen in -

- A. Psoriasis B. Lichen planus C. Vitiligo D. Plane warts

1. Ans: D Plane warts

Q. 2.Cicatrising alopecia with perifollicular blue-gray patches is most commonly associated with

- A. Nail dystrophy B. Whitish lesion in the buccal mucosa
 C. Arthritis D. Discoid Plaques in the face

2. Ans: B. Whitish lesion in the buccal mucosa

Q.3 Erythema nodosum is seen in all except:

- A. Pregnancy B. Tuberculosis C. SLE D. Chronic pancreatitis

3. Ans: D Chronic pancreatitis

Q.4 . A young male presented with history of fever and a nodule in the leg. Histopathology of the nodule revealed foamy histiocytes and neutrophilic infiltrate in the dermis. Most probable diagnosis is?

- A. Sweet's syndrome B. Rosai Dorfman disease
 C. Erythema Nodosum Leprosum D.erythema nodosum

4. Ans: D.erythema nodosum

Q.5. A man presents with maculopapular rash 2weeks after having a painless genital ulcer.Causative organism of the condition is:

- A.Treponema pallidum B.Chlamydia C.C.granulomatis D.H.ducreyi

5. Ans:A Treponema pallidum

ANESTHESIA

1. Spinal anaesthesia is given at which level?

- A. L1-2 B. L3-4 C. S1 D. Midline thoracic segments

1. Ans. B. L3-4

2. Epileptic potential is present in

- A. Desflurane B. Halothane C. Sevoflurane D. Ether

2. Ans C. Sevoflurane

3. Which of the following anesthetic drugs is contraindicated in a patient with hypertension who is being posted for cholecystectomy?

- A. Ketamine B. Propofol C. Etomidate D. Midazolam

3. Ans. A. Ketamine

4. True about spinal opioids are all except?

- A. Acts on dorsal horn substantia gelatinosa
- B. Can cause Itching
- C. Intestinal motility is decreased
- D. Can cause respiratory depression

4. Ans. C. Intestinal motility is decreased

5. A fire breaks out occurs during laser vocal cord surgery on larynx Under general anaesthesia. What is not to be done in management of above?

- A. Pouring sterile water into the oral cavity
- B. Removing endotracheal tube
- C. 100% oxygen after discontinuing anesthetic gases
- D. Treatment with steroid & antibiotic

5. Ans. C. 100% oxygen after discontinuing anesthetic gases

6. Which anesthetic modality is to be avoided in sickle cell disease?

- A. General anesthesia
- B. Brachial plexus block
- C. IV regional anesthesia
- D. Spinal

6. Ans C. IV regional anesthesia

7. A 40 year old female underwent surgery. Post operatively she told the anaesthetist that she was aware of operative events & was very uncomfortable feeling about that . Individual intraoperative awareness is evaluated by (to prevent such instances from occurring)?

- A. Pulse oximetry
- B. Colour doppler
- C. Bispectral index
- D. End tidal CO₂

7. Ans. C. Bispectral index

8. A 35 year old female was undergoing thyroid surgery under general anesthesia.During which there was sudden rise in end tidal CO₂. It can be due to all except:

- A. Anaphylaxis
- B. Malignant hyperthermia
- C. Thyroid storm
- D. Neuroleptic malignant syndrome

8. Ans. A. Anaphylaxis

9. An anesthesia resident was giving epidural anaesthesia when the patient had sudden aphonia and loss of consciousness. What could have happened?

- A. Total spinal anaesthesia
- B. Anaphylaxis
- C. Vaso vagal attack
- D. Intra vessel injection

9. Ans. C. Vaso vagal attack

10. All are" Definitive" airway except?

- A. Nasotracheal tube
- B. Orotracheal tube
- C. LMA
- D. Cricothyroidotomy

10. Ans. C. LMA

11. Anaesthetic agent with vasoconstrictor properties are contraindicated in?

- A. Finger block
- B. Spinal block
- C. Epidural block
- D. Surface anaesthesia for bronchoscopy

11. Ans. A. Finger block

RADIOLOGY

1. The distant metastasis of bone can be best detected by:

- A. MRI
- B. Bone scan
- C. CT
- D. Intravenous venogram

1. Ans. B. Bone scan

2. Dose of radiation required for development of haematological syndrome is?

- A. 2 to 5 Gy
- B. 10 Gy
- C. 100 Gy
- D. 200 Gy

3. Ans. A. 2 to 5 Gy

3. Which among the following is preferred in a patient with decreased renal function to avoid contrast nephropathy?

- A. N acetylcysteine
- B. Fenoldopam
- C. Low osmolar contrast media
- D. Mannitol

3. Ans. C. Low osmolar contrast media

4. Earliest to be diagnosed by USG is?

- | | | | |
|------------------------|------------------|----------------|-----------------|
| A. Anencephaly | B. Prosencephaly | C. Meningocele | D. Spina bifida |
| 4. Ans. A. Anencephaly | | | |

5. Aortic knob silhouette on chest X ray, PA view is obliterated by consolidation of which portion of lung?

- | | |
|--|---|
| A. Apicoposterior segment of left upper lobe | B. Superior lingual segment of left upper lobe |
| C. Apical segment of left lower lobe | D. Inferior lingular segment of left upper lobe |

5. Ans. A. Apicoposterior segment of left upper lobe

6. CT scan is least accurate for diagnosis of:

- | | |
|---|---|
| A. 1 cm size aneurysm in hepatic artery | B. 1 cm size lymph node in para aortic region |
| C. 1 cm size mass in tail of pancreas | D. 1 cm size gall stone |

6. Ans. D. 1 cm size gall stone

7. Differentiating feature of ASD from VSD in Chest X-ray?

- | | |
|---------------------------|---------------------------------------|
| A. Pulmonary hypertension | B. Absence of left atrium enlargement |
| C. Pulmonary congestion | D. Aortic shadow |

7. Ans. B. Absence of left atrium enlargement

8. Which of the following is true about contrast radiography

- | |
|--|
| A. In conventional monomeric iodinated contrast media the iodine molecule to solute particle ratio is 3:2. |
| B. Injection into artery is associated with 3 times more complication than injection into a vein |
| C. Test dose should be performed if a contrast reaction is suspected |
| D. Gadolinium DTPA crosses blood brain barrier |

8. Ans. A. In conventional monomeric iodinated contrast media the iodine molecule to solute particle ratio is 3:2

PSYCHIATRY

1. Antidepressant drug that can be used in nocturnal enuresis, ADHD & chronic pain

- | | | | |
|---------------|---------------|--------------|----------------|
| A. Imipramine | B. Fluoxamine | C. Bupropion | D. Fluvoxamine |
|---------------|---------------|--------------|----------------|

1. Ans. A. Imipramine

2. A female patient presented with depressed mood, loss of appetite and no interest in surroundings. There is associated insomnia. The onset of depression was preceded by a history of business loss and immediately soon after it she developed the following symptoms for the past 1 year. Which of the following is true-

- | |
|---|
| A. No treatment is necessary as it is due to business loss |
| B. SSRI is the most efficacious of the available drugs |
| C. Start antidepressant drug treatment based on side effect profile |
| D. Combination therapy of 2 anti depressant drugs |

2. Ans. C. Start antidepressant drug treatment based on side effect profile

3. Regarding an imbecile, all are true except?

- | | |
|--|--|
| A. IQ is 50-60 | B. Intellectual capacity equivalent to a child of 3-4 years of age |
| C. Not able to take care of themselves | D. Condition is congenital or acquired at an early age |

3. Ans. A. IQ is 50-60

4. Maintenance dose of which of the following drugs is used worldwide for opioid dependence?

- | | | | |
|-------------|--------------|---------|--------------|
| A. Naloxone | B. Methadone | C. LAAM | D. Pethidine |
|-------------|--------------|---------|--------------|

4. Ans. B. Methadone

5. Most common Cause of premature death in schizophrenia?

- | | | | |
|-------------|------------|-----------------------------------|---------------------------------|
| A. Homicide | B. Suicide | C. Toxicity of antipsychotic drug | D. Hospital acquired infections |
|-------------|------------|-----------------------------------|---------------------------------|

5. Ans. B. Suicide

6. Which among the following is not used to treat alcohol dependence?

- | | | | |
|---------------|----------------|---------------|---------------|
| A. Flumazenil | B. Acamprosate | C. Naltrexone | D. Disulfiram |
|---------------|----------------|---------------|---------------|

6. Ans. A. Flumazenil

7. All are true about delirium tremens except?

- A. Visual hallucinations B. Coarse tremors C. Third Nerve palsy D. Confusion

7. Ans. C. Third Nerve palsy

8. Mr X is a chronic smoker. His family insists on quitting smoking. He is thinking about quitting, but is reluctant to do so because he is worried that on quitting he will become irritable. According to health belief model state of patient is?

- A. Precontemplation and preparation B. Contemplation and extent of sickness susceptibility
C. Contemplation and cost D. Precontemplation and cost

8. Ans. C. Contemplation and cost

Ortho

1. A 65 yrs old lady presented with a swollen and painful knee. On examination, she was found to have grade III osteoarthritic changes. What is the best treatment option ?

- A. Conservative management B. Arthroscopic washing
C. Partial knee replacement D. Total knee replacement

1. Ans D. Total knee replacement

Grade III always do total knee replacement.

2. Most common nerve injured in supracondylar fracture humerus?

- a. Median b. Radial c. Ulnar d. Anterior interosseous nerve

2. Ans. d. Anterior interosseous nerve

References:

The elbow and its disorders By Bernard F. Morrey, Joaquin Sanchez-Sotelo, Page 226

Skeletal trauma in children, Volume 3 By Neil E. Green, Marc F. Swiontkowski, Page 212

The order is Anterior Interosseous Nerve > Median > Radial > Ulnar

- Nerve injuries occur in about 40% of type III (Gartland's classification) supracondylar fractures
- Earlier literature stated that radial nerve was the most commonly injured nerve in supracondylar fractures
- **But recent studies indicate that the anterior interosseous branch of median nerve is mostly affected**

Nerve involvement differ with the type of fracture

Anterior interosseous nerve is mostly affected during posterolateral displacement of the distal fragment

Radial nerve is mostly affected with posteromedial displacement

Ulnar nerve is involved in flexion type of supracondylar fracture

3. Blount's disease is:

- A. Genu valgum B. Genu varum C. Genu recurvatum D. Meniscal injury

3. Ans. B. Genu varum

Blount's disease

Tibia vara

Blount's disease is a growth disorder of the shin bone (tibia) in which the lower leg turns inward, resembling a bow leg.

Causes, incidence, and risk factors

Blount's disease occurs in young children and adolescents. The cause is unknown but is thought to be due to the effects of weight on the growth plate. The inner part of the shin bone, just below the knee, fails to develop normally.

Unlike bowlegs, which tend to straighten as the child develops, Blount's disease slowly gets worse. It can cause severe bowing of one or both legs.

This condition is more common among African-American children. It is also associated with obesity and early walking.

Genu recurvatum is a deformity in the knee joint, so that the knee bends backwards. In this deformity, excessive extension occurs in the tibiofemoral joint. Genu recurvatum is also called **knee**

hyperextension and back knee. This deformity is more common in women and people with familial ligamentous laxity.

4. A Teenaged girl complains of pain in knee on climbing stairs and on getting up after sitting for a long time. What is the probable diagnosis?

- | | |
|----------------------------|-----------------------------------|
| A. Chondromalacia patellae | B. Plica syndrome |
| C. Bipartite patella | D. Patello-femoral osteoarthritis |

4. Ans. A. Chondromalacia patellae

Chondromalacia patella

Patellofemoral syndrome; Knee pain - chondromalacia

Chondromalacia patella is the softening and breakdown of the tissue (cartilage) that lines the underside of the kneecap (patella).

It is a common cause of anterior knee pain.

Chondromalacia of the patella occurs in adolescents and young adults.

The condition is more common in females. It can be related to the abnormal position of the knee.

Symptoms

- A grating or grinding sensation when the knee is flexed (moved so that the ankle is brought closer to the back of the thigh)
- **Knee pain in the front of the knee that occurs when you get up after sitting for a long period of time**
- **Knee pain that worsens when you use stairs or get out of a chair**
- Knee tenderness

Plica syndrome of the knee is a constellation of signs and symptoms that occur secondary to injury or overuse. An otherwise normal structure, a plica can be a significant source of anterior knee pain.

Bipartite patella-

A bipartite patella occurs when the patella, or kneecap, occurs as two separate bones. Instead of fusing together in early childhood, the patella remains separated. A bipartite patella is usually not a problem; it occurs in at least 1 percent of the population, and perhaps more.

5. First structure to be fixed after amputation is?

- | | | | |
|----------------|--------------------|------------------|-----------------|
| A. Bone fixing | B. Arterial repair | C. Venous repair | D. Nerve repair |
|----------------|--------------------|------------------|-----------------|

5. Ans. A. Bone fixing

Replantation

The goal of replantation (commonly known as re-implantation or re-attachment surgery) after traumatic amputation is successful restoration of function. Simply returning circulation to an amputated part does not in itself define success. The aim of the both the patient and the surgeon is useful function - replantation of a part that will not perform useful activity should be avoided.

Bone Fixation (Osteosynthesis)

If the part is deemed to be replantable, bone fixation is performed first. Most commonly, fixation with k-wires is performed.

Tendon Repair

After bone fixation is performed, the dorsal extensor tendon (above) and flexor tendon (below) are repaired. With all the "macro" structures repaired - bone, extensor and flexor tendon - attention is then turned to the microsurgical portion of the procedure.

Microsurgical Artery and Nerve Repair

The microsurgical repair of an artery can now be performed with the operating microscope. A digital vessel, which is approximately 1 millimeter in size, can be repaired with 6 to 8 sutures of nylon. Removal of the vascular clamps reveals whether circulation can be re-established to the finger.

Microsurgical Vein Repair

Attention is then usually turned to the dorsal aspect of the finger where the venous system is present that drains blood from the finger. Usually one or occasionally two veins are repaired with the operating microscope. The veins are often much smaller and more fragile than the arteries and hence more prone to clotting post-operatively.

Skin Closure and Splinting

The skin is then closed, often with a skin graft, depending on the swelling and the nature of the injury. The hand is usually placed in a splint and the patient is monitored closely for circulatory changes in the finger during the post-operative period.