

Rapid Review

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Anatomy

1. Movements affected by involvement of L5 nerve root includes Knee flexion, knee extension and toe extension.
2. Injury to common peroneal nerve commonly results from injury to the neck of fibula, loss of toe dorsiflexion and foot drop.
3. Suprascapular nerve is a branch from the trunk of brachial plexus.
4. Common bile duct, aorta and inferior vena cava form posterior relations of head of pancreas.
5. Urethral crest is situated in prostatic urethra.
6. Components of hypogastric sheath includes uterosacral ligament, transverse cervical ligament and lateral ligament of the bladder.
7. Bifurcation of common carotid occurs at upper border of thyroid cartilage.
8. Anterior division of mandibular nerve (V3) supplies temporalis, masseter and lateral pterygoid.
9. Infundibulum, mammillary body and optic chiasma forms floor of third ventricle.
10. Frontal, ethmoid and maxilla are pneumatic bones.
11. Type of joint seen in growth plate is Primary cartilaginous.
12. Vertebra artery passes through foramen magnum.
13. Diaphragm develops from septum transversum, pleuroperitoneal membrane and cervical myotomes.
14. Muscular component of dorsal aorta develops from paraxial mesoderm.
15. Umbilical vein does not carry deoxygenated blood in fetal circulation.

Physiology

1. Primary action of Nitric oxide (NO) in the gastrointestinal tract is GI smooth muscle relaxation.
2. Maximum water reabsorption in GI tract occurs in Jejunum.
3. Small airways have laminar air flow because extremely low velocity.
4. Pulmonary compliance is decreased in pulmonary congestion, decreased surfactant and pulmonary fibrosis.
5. During plethysmography for estimation of FRC, during inspiration against closed glottis, pressure in the lungs decreases, but that in the box increases.
6. 32 year old high altitude mountaineer is observed to have a hematocrit of 70 percent. Most likely cause is Polycythemia with increased red cell mass.
7. Orthopnea in heart failure develops due to reservoir function of leg veins.
8. Estrous cycle is not seen in humans.
9. Nucleus involved in Papez circuit is anterior nucleus of Thalamus.
10. Basal metabolic rate depends most closely on lean body mass.
11. Phagocytosis is used by Amoeba and other unicellular protozoa to make their living, it is used to ingest particles >0.5 microns in size and digestion occurs within phagolysosomes.

Biochemistry

1. Vitamin K is involved in post-translational modification of Glutamate.
2. Thiamine deficiency causes decreased energy production because it is a coenzyme for pyruvate dehydrogenase and alpha ketoglutarate dehydrogenase in Tricarboxylic acid pathway.
3. Fluoroacetate competitively inhibits Aconitase.
4. Urea cycle occurs in Liver.
5. Transfer of an amino group from an amino acid to an alpha-keto acid is done by transaminases.
6. Omega 3 fatty acids are cardioprotective fatty acids.
7. HDL reduces foam cell production by LDL, it is best predictor of CAD and it helps to clear lipids from atheromas.
8. Factors associated with increased risk of atherosclerotic plaque formation includes ApoE mutation, oxidised LDL and increased homocysteine.
9. Disorders of protein misfolding includes Alzheimer's disease, cystic fibrosis and Creutzfeldt-Jakob disease.
10. Process in a vector which is used to increase the yield of protein produced in recombinant protein synthesis is Promoter induction.
11. Differential RNA processing is responsible for deciding whether an antibody/ immunoglobulin will remain membrane bound or get secreted.
12. Methods of fusing 2 cells in genetic recombination technique includes fusion mediated by Ethylene glycol, fusion mediated by Electric current and fusion mediated by viral transformation.
13. 2 transgenic plants were genetically engineered using recombinant DNA technology. One plant was transformed using a plasmid vector with GFP (green fluorescent protein) gene and another plant was transformed with Luciferase gene. Then plant with Luciferase gene will grow in dark.

Pharmacology

1. Actions of muscarinic antagonists includes decreased gastric secretions, decreased respiratory secretions and facilitates AV conduction.
2. Buprenorphine is classified as partial agonist at mu receptor.
3. Opioid tolerance develops to analgesia, euphoria, nausea and vomiting but does not develop to Miosis.
4. Epidural opioids acts on dorsal horn substantia gelatinosa, may cause pruritus and may cause respiratory depression.
5. Methadone is most commonly used worldwide in maintenance dose for opioid dependence.
6. Serotonin syndrome is not an idiosyncratic reaction, can be caused by SSRI and associated with hyperthermia and hypertension.

7. Agents associated with hyperthermia includes Amphetamines, MAO inhibitors and Atropine.
8. Patient who was given primaquine develops dark coloured urine 1 day after administration of drug. Likely diagnosis is Glucose 6 phosphate dehydrogenase deficiency.
9. Prolonged treatment with INH leads to deficiency of Pyridoxine.
10. Amphotericin B treatment mandates monitoring of K⁺ and Mg⁺⁺.
11. Integrase inhibitors approved for HIV is Raltegravir.
12. Ranolazine is Piperazine derived antianginal agent, it may be used 1st line agent in chronic angina and may improve Glycemic control.
13. Selective estrogen receptor down regulator (SARD), Fulvestrant is a selective estrogen antagonist, it is used in treatment of breast cancer and may be administered as once a month dose.
14. Erlotinib is a Tyrosine kinase inhibitor, rash decreased its absorption and used in non-small cell lung carcinoma.
15. Aprepitant crosses blood brain barrier, metabolized by CyP3A4 pathway and ameliorates nausea and vomiting of chemotherapy.
16. Oprelvekin is used for treatment of Thrombocytopenia secondary to myelosuppressive cancer chemotherapy.
17. Diuretic should not be used in a patient on Lithium in order to prevent Lithium toxicity.
18. Adverse effects of Thalidomide includes teratogenicity, DVT and peripheral neuropathy.
19. Alkalinization of urine is done during administration of Methotrexate.
20. Mineralocorticoid receptors are found in colon, hippocampus and kidney.

Pathology

1. Mitochondria plays a pivotal role in Apoptosis.
2. Enzymes which may contribute in generating free oxygen radicals within neutrophils for killing intracellular bacteria includes Superoxide dismutase, fenton's reaction and NADPH oxidase.
3. Oxidase is responsible for generating 'oxygen burst' within neutrophils for killing intracellular bacteria.
4. Most characteristic feature of acute inflammation is vasodilatation and increased vascular permeability.
5. In Xanthogranulomatous inflammation foam cells are seen, yellow nodules are seen and multinucleated giant cells are seen.
6. Factor X is part of both intrinsic and extrinsic pathways, intrinsic pathway can be activated in vitro and calcium is required in several steps of coagulation.
7. HbH is associated with deletion of 3 alpha genes.
8. In platelet function defect there is normal platelet count with prolonged bleeding time.
9. Bernard Soulier syndrome aggregation with collagen and ADP is normal, large platelets and thrombocytopenia.
10. Anti-beta 2 glycoprotein antibody is most frequently seen in antiphospholipid syndrome.

11. SLE, Grave's disease and Myasthenia gravis are autoimmune disease.
12. Necrotizing lymphadenitis is characteristically seen in Kikuchi disease.
13. Gangliocytoma, Ganglioglioma and Neurocytoma are Neuronal tumors.
14. Psammoma bodies may be seen in Papillary carcinoma of Thyroid, meningioma and serous cystadenocarcinoma of ovary.
15. Most commonly used 'fixative' in diagnostic pathology is Formaldehyde.

Microbiology

1. Patient with sign of pneumonia, bacteria obtained from sputum was a gram positive cocci which showed alpha hemolysis on sheep agar. Bile solubility test will help to confirm the diagnosis.
2. In pneumococcus, capsule aids in virulence, commonest cause of otitis media and respiratory tract of carriers is most important source of infection.
3. 8 year old child with history of pain and discharge from right ear presents with fever, neck rigidity and a positive Kernig's sign. Discharge was stained gram stain which revealed gram positive cocci. Most likely organism is Pneumococcus.
4. Pneumococcus, meningococcus and Haemophilus influenzae have polysaccharide capsule related antigen-antibody responses.
5. 'C' in C reactive stands for Capsular polysaccharide in pneumococcus.
6. Resistance to Methicillin in MRSA is produced as a result of alteration in Penicillin Binding proteins (PBP), resistance may be produced by hyperproduction of beta lactamase and resistance may be missed at incubation temperature of 37 degree C during susceptibility testing.
7. C. diphtheria may be identified by tests for toxicity, toxin acts by inhibiting protein synthesis and toxin may affect the heart and nerves.
8. Campylobacter jejuni is commonest agent responsible for campylobacteriosis, poultry is a common source of infection and associated with Guillain Barre Syndrome.
9. Farmer with painful inguinal lymphadenopathy, h/o fever and flu like symptoms and ulcer on leg. Stain used to detect suspected bipolar stained organism is Wayson's stain.
10. Clostridium tetani spores are resistant to heat, primary immunization consists of 3 doses, incubation period is 6-10 days and person to person transmission does not occur in it.
11. Woman with symptoms and signs suggestive of meningitis. MRI scan reveals a ring enhancing lesion in fronto temporal region while CFSF grows gram positive bacilli. Other finding are minimally abnormal. Most likely etiological agent is Listeria monocytogenes.
12. Chlamydia trachomatis is biphasic, reticulate body divides by binary fission and inside the cell it evades phagolysome.
13. For Parvovirus B19 respiratory route is primary mode of transmission, it is a DNA virus and it affects erythroid progenitors.
14. Candida is the most common fungal infection in immunocompetent patient.
15. Aflatoxins are produced by Aspergillus flavus.

16. Patient with h/o persistent fever and cough, radiological features of pneumonia and on sputum examination cultures reveals aerobic branching gram positive filaments that are partially acid fast. Most likely etiological agent is *Nocardia asteroides*.
17. Visceral larva migrans is associated with *Toxocara canis*.
18. Complement C3 is the common link in classical and alternate pathway of complement system.
19. Mature dendritic cells are most potent activators of naive T cells.
20. Carbohydrate antigens have poor immunogenicity, T cell independent immunity and polyclonal response.
21. If ovalbumin is injected into a Rabbit, IgE antibodies are likely to be produced initially.

Forensic Medicine

1. 'Sparrow's foot' mark is seen in Windshield Glass injury.
2. Gunpowder or soot on bloodstained garments can be visualized by Infrared rays.
3. Markings of Rickshaw tire over body of a child after accident is best defined as Patterned abrasions.
4. 'Fracture-ala signature' or signature fracture is Depressed fracture of skull.
5. Most common injury to child after violent shaking by parent is Subdural hematoma.
6. Dental numbering is done by FDI two digit system, anatomic and diagrammatic charting and palmer notation.
7. Yellow phosphorus is a luminous, translucent and waxy poison.
8. Patient with bluish discolouration of conjunctiva, mucous membrane and nails one hour after ingestion of poison. On examination tachycardia and hypotension seen. Most likely ingested poison is Arsenic.
9. Ecstasy is commonly used as a Rave drug.
10. Urinary bladder is presently not being used for organ transplantation.

PSM

1. Human development index includes Life expectancy at birth, education and GDP.
2. Case fatality rate is a good index of severity of an acute disease.
3. Denominator in estimating Maternal mortality rate (MMR) is total number of live births.
4. Chronic carrier state is seen in Diphtheria, Typhoid and Gonorrhoea.
5. Tetracycline is used in prophylaxis of Cholera.
6. Vectors may transmit infection by Regurgitation, Rubbing of infected faeces and Contamination with body fluids.
7. Use of alkaline detergents is a non-deliberate cultural practice leading to anti-mosquito effect.
8. Factors responsible for resurgence of malaria includes Drug resistance in parasite, insecticide resistance in vectors and antigenic mutations in parasite.

9. *Musca domestica*, *Xenopsylla* species and *Anopheles* species have developed resistance to DDT but *Phlebotomus* species has not.
10. Yellow fever is an Arboviral disease which is not found in India.
11. In Japanese encephalitis 2-3 cases per village may suggest an epidemic, children are more frequently affected than adults and ratio of inapparent to apparent infections is >100:1.
12. In Leptospirosis, Rats are prime reservoirs.
13. Sewage worker with fever, jaundice, elevated BUN and serum creatinine suggestive of renal failure. Recommended antibiotic is Penicillin G.
14. Yaws is caused by *Treponema paertunae*, it is transmitted non-venereally and secondary yaws can involve bone.
15. According to Mc Keown's theory, reduction in mortality from TB was a consequence of Social and environmental factors.
16. Phosphatase test is performed to assess the efficiency of pasteurization.
17. Orthotolidine test is used for detecting Chlorine.
18. Mercury vapor is least likely cause of indoor air pollution.
19. Dental caries does not have a national Screening/ Control programme.
20. Reforms proposed by World Health Report (2008) includes Service reforms, leadership reforms and Policy reforms.
21. Direct standardization is used to compare the mortality rates between 2 countries because of difference in Age distribution.
22. If a village is divided into 5 relevant subgroups for the purpose of a survey and individuals from each subgroup are then selected randomly then this type of sampling is Stratified sampling.
23. If a region is divided into 50 villages for the purpose of a survey and 10 villages are then selected randomly for the purpose of a study then his type of sampling is termed as Cluster sampling.
24. Punnett square is used to predict genotype of offspring.
25. If an investigator observes that 5 independent risk factors influence the occurrence of a disease, then multiple logistic regression should be applied to assess the relationship between these 5 risk factors and the occurrence of disease.
26. Pearson's coefficient of skewness is defined as (Mean-Mode)/SD.
27. Human anatomical waste is disposed in a Yellow bag, contents from a Red bag may be a source of contamination and black bags are used for disposal of ash from incineration.
28. Plague (*Yersinia pestis*) carries the highest potential for use as a biological weapon for microbial bioterrorism. Smallpox (*Variola major*) and Botulism (*Cl. botulinum*) also has potential for use as a biological weapon for microbial bioterrorism.

Medicine

1. Dietary goals recommended for patients with high risk coronary heart disease includes LDL cholesterol <100 mg/dL, saturated fat <7% of total calories and salt restriction <6 gm/day.

2. ECG is poor in detecting ischemia in areas supplied by Left circumflex artery (LCx).
3. Treatment of hypothyroidism in a patient with ischemic heart disease.
4. Coarctation of Aorta is most commonly associated with Bicuspid aortic valve.
5. Digoxin induced arrhythmias are paroxysmal atrial tachycardia with variable AV block, ventricular bigeminy and may be used to Atrial fibrillation.
6. Best inotropic agent for use in right heart failure secondary to pulmonary hypertension is Milrinone.
7. t(9;22); t(4;11) is poor prognostic factor in Acute lymphoblastic leukemia (ALL).
8. Cavitory lesions in lung are seen in Staphylococcal pneumonia.
9. Small cell carcinoma is most commonly associated with superior vena cava syndrome.
10. Pulmonary fibrosis is associated with the use of Bleomycin.
11. Acid base status of a patient reveals pH of 7.46 and pCO₂ of 30 mm Hg. So patient has a partially compensated primary Respiratory alkalosis.
12. Sterile Pyuria is characteristically seen in Renal tuberculosis.
13. For a woman with UTI, findings on a midstream urine sample which supports the diagnosis of 'Uncomplicated acute cystitis' includes positive nitrite test, detection of 1 bacteria/field on gram stain and >10 WBC/HPF.
14. Radiopaque stones is a contraindication or medical management of Gallstones.
15. Young patient with fever, right upper quadrant pain, hepatomegaly, no jaundice, on USG solitary, homogenous, hypoechoic lesion in right lobe measuring 5 cm x 5 cm x 4 cm and tests for hydatid disease were negative. Best recommendation for initial treatment is antiamoebic/ antibiotics alone.
16. Octreotide is recommended for medical treatment of variceal bleed.
17. Insulin levels may be increased in patients with Type II Diabetes mellitus.
18. Insulin is essential to reverse Diabetic Ketoacidosis.
19. Intravenous insulin is administered as a sliding scale in the hospital.
20. In diabetic ketoacidosis there is decreased bicarbonate.
21. Causes of fasting hypoglycemia includes glucose-6-phosphatase deficiency, glycogen synthase deficiency and uremia.
22. Fasting blood glucose, C-peptide and insulin/glucose ratio are tests done for diagnosis of insulinoma.
23. In Nesidioblastosis, hypoglycemic episodes may be seen, its histopathology shows hyperplasia of islet cells and Diazoxide may be used for treatment of it.
24. In diabetes insipidus, water deprivation test is required.
25. DOC for central diabetes insipidus is Desmopressin.
26. Conditions associated with Hyperthyroidism includes Grave's disease, Toxic multinodular goiter and Stroma ovary.
27. Most likely diagnosis for patient with decreased T₄ and increased TSH is Hashimoto's disease.
28. In pseudohypoparathyroidism there is decreased formation of c-AMP.
29. Pheochromocytoma occurs 95% in abdomen, they secrete catecholamines and they arise from sympathetic ganglioma.
30. Young girl with repeated episodes of throbbing occipital headache associated with ataxia and vertigo. Her mother also had similar complaints. Most likely diagnosis is Basilar migraine.

31. Drugs used in prophylaxis of migraine includes Propranolol, Flunarizine and Topiramate.
32. Features of anterior choroidal artery syndrome includes hemiparesis, hemisensory loss and homonymous hemianopia.
33. Sites involved in posterior cerebral artery infarcts includes Midbrain, thalamus and Temporal lobe but does not include Anterior cortex.
34. Features of delirium tremens includes visual hallucinations, tremors and clouding of consciousness.
35. 60 year old man with progressive dementia of recent onset presents with intermittent irregular jerky movements. EEG shows periodic sharp biphasic waves. Most likely diagnosis is Creutzfeldt Jakob disease.
36. 35 year old woman with proximal weakness of muscles, ptosis and easy fatigability. Most sensitive test to suggest the diagnosis is Single fiber EMG.
37. NARP syndrome is a type of Mitochondrial function disorder.

Surgery

1. Ranula is a cystic swelling in the floor of mouth.
2. A well differentiated follicular carcinoma of thyroid can be best differentiated from a follicular adenoma by Vascular invasion.
3. Multiple cutaneous sebaceous adenomas are seen in Muir Torre syndrome.
4. 30 year old with epigastric pain radiating to back that wakes him up at night and is relieved by consuming food. He gives h/o similar episodes which was diagnosed as perforated duodenal ulcer and was treated with omental patch surgery on 2 occasions. Pain before and after surgery has been controlled with PPI and analgesics. Likely diagnosis is Duodenal ulcer.
5. Gastric carcinoma are often associated with Hypochlorhydria/ Achlorhydria.
6. Woman with 3 days h/o epigastric pain radiating to back, serum amylase normal, and USG abdomen reveals gall bladder stones and enlarged pancreas. CT confirmed the diagnosis. Most likely diagnosis is Acute pancreatitis.
7. 50 year old woman with 2 year h/o recurrent abdominal pain with radiation to her back, pain is severe in intensity and refractory to simple analgesics. USG and CECT confirmed the diagnosis and showed dilated pancreatic duct. Most likely recommended surgical procedure of choice is longitudinal pancreaticojejunostomy.
8. Patient with stab injury to anterior abdomen with tag of omentum protruding through abdominal wall near umbilicus and he was hemodynamically stable with no signs of peritonitis. Initial management should be CECT abdomen.
9. Patient with abdominal injury and signs of peritonitis and shock. Airway and breathing were secured and IV fluids were started with 2 large bore cannulas. Next line of management should be exploratory laparotomy under GA.
10. Portion of liver to the left of the attachment of falciform ligament is segment 2 and 3.
11. Renal calculi associated with proteus infection is Triple phosphate.

12. Most common cause of delayed urinary tract obstructive symptoms after TURP is bladder neck stenosis.
13. During TURP, surgeon takes care to dissect above the verumontanum to prevent injury to external urethral sphincter.
14. 55 year old smoker with h/o 5 episodes of macroscopic hematuria each lasting for about 4-5 days in the past five years. Investigation to be performed to evaluate suspected diagnosis is urine microscopy and cytology.
15. 40 year old patient with single kidney presents with solitary exophytic mass of 4 cm localized at its lower pole. Best recommended management is partial nephrectomy.
16. Woman with hematuria was found to have Stage II Transitional Cell Carcinoma of bladder. Then there are 70% chances of requiring cystectomy in 5 years after TUR.
17. Surgery for undescended testis is recommended at 6 months of age and should be done before 12 months of age.
18. 5 year old child with ballooning of prepuce after micturition. Examination revealed preputial adhesions. Best treatment would be Circumcision.
19. Fibers are not included in Total Parenteral Nutrition.
20. Patient with head injury opens eyes to painful stimulus and uses inappropriate words and localizes pain. GCS score in this patient is 10.

Paediatrics

1. Premature baby born at 33 weeks of gestation with a birth weight of 1500 gms has stable vitals. Initial feeding method of choice is Orogastric tube/ Alternate oral route.
2. Most important determinant of prognosis in neonatal Congenital Diaphragmatic hernia (CDH) is pulmonary hypertension and least important prognostic factor is delay in emergent surgery.
3. Neonate delivered at 38 weeks with birth weight of 2.2 kg developed intolerance to feed/ abdominal distension on 2nd day, physical examination normal, sepsis screen negative and PCV is 72%. Best management option is partial exchange transfusion.
4. Earliest indicator of pathological GERD is respiratory symptoms.
5. Infant of diabetic mother with weight 3.8 kg presented with seizures after 16 hours of birth. Most likely cause is Hypoglycemia.
6. Pentalogy of Fallot includes Atrial septal defect (ASD).
7. Enlarged left atrium on X-ray chest can differentiate an ASD from an VSD.
8. Previously healthy infant with recurrent episodes of abdominal pain, passing altered stool after episodes of pain but no h/o vomiting or bleeding per rectum. Most likely diagnosis is Intussusception.
9. 12 year old boy with hematemesis, melena and mild splenomegaly. No obvious jaundice or ascites. Most likely diagnosis is EHPVO.
10. Child with fever and mild respiratory distress was started on oral antibiotics and showed initial improvement but later deteriorated again with fever, wheeze and exaggerated breathlessness. Radiographs of chest showed hyperlucency and pulmonary function tests showed an obstructive pattern. Most probable diagnosis is Bronchiolitis Obliterans.

11. Most common tumor associated with neurofibromatosis-I (NF-I) in a child is Juvenile Myelomonocytic Leukemia (JMML).
12. Most common cause of meningoencephalitis in children is Enterovirus.
13. 6 year old child managed by complete surgical removal of craniopharyngioma developed endocrinopathies. Hormone which should be replaced first is Hydrocortisone.
14. 1 year old child with short stature, lethargy, constipation, palpable goiter, low T4 and elevated TSH. Most likely diagnosis is Thyroid dyshormonogenesis.
15. 8 days old neonate with vomiting, lethargy, dehydration, features of shock, hyperpigmentation of genital skin, normal external genitalia, abdominal examination normal, on blood test Na 124 meq/L, K 7 meq/L and hypoglycemia. Most likely diagnosis is Congenital Adrenal Hyperplasia (CAH).
16. Common causes of ambiguous genitalia in a female child includes fetal placental aromatase deficiency, congenital adrenal hyperplasia and WNT4 gene mutation.
17. 15 day old neonate with h/o seizures, serum CA 5 mg/dL, phosphate 9 mg/dL and intact PTH 30 pg/ml (normal range 10-60 pg/ml). Most likely diagnosis is Hypoparathyroidism.
18. For a child with recurrent bouts of severe cough followed by an audible whoop. Best type of specimen to isolate the organism and confirm diagnosis is Nasopharyngeal swab.
19. Previously healthy 8 year old boy presented with high grade fever, arthralgia, pruritic erythematous rash and lymphadenopathy. He has completed 8 out of 10 days course of cefaclor for URTI. Initially suspected condition is Type III hypersensitivity reaction and most likely diagnosis is Serum sickness like illness (SSLI).
20. Right sided isomerism is associated with Asplenia.
21. Burn area corresponding to the size of palm of a 5 year old is 1% BSA.

Obstetrics & Gynaecology

1. Weight gain in pregnancy depends on socioeconomic status, pre-pregnancy weight and ethnicity.
2. Anencephaly can be diagnosed earliest in a 1st trimester USG.
3. Most specific marker for Neural Tube Defects is Acetylcholinesterase.
4. Most sensitive/ gold standard test for assessing beta HCG in maternal serum is Radioimmune assay.
5. Expectant management of placenta praevia includes anti-D administration, corticosteroids and blood transfusion.
6. Woman at 37 weeks of gestation with uterine contraction and pain suggestive of labour for 10 hours. Cervix is persistently 1 cm dilated and effaced. Next line of treatment is Sedation and wait.
7. Maneuvers used in shoulder dystocia includes Woods Corkscrew maneuver, Mcroberts maneuver and Suprapubic pressure.
8. Methylergometrine should not be used to conduct labour in a woman with Rheumatic heart disease.

9. Earliest sign of magnesium toxicity in a patient with eclampsia on treatment with magnesium sulphate is loss of deep tendon reflexes.
10. Best marker for intrahepatic cholestasis of pregnancy is Bile acids.
11. Drugs which can be given to another with lupus after 35th week of gestation includes Chloroquine, Sulphadiazine/ Sulphasalazine and Prednisolone.
12. Primigravida in 1st trimester observed to be sputum positive for acid fast bacilli with no previous h/o TB. Treatment strategy should be Category I DOTS.
13. HSV and HBV are least likely to cross placenta.
14. Interventions recommended to prevent mother to child transmission of HIV includes avoiding breast feeding, highly active antiretroviral therapy (HAART) and intrapartum Zidovudine.
15. Clue cells are seen in Bacterial vaginosis.
16. Sheehan's syndrome is not a cause of primary amenorrhea.
17. Most likely diagnosis of a woman with 45 XO genotype with primary amenorrhea is Gonadal dysgenesis.
18. Treatment of menorrhagia supported by evidence includes Combined OC pills, Progesterone and Tranexamic acid.
19. 45 year old postmenopausal woman with vaginal bleeding and transvaginal USG reveals endometrial thickness of 8 mm. Next step in management should be histopathological examination of curettage.
20. Mifepristone may be used for Ectopic pregnancy, Fibroids and Molar pregnancy.
21. Hormonal observations in PCOD includes High LH/FSH, High androgens and High LH.
22. Agents used in treatment of hot flashes includes Venlafaxine, Gabapentin and Paroxetine.
23. Desogestrel is preferred in combination with estrogen in Low dose OC pills.
24. OC pills should be avoided in women with epilepsy.
25. Use of OC pills is associated with increased risk of asymptomatic Chlamydial infection.
26. Decreased motility of fallopian tube is seen in Kartagener's syndrome.
27. In obstructive azoospermia there is normal FSH and LH.
28. Treatment of choice for Genuine stress incontinence is Kelly's procedure.
29. Blood chimerism is most likely to occur in Monochorionic dizygotic twins.

Ophthalmology

1. Late onset endophthalmitis after cataract surgery is most often caused by Propionibacterium acne.
2. Patient with h/o running nose, pain over medial aspect of eye with sudden onset high grade fever, prostration, chemosis, proptosis and diplopia on lateral gaze with congestion of optic disc. Most likely diagnosis is Cavernous sinus thrombosis.
3. ophthalmoplegic migraine is best defined by recurrent transient 3rd, 4th and/or 6th nerve palsy associated with headache.
4. Diplopia in superior oblique palsy is most correctly described as vertical on looking down.

5. In Argyll Robertson pupil, near reflex is normal, direct light reflex absent and visual acuity normal.
6. Patient with flashing light, sudden floaters and perception of a curtain falling in front of eye. Most likely diagnosis is Rhegmatogenous retinal detachment.
7. Young patient with loss of central vision, no obvious family history, ERG and EOG normal. Most likely diagnosis is Stargardt's disease. If in this patient EOG is abnormal then it is Best's Vitelliform dystrophy.
8. Agents used in treatment of Diabetic macular edema/retinopathy includes Ruboxistaurin, Pyridazinones and benfotiamine.
9. Most common cause of bilateral proptosis in children is Chloroma (Leukemia).
10. Most common malignant orbital tumor in children is Rhabdomyosarcoma.
11. 5 year old with leukocoria in right eye which is diagnosed as diffuse retinoblastoma involving entire globe. Left eye has a small 2-3 mm tumor in periphery. Ideal management of this patient is Enucleation of right eye and focal therapy of the left eye.
12. Young boy with decreased vision, 6 months after hit by tennis ball. Finding on optical examination suggestive of blunt injury to eye is Vitreous base detachment.

ENT

1. NaF in otosclerosis acts by inhibiting proteolytic enzymes in cochlea, is contraindicated in chronic nephritis and is indicated in patients with a positive Schwartze sign.
2. Vestibular Schwannoma arises most frequently from Superior vestibular nerve.
3. Endolymphatic hydrops is seen in Meniere's disease.
4. 5 year old boy developed sudden aphonia and respiratory distress while having dinner. Next recommended management is Heimlich maneuver.
5. Gold standard of Laryngopharyngeal reflux is 24 hour double pH monitoring.
6. Secondary haemorrhage after tonsillectomy usually presents at 6 days.
7. Pain sensations from ethmoidal sinus are carried by Nasolacrimal nerve.
8. Onodi cells and Haller cells are seen in relation to Optic nerve and floor of orbit respectively.

Orthopaedics

1. Main blood supply to the head and neck of femur comes from Medial circumflex femoral artery.
2. 65 year old woman with long h/o pain and swelling in her right knee and pain significantly interfering with her daily activities. Radiological evaluation shows Grade III osteoarthritis. REcommended line of management is Total knee replacement.
3. Athletic teenage girl complains of anterior knee pain on climbing stairs and on getting up after prolonged sitting. Most likely diagnosis is Chondromalacia Patellae.
4. 50 year old woman sprained her ankle 2 months back from which she made a steady recovery. 2 months after injury she gradually developed severe pain in her right ankle

with significant limitation of ankle movement. Clinical examination reveals edema and shiny skin. Likely diagnosis is Complex regional pain syndrome Type I (CRPS I).

5. Most common nerve involved in supracondylar fracture of humerus is Anterior interosseous nerve.
6. 6 year old boy with painful limp, tenderness in femoral triangle and some limitation of hip movements. X-ray was normal. Next actions should be a MRI scan.
7. Blount's disease is characterized by Genu varum and is also associated with Genu recurvatum and internal tibial torsion.
8. In low radial nerve palsy there is loss of nerve supply to extensor carpi radialis brevis and extensor pollicis brevis and loss of sensation over 1st dorsal web spaces.
9. Agents causing decreased bone resorption in osteoporosis includes Alendronate, Etidronate and Strontium.
10. Bone is fixed 1st during reimplantation of an amputated digit.

Skin

1. Lines of Blaschko represents Lines of development.
2. Pseudo isomorphic phenomenon is seen in Plane warts.
3. Cicatrising alopecia with perifollicular blue-gray patches is most whitish lesions in buccal mucosa.
4. Erythema nodosum is seen in pregnancy, TB and SLE.
5. Young woman with h/o fever and nodular lesion over shin. Histopathology reveals foamy histiocytes with neutrophilic infiltration. No evidence of vasculitis. Most probable diagnosis is Erythema nodosum.
6. Child with fever presents with multiple tender erythematous skin lesions. On microscopy skin lesions are seen to have neutrophilic infiltration in dermis. Diagnosis is Sweet syndrome.
7. Young man with maculopapular rash 2 weeks after healing of a painless genital ulcer. Most likely etiological agent is Treponema pallidum.

Anaesthesia

1. Examples of definite airways includes Nasotracheal tube, orotracheal tube and Cricothyroidotomy.
2. Ketamine is contraindicated in patients with hypertension.
3. Sevoflurane is an epileptogenic anaesthetic agent.
4. Anaesthetic agent with vasoconstrictor drug is contraindicated in Finger block.
5. IV regional anaesthesia should be avoided in sickle cell disease.
6. Spinal anaesthesia is given at L2-L4.
7. Sudden aphonia and loss of consciousness during spinal anaesthesia is due to Vasovagal attack.

8. 40 year old woman after undergoing surgery told anaesthetist that she was aware of preoperative events. Individual intraoperative awareness is evaluated by Bi-spectral imaging.
9. Rise in end tidal CO₂ during thyroid surgery can be due to malignant hyperthermia, thyroid storm and neuroleptic malignant syndrome.
10. If fire breaks out during laser vocal cord surgery, things to be done includes pouring sterile water, removing endotracheal tube and treatment with steroid and antibiotics but thing not to be done is % oxygen after discontinuing anaesthetic gases.

Radiology

1. For contrast in radiography, ionic monomers have 3 iodine atoms per 2 particles in solution.
2. Low osmolar contrast is preferred in a patient with decreased renal function to avoid contrast nephropathy.
3. Consolidation of left upper lobe (posterior part) is likely to obliterate the Aortic knuckles on X-ray chest.
4. Objective sign of identifying pulmonary plethora in a chest radiography is diameter of descending right pulmonary artery >16 mm.
5. Best investigation for bone metastasis is Bone scan.
6. Ct is least accurate diagnosis of Gallstones.
7. Dose of radiation during whole body exposure that leads to Hematological syndrome is 2 Gy.

Psychiatry

1. 40 year old woman with h/o depressed mood, loss of appetite insomnia and no interest in surroundings for past 1 year. Symptoms followed soon after a business loss. Management is antidepressants treatment based on side effect profile of drugs.
2. Antidepressant drug used in nocturnal enuresis is Imipramine.
3. Most common cause of premature death in schizophrenia is Suicide.
4. Patient with acute psychosis, on haloperidol 20 mg/day for last 2 days has an episode characterized by tongue protrusion, oculogyric crisis, torticollis and abnormal posture of limbs and trunk without loss of consciousness for 20 minutes before presenting to emergency. This improved within a few minutes after administration of diphenhydramine. Most likely diagnosis is Acute dystonia.
5. Agents used in treatment of alcohol dependence includes Acamprosate, Naltrexone and Disulfiram.
6. Chronic smoker taking 20 cigarettes/day has developed chronic cough. His family suggested quitting cigarettes. He is ready to quit but thinks that quitting will make him irritable. Stage of behaviour change is Contemplation and cost analysis.

7. Imbecile has intellectual capacity equivalent to child of 3-7 year of age, impaired self-care and condition usually congenital or acquired at an early age.