Rapid Review

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Anatomy

1. Cell junctions allowing exchange of cytoplasmic molecules between two cells are called Gap junctions.
2. Cells belonging to transitional epithelium are provided with extra reserve of cell membrane.
3. Examples of traction epiphysis includes Mastoid process, Tubercles of humerus and Trochanter of femur.
4. Metaphysis of bone is the most vascular part of bone, growth activity is maximised in it and it is region favouring hematogenous spread of infection.
5. After injury to axillary nerve there is loss of rounded contour of shoulder, loss of sensation along lateral side of upper arm and atrophy of deltoid muscle.
6. Injury to radial nerve in lower part of spiral groove results in paralysis of anconeus muscle.
7. Right coronary artery supplies SA node, AV node and AV bundle.
8. Middle cardiac vein is located at posterior interventricular sulcus.
9. In tumor in superior mediastinum compressing superior vena cava, alternate pathways for blood return to right atrium includes Lateral thoracic vein, Internal thoracic vein and Hemiazygous vein.
10. Lumbar region of vertebral column permits flexion, extension and lateral flexion.
11. Blood vessel related to paraduodenal fossa is Inferior mesenteric vein.
12. Commonest variation in arteries arising from arch of aorta is left common carotid artery arising from brachiocephalic trunk.

Physiology

1. Most of the K+ is intercellular, ¾ of the total body K+ is found in skeletal muscle and intracellular K+ is released into extracellular space in response to severe injury.
2. Synaptic conduction is mostly orthodromic because chemical mediator localised only in presynaptic terminal.
3. Excitatory postsynaptic potential (EPSP) are proportional to amount of transmitter released by the presynaptic neuron.
4. Lesion of ventrolateral part of spinal cord will lead to loss below level of lesion of Pain sensation on contralateral side.
5. Features of corticospinal involvement includes Spasticity, plantar extensor response and exaggerated deep tendon reflexes.
6. Superior hypogastric plexus is located at the anterior aspect of the aortic bifurcation and 5^{th} lumbar vertebra.
7. Positive feedback action of estrogen for inducing LH surge is associated with high estrogen : low progesterone ratio.
8. To investigate flight induced stress on BP, BP of cosmonauts were measured twice: once before and once after spaceship entered designated orbit around earth. For proper comparison preflight BP should be recorded in lying down position.
9. Increase in oxygen affinity of hemoglobin will shift O_2 dissociation curve to the left.
10. If Para Aminohippuric acid (PAH) os used in thrice the normal amount for measurement of Renal plasma flow (RPF) estimate will be false low.
11. In presence of vasopressin greatest fraction of filtered water is reabsorbed in Proximal tubule of nephron.

Biochemistry

1. Buffering capacity of a buffer is maximum at pH equal to pKa.
2. Gel filtration chromatography depends on molecular size of the protein.
3. Conversion of an optically pure isomer (enantiomer) into a mixture of equal amounts of both dextro and levo forms is called as Racemerization.
4. Decreased glycolytic activity impairs oxygen transport by hemoglobin due to decreased production of 2,3-biphosphoglycerate.
5. Enzyme involved in catabolism of fructose to pyruvate in liver is Glyceraldehyde 3 phosphate dehydrogenase.
6. β Oxidation of odd chain fatty acids produces Propionyl CoA.

7. Protein rich in basic amino acids, which functions in the packaging of DNA in chromosomes, is Histone.
8. Post transcriptional modification of RNA includes Slicing, 5' capping and 3' polyadenylation.
9. Restriction fragment length polymorphism is used for analysis of chromosome structures.
10. Primary role of chaperones is to help in Protein folding.
11. Collagen triple helix structure is found in Golgi apparatus, Lumen of endoplasmic reticulum and Intracellular vesicles but no found in Cytoplasm.
12. Main enzyme responsible for activation of xenobiotics is Cytochrome P-450.
13. Substance present in the gall bladder stones or the kidney stones can be best identified by X-ray diffraction.
14. Porphobilinogen in urine produces pink colour with Ehrlich's reagent.

Pharmacology

1. Bioavailability is the proportion (fraction) of unchanged drug that reaches systemic circulation, that of an orally administered drug can be calculated by comparing area under curve (0-α) after oral and intravenous (IV) administration and it can be determined from plasma concentration or urinary excretion data.
2. Absorption of digoxin is delayed by the presence of food, concurrent food intake may severely reduce rate of absorption of phenytoin and antimalarial drug halofantrine is more extensively absorbed if taken with food.
3. Drugs useful in intravenous therapy for hypertensive emergencies includes Fenoldopam, Urapidil and Enalapril.
4. Cardiac or central nervous system toxicity may result when standard lidocaine doses are administered to patients with circulatory failure. This may be due to lidocaine concentration are initially higher in relatively well perfused tissues such as brain and heart.
5. Haemorrhage secondary to human administration can be administration of Protamine.
6. Granulocytopenia, gingival hyperplasia and facial hirsutism are possible side effects of Phenytoin.
7. Corticosteroid are present intracellularly in muscle cells.
8. Insulin, Amphotericin and Polymyxin B act on cell membrane.
9. Bacitracin acts on cell wall.
10. Most effective drug against M. leprae is Rifampicin.
11. Most appropriate drug used for chelation therapy in beta thalassemia major is oral deferiprone.
12. Bosentan is a endothelin receptor antagonist.
13. pKa of a drug is pH at which drug is 50% ionized, knowledge of pKa of a drug is useful in predicting its behaviour in various body fluids and phenobarbitone with a pKa of 7.2 is largely ionized at acidic pH and will be about 40% nonionized in plasma.

Pathology

1. Correct sequence of cell cycle is G_0-G_1-S-G_2-M.
2. G-banding is a routine technique for karyotyping using light microscopy.
3. 19 year old female with short stature, wide spread nipples and primary amenorrhoea most likely has karyotype of 45 X.
4. If an albino girl gets married to a normal boy, none of their children will be affected but all will be carriers.
5. Couple with history of beta thalassemia major in a distant relative, husband has HbA2 of 4.8% and wife has HbA2 of 2.3%. Risk of having child with beta thalassemia major is 0%>
6. Hereditary retinoblastoma develop from 13 q 14 chromosomal deletion.
7. Gluten sensitive enteropathy is most strongly associated with HLA-DQ2.
8. CD3 is a pan T lymphocyte marker.
9. Memory T cells can be identified by using CD45 RO.
10. NK cells are derived from granular cells, they comprise about 5% of human peripheral lymphoid cells and they express IgG Fc receptor.
11. MHC class III genes encode Tumor necrosis factor.
12. HLA class III region genes are important elements in governing susceptibility to autoimmune diseases.

13. Lactoferrin is present in secondary granule of neutrophil and in exocrine secretions of body and it has great affinity for iron.
14. Primary defect which leads to sickle cell anemia is replacement of glutamate by valine in βchain of HbA.
15. Raised serum level of lipoprotein-A is a predictor of Atherosclerosis.
16. Recurrent ischemic events following thrombolysis has been pathophysiologically linked to Fibrinopeptide A.
17. Nephrotic syndrome increases susceptibility to coronary artery disease.
18. Medullary carcinoma of thyroid is associated with MEN II.
19. In Berger's disease pathological changes are proliferative and usually confined to mesangial cells, usually focal and segmental, hematuria may be gross or microscopic and on immunofluorescence deposits contain both IgA and IgG.
20. 40 year old male had who has undergone splenectomy 20 years ago will shows presence of Howell Jolly bodies.

Microbiology

1. Most appropriate method to disinfect bronchoscope is 2% formaldehyde for 10 min.
2. Heat labile instruments for use in surgical procedures can be best sterilized by Ethylene oxide gas.
3. Bordetella pertussis is a strict human pathogen, it can be cultured from the patient during catarrhal stage and it can lead to invasion of the respiratory mucosa.
4. A labourer involved with repair work of sewers was admitted with fever, jaundice and renal failure. Best method for diagnosis is Microscopic agglutination test.
5. 60 year old gets Legionnaires disease after he returned home from attending a convention. He could have acquired it from inhalation of the aerosol in the air conditioned room at convention center.
6. Lyme's disease is transmitted by ixodes tick, erythema chronicum migrans may be a clinical feature and rodents act as natural host.
7. 20 out of 38 children who eat same food at picnic developed abdominal cramps followed by vomiting and watery diarrhea 6-10 hours after the party.Most likely etiology of this outbreak is Clostridium perfringens infection.
8. Rabies virus RNA has negative polarity.
9. Infections associated with acute intravascular hemolysis includes Bartonella bacilliformis, Plasmodium falciparum and Babesia microti.
10. Earliest immunoglobulin synthesized by fetus is IgM.

Forensic Medicine

1. Mummification refers to Desiccation of a dead body.
2. Cobra venom is Neurotoxic.
3. Related to legal responsibility of an insane person are McNaughton's rule, Durham's rule and Curren's rule.
4. In arsenic poisoning cadaveric rigidity lasts longer than usual.
5. Blackening and tattooing of sin and clothing can be best demonstrated by Infrared photography.
6. Post mortem lividity is unlikely to develop in a case if Drowning in a fast flowing river.
7. Heat stroke, pontine hemorrhage and septicemia are associated with rise in temperature after death.
8. In prenatal diagnostic technique act 1994, fetal heart rate 160/min at 5^{th} and 120/min at 9^{th} month are not a ground for carrying out prenatal test.
9. Perjury (giving false evidence under oath) falls under section 193 of IPC.
10. Most reliable criterion in Gustafson;s method of identification is transparency of root.

Preventive and Social Medicine

1. Denominator in secondary attack rate includes all susceptible amongst close contact.
2. In one single visit a 9 month old, unimmunised child can be given BCG, DPT_1 , OPV_1 , measles can be given.
3. $\frac{\text{True positive} * 100}{\text{True positive + False negative}}$Denotes Sensitivity.

4. For calculation of positive predictive value of a screening test, denominator comprises of True positive + False positives.
5. For calculation of sample size of a prevalence study necessary things are prevalence of the disease in population, significance level and desired precision.
6. Parameters of sensitivity and specificity are used for assessing Criterion validity.
7. Meningococcal meningitis is more common in dry and cold months of year, chemoprophylaxis of close contacts of cases is recommended and vaccine is not effective in children below 2 years of age.
8. 24 months old comes to PHC with cough and fever since past 2 days, weight is 11 kgs, RR of 38/min, chest indrawing present. Most important line of management is to classify as severe pneumonia, start antibiotics and refer urgently.
9. For controlling outbreak of cholera measures include proper disposal of excreta, chlorination of water and early detection and management of cases.
10. Organism most commonly causing genital filariasis in most parts of Bihar and eastern UP is Wuchereria bancrofti.
11. Class II exposure in animal bites includes Licks on a fresh wound.
12. Endemic typhus is transmitted by the bite of fleas.
13. Leprosy is considered a public health problem if the prevalence of it is more than 1/10,000.
14. Lepromin test is most useful in prognosis of leprosy.
15. Scope of family planning services includes screening for cervical cancer, providing services for unmarried mothers and providing adoption services.
16. Most important epidemiological tool used for assessing disability in children is Wing's handicaps, behavioural and skills (HBS) schedule.
17. Vitamin A supplement administration in 'Prevention of nutritional blindness in children programme' contains 1 lakh IU/ml.
18. Protein efficiency ratio is defined as gain in weight of young animals per unit weight of protein consumed.
19. Contents in iron and folic acid adult tablets under "National programme for anemia prophylaxis" are 100 mg of elemental iron and 500 mcg of folic acid.
20. Elemental iron and folic acid contents of pediatric iron-folic acid tablets supplied under rural child health (RCH) programme are 20 mg iron and 100 microgram folic acid.
21. Measure of location which divides distribution in ratio of 3:1 is Third quartile.
22. 'P' value of a randomized controlled trial comparing operation A (new procedure) and operation B (gold standard) is 0.04. This concludes that probability of a false positive conclusion that operation A is better than B when in truth it is not, is 4%.
23. Chi-square test is used to measure degree of association between two variables.
24. Elements of primary health care includes adequate supply of safe water and basic sanitation, providing essential drugs and health education.
25. Response which is graded by an observer on an agree or disagree continuum is based on Likert scale.

Medicine

1. Normal anion gap metabolic acidosis is caused by Cholera.
2. Causes of metabolic alkalosis includes mineralocorticoid deficiency, thiazide diuretic therapy and recurrent vomiting.
3. 50 kg man with severe metabolic acidosis has pH 7.05, pCO_2 12 mmHg, pO_2 108 mmHg, HCO_3 5 mEq/L, base excess 30 mEq/L. Approximate quantity of $NaHCO_3$ that patient should receive in half hour is 250 mEq.
4. Most sensitive and specific test for diagnosis if iron deficiency is Serum ferritin levels.
5. Leukoerythroblastic picture may be seen in Myelofibrosis, metastatic carcinoma and Gaucher's disease.
6. 63 year old man shows massive splenomegaly, lymphadenopathy and total leucocyte count of 17000/mm^3. Flow Cytometry shows CD19 positive, CD5 positive and CD23 negative, monoclonal B cells with bright kappa positively comprising 80% of the peripheral blood lymphoid cells. Most likely diagnosis is Mantle cell lymphoma.

7. ECg in acute pericarditis shows global ST segment elevation in early pericarditis and sinus tachycardia is a common finding PR segment depression is present in majority of patients.
8. ECG features of severe hyperkalemia includes peaked T waves, sine waves pattern and loss of P waves.
9. Hypocalcemia is characterised by numbness and tingling of circumoral region, hyperactivity tendon reflexes and carpopedal spasm.
10. Heart sounds that occur shortly after S_2 includes opening snap, pericardial knock and tumor plop.
11. Early systolic murmur may be caused by small ventricular septal defect, papillary muscle dysfunction and tricuspid regurgitation.
12. Exercise testing is absolutely contraindicated in Aortic stenosis.
13. Most common cause of tricuspid regurgitation is secondary to dilatation of right ventricle.
14. Tricuspid valve is most likely to be involved by infective endocarditis following a septic abortion.
15. Osler's nodes are typically seen in acute staphylococcal endocarditis.
16. Troponin-T is preferable to CPK-MB in diagnosis of acute MI in bedside diagnosis of MI, postoperative (after CABG) and small infarcts but not in reinfarction after 4 days.
17. During cardiopulmonary resuscitation, intravenous calcium gluconate is indicated in hypocalcemia, CCB toxicity and electromechanical dissociation.
18. Postoperative cardiac patient developed sudden hypotension, raised central venous pressure, pulsus paradoxus at 4^{th} postoperative hour.Most probable diagnosis is Cardiac tamponade.
19. Blood gas parameter; pH 7.58, pCO_2 23 mmHg, pO_2 300 mmHg and O_2 saturation 60% are most consistent with Ventilatory malfunction.
20. Diffusion capacity of lung is decreased in interstitial lung disease, emphysema and primary pulmonary hypertension.
21. 55 year old on bed rest for past 10 days, complains of breathlessness and chest pain. Chest X-ray is normal. Next investigation should be Pulmonary arteriography.
22. Diagnostic feature of allergic bronchopulmonary aspergillosis (ABPA) includes changing pulmonary infiltrates, peripheral eosinophilia and serum precipitins against aspergillosis fumigants.
23. Bronchogenic carcinoma may lead to exudative pleural effusion.
24. Pulmonary hypertension may occur in toxic oil syndrome, progressive systemic sclerosis and sickle cell anemia.
25. 60 year old male presented to emergency with breathlessness, facial swelling and dilated veins on chest wall. Most common cause is superior vena cava obstruction.
26. Hepatitis B virus has significant perinatal transmission.
27. Syndrome of inappropriate ADH is characterized by hyponatremia and urine sodium excretion >20 mEq/L.
28. 23 year old woman with episodes of myalgias, pleural effusion, pericarditis and arthralgias without joint deformity over course of several years. The best laboratory screening test to diagnose her disease would be antinuclear antibody.
29. Putamen/ external capsule is most common location of hypertensive hemorrhage.
30. Absence seizures are characterised on EEG by 3 Hz spike and wave.
31. Commonest presentation of neurocysticercosis is seizures.
32. Commonest cause of sporadic encephalitis is Herpes simplex virus.
33. Serum total lactate dehydrogenase level will be raised in muscle crush injury, myocardial infarction and hemolysis.
34. Thiamine deficiency is known to occur in food faddist, chronic alcoholic and chronic heart failure patient on diuretics.
35. 30 year old HIV positive presents with fever, dyspnoea, non-productive cough, cyanosis and chest X-ray showing bilateral, symmetrical interstitial infiltrates. Most likely diagnosis is Pneumocystis carinii pneumonia.
36. 60 year old man with diabetes mellitus, painless swollen right ankle joint, x-ray showing destroyed joint with large number of loose bodies. Most probable diagnosis is Charcot's joint.
37. CNS manifestations in chronic renal failure are result of hyperosmolarity, acidosis and hyponatremia.

38. 25 year old with fever, cough, expectoration and breathlessness of 2 months, contrast CT showed bilateral upper lobe fibrotic lesions and mediastinum with enlarged necrotic nodes with peripheral rim enhancement. Most probable diagnosis is Tuberculosis.

Surgery

1. Most characteristic feature of congenital hypertrophic pyloric stenosis is that pyloric tumour is best felt during feeding.
2. Marjolin's ulcer is a malignant ulcer found on the scar of burn.
3. Bedsore is an example of trophic ulcer.
4. Early stage of trauma is characterized by catabolism.
5. One unit of fresh blood raises Hb % concentration by 1 gm%.
6. 10 mm calculus in right lower ureter associated with proximal hydroureteronephrosis is best treated with ureteroscopic retrieval.
7. Best treatment of cystic hygroma is Surgical excision.
8. Ho: YAG laser is used for treatment of benign prostatic hyperplasia as well as urinary calculi.
9. Semen analysis of a young man with primary infertility revealed low volume, fructose negative ejaculate with azoospermia. Most useful imaging modality to evaluate because of his infertility is transrectal USG.
10. 65 year old male smoker presents with gross total painless hematuria. Most likely diagnosis is carcinoma of urinary bladder.
11. Posteriorly perforating ulcer in the pyloric antrum of stomach is most likely to produce initial localized peritonitis or abscess formation in omental bursa (lesser sac).
12. 27 year old man with left testicular tumor with 10 cm retroperitoneal lymph node mass. Treatment of choice is left high inguinal orchiectomy plus chemotherapy.
13. Bilateral hydroureteronephrosis is an absolute indication for surgery in cases of benign prostatic hyperplasia.
14. Bilious vomiting is most suggestive of neonatal small bowel obstruction.
15. Protein S deficiency, malignancy and obesity may predispose to pulmonary embolism.
16. Risk factors for deep vein thrombosis (DVT) includes duration of surgery more than 30 min, obesity and use of estrogen progesterone contraceptives.
17. If a patient with Raynaud's disease immersed his hand in cold water, the hand will turn white.
18. Referred pain from ureteric colic is felt in the groin due to involvement of Genitofemoral nerve.
19. Radiation exposure during infancy has been linked to Thyroid carcinoma.
20. Increased incidence of cholangiocarcinoma is seen in polycystic disease of liver, sclerosing cholangitis and liver flukes.
21. Hunterian ligation operation is performed for Aneurysm.
22. Pseudoclaudication is due to compression of cauda equina.
23. Strong correlation with colorectal cancer is seen in Familial polyposis coli.
24. Sympathectomy is indicated in ischaemic ulcer, intermittent claudication and acrocyanosis.
25. Best for surgery of hypospadias is 6-10 months of age.
26. 50 year old male hotel cook with 4 dependent family members diagnosed of early stage squamous cell cancer of anal canal. He has more than 60% chance of cure. Best treatment option is combined chemotherapy and radiotherapy.
27. Best method to prevent cross infection occurring in patients of same ward is practice of proper hand washing.
28. 70 year old with h/o chest pain was diagnosed to have coronary artery disease. During routine evaluation USG showed gallbladder stones with no past history of biliary colic or jaundice. Best treatment advice for such patient is no surgery for gallbladder stones.
29. Nerve commonly damaged during McBurney's incision is Iliohypogastric nerve.
30. 70 year old with BPH underwent transurethral resection of prostate under spinal anaesthesia. One hour later he developed vomiting and altered sensorium. Most probable cause is water intoxication.
31. Most appropriate operation for a solitary nodule in one lobe of thyroid is hemithyroidectomy.

32. Commonest cause of an obliterative stricture of membranous urethra is road traffic accident with fracture pelvis and rupture urethra.

Paediatrics

1. Transient myeloproliferative disorder of newborn is seen in association with Down syndrome.
2. Associated with noonan's syndrome are hypertrophic cardiomyopathy, cryptorchidism and autosomal dominant transmission.
3. 5 year old boy passed 18 stools in last 24 hours and vomited twice in last 4 hours. He is irritable but drinking fluids. Optional therapy for child is Oral rehydration therapy.
4. 15 year old with no medical problem complains that he breaks out with blocky areas of erythema that are pruritus over skin of his arm, leg and trunk every time within an hour of eating seafoods. Clinical features are suggestive of localised anaphylaxis.
5. 45 days old infant developed icterus and two days later symptoms and signs of acute liver failure appeared. Child is HBsAg positive and mother is HBsAg carrier. Mother's hepatitis B serological profile is likely to be HBsAg and HBeAg positivity.
6. An otherwise asymptomatic 5 year old boy is HBsAg positive on 2 separate occasions found by screening. He was given 3 doses of recombinant hepatitis B vaccine at age of 1 year. His mother was treated for chronic hepatitis B infection around same time. Next investigation should be to obtain anti HBs level.
7. 8 year old boy with abdominal pain, fever with bloody diarrhea for 18 months, height 100 cms, weight 14.5 kg. Stool culture negative for known enteropathogens, normal sigmoidoscopy and during same period child has episode of renal colic and passed urinary gravel. Mantoux test was 5×5 mm. Most probable diagnosis is Crohn's disease.
8. 7 year old girl from Bihar presented with 3 episodes of massive hematemesis and malena, no h/o jaundice, large spleen, non-palpable liver and mild ascites, portal vein not visualised on USG, LFT normal and endoscopy revealed esophageal varices. Most likely diagnosis is Portal hypertension due to extrahepatic obstruction.
9. Urinary infection can occur without pyuria, pyuria may be present without urinary tract and isolated pyuria is neither confirmatory nor diagnostic urinary tract infection.
10. Xanthogranuloma pyelonephritis in children often affects those younger than 8 years of age, affects kidney focally more frequently than diffusely, boys are affected more frequently and clinical presentation in children is same as in adults.
11. Multicystic dysplastic kidneys is one of the most common cause of abdominal mass in neonates.
12. 10 year old girl presents with swelling of one knee joint. Differential diagnosis includes tuberculosis, Juvenile rheumatoid arthritis and Villonodular synovitis.
13. 1 month old baby with frequent vomiting, failure to thrive, features of moderate dehydration, blood Na+ is 122 mEq/L and K+ is 6.1 mEq/L. Most likely diagnosis is 21-hydroxylase deficiency.
14. 2 month baby with jaundice, turmeric colored urine and pale stools since birth, liver span is 10 cms, form in consistency and spleen of 3 cms. Most specific investigation for establishing diagnosis would be Peroperative cholangiogram.

Obstetrics and Gynaecology

1. Obesity, family history and use of hormone replacement therapy are known risk factors for development of endometrial carcinoma.
2. A case of gestational trophoblastic neoplasia belongs to high risk group if disease develops after Full term pregnancy.
3. Primigravida at 37 weeks of gestation reported to labour room with central placenta praevia with heavy bleeding per vaginum, fetal heart rate normal.Best management option for her is Caesarean section.
4. Hemodynamically stable nulliparous patient with ectopic pregnancy has adnexal mass of 2.5 ×3 cms, beta HCG titer 1500 mIU/ml. Modality of treatment suitable is Medical management.
5. 55 year old woman with postmenopausal bleeding for 3 months has 1×1 cm nodule on anterior lip of cervix. Most appropriate investigation to be done subsequently is Punch biopsy.
6. Misoprostol, oxytocin and prostaglandins could be used in management of postpartum haemorrhage.

7. Laparotomy performed on a case of ovarian tumor revealed unilateral ovarian tumor with ascites positive for malignant cells and positive pelvic lymph nodes. All other structures are free of disease. Stage of disease is Stage II c.
8. Observed in normal pregnancy are fall in serum iron concentration, increase in serum iron capacity and increase in blood oxygen carrying capacity.
9. B lynch suture is applied on Uterus.
10. Pyometra is a complication associated with carcinoma of cervix, carcinoma of endometrium and pelvic radiotherapy.
11. Cut-off for cervical length at 24 weeks of gestation for prediction of preterm delivery is 2.5 cm.
12. Pure gonadal dysgenesis will be diagnosed in the presence of Bilateral streak gonads.
13. Mechanism of action of emergency contraceptives includes delaying ovulation, inhibiting fertilization and preventing implantation of fertilized egg.
14. Most common cause of 1st trimester abortion is Chromosomal abnormalities.
15. Hypertensive woman with 34 weeks of pregnancy comes with pain in abdomen, bleed in per vaginum and loss of fetal movements. On examination uterus contracted with increased uterine tone. Fetal heart sounds are absent. Most likely diagnosis is Abruptio placentae.
16. 20 year old woman gives history of sharp pain in lower abdomen for 2-3 days every month approximately 2 weeks before menses. Most probable etiology for her pain is Mittelschmerz.
17. 55 year old woman with recurrent urinary retention after hysterectomy done for huge fibroid. Most likely cause is injury to hypogastric plexus.
18. 45 year old female with bilateral ovarian mass, ascites and omental caking on CT. Most likely patient is having Malignant epithelial ovarian tumor.

Orthopaedics

1. Commonest cause for neuralgic pain in foot is compression of communication between medial and lateral plantar nerves.
2. Vascular necrosis can be a possible sequelae of fracture of neck of femur, scaphoid and talus.
3. Kienbock's disease is due to avascular necrosis of Femoral neck.
4. Classical expansive lytic lesion in transverse process of a vertebra is seen in Aneurysmal bone cyst.
5. 330 year old with road traffic accident has his right lower limb short, internally rotated and flexed and adducted at hip. Most likely diagnosis is Posterior dislocation of hip.
6. Sciatic nerve palsy may occur in posterior dislocation of hip joint.
7. Osteomalacia is associated with increase in osteoid maturation time.
8. Lachman test is done on knee joint when suspecting old tear of anterior cruciate ligament.
9. 64 year old hypertensive obese female undergoing surgery for fracture femur under GA, intra operatively her end tidal carbon dioxide decreased to 20 from 40 mmHg, followed by hypotension and oxygen saturation of 85%. Most likely cause is Fat embolism.
10. In actinomycosis of spine the abscess usually erodes towards the skin.

Ophthalmology

1. 30 year old man had suddenly developed double vision, on examination right eye when at rest turned medially. Most likely anatomical structure involved are lateral rectus and abducent nerve.
2. Commonest cause of low vision in India is uncorrected refractive errors.
3. Recurrent bilateral conjunctivitis occurring with onset of hot weather in young boys with symptoms of burning, itching and lacrimation with polygonal raised areas in palpebral conjunctiva is Vernal keratoconjunctivitis.
4. Type IV hypersensitivity to Mycobacterium tuberculosis antigen may manifest as Phlyctenular conjunctivitis.
5. 'SAFE strategy' has been developed for control of Trachoma.
6. Best drug for contact lens associated corneal ulcer caused by Acanthamoeba keratitis is Polyhexamethylene biguanide.
7. In AIDS, chorioretinitis is typically caused by Cytomegalovirus.

8. 20 year old complains of difficulty in reading newspaper with right eye, 3 weeks after sustaining a gunshot injury to his left eye is due to Sympathetic ophthalmia.
9. Child got congenital cataract involving visual axis which was detected by parents right at birth. So Child should be operated immediately.
10. Suitable for LASIK surgery are myopia of 4 diopter, stable refraction for 1 year and corneal thickness of 600 microns.
11. After enucleation of eyeball, a proper sized artificial prosthetic eye is advised after postoperative period of about 20 days.
12. 1 year old child having leukocoria was detected to be having a unilateral, large retinoblastoma filling half the globe. Current therapy would involve Enucleation.
13. Fasanella Servat operation is specifically indicated in Horner's syndrome.
14. Operation of plication of inferior lid retractors is indicated in Senile entropion.
15. Vitreous aspirate should be stored 4 degree C till sent for investigation.
16. Vortex vein invasion commonly seen in Malignant melanoma.

ENT

1. 5 year old diagnosed to have Posterior superior retraction pocket cholesteatoma. Management would include Audiometry, mastoid exploration and tympanoplasty.
2. 31 year old woman complains of bilateral impairment of hearing for 5 years, normal tympanic membrane, audiogram showing bilateral conductive deafness, impedance Audiometry showing 'As' type curve and acoustic reflex absent. Treatment includes sodium fluoride, stapedectomy and hearing aid.
3. Carhart's notch in audiogram is deepest frequency of 2 KHz.
4. Middle aged man with hoarseness of voice for past 2 years, he is chronic smoker for past 30 years, reddish area of mucosal irregularity overlying a portion of both cords was seen. Management includes cessation of smoking, microlaryngeal surgery for biopsy and regular follow up.
5. Type I thyroplasty is for Vocal cord medialization.

Skin

1. 40 year old with persistent oral ulcers followed by multiple flaccid bullae on trunk and extremities. Direct examination of skin biopsy immunofluorescence showed intercellular IgG deposits in epidermis. Most probable diagnosis is Pemphigus vulgaris.
2. Acantholysis is characteristic of Pemphigus vulgaris.
3. 5 year old boy has multiple asymptomatic oval and circular faintly hypopigmented macules with fine scaling on his face. Most probable diagnosis is Pityriasis Alba.
4. 11 year old boy is having tinea capitis on his scalp. Most appropriate line of treatment is Oral griseofulvin therapy.
5. Test likely to help in diagnosis of patient with itchy annular plaque on the face is KOH mount.
6. 8 month old with itchy, exudative lesions on face, palms and soles. The siblings also have similar complaints. The treatment of choice is Topical permethrin.
7. Most frequent cause of recurrent genital ulceration in a sexually active male is Herpes genitalis.
8. Syndromic management of urethral discharge includes treatment of Neisseria gonorrhoeae and Chlamydia trachomatis.

Anaesthesia

1. Oxygen cylinder has Black cylinder with white shoulder.
2. Interscalene approach to brachial plexus doesn't provide optimal surgical Anaesthesia in the area of distribution of Ulnar nerve.
3. Neuraxial blockade is absolutely contraindicated in patients refusal, coagulopathy and in severe hypovolemia.
4. Induction agent of choice in day care anaesthesia ia propofol.
5. Propofol is preferred agent of choice for day care general anaesthesia if patient wants to resume his work after 6 hours.

6. Induction agent that may cause adrenal cortex suppression is Etomidate.
7. During Rapid sequence induction of anaesthesia Pre-oxygenation is mandatory.
8. With atracurium patient recovers spontaneously from effect of muscle relaxant without any reversal.
9. Most appropriate anaesthetic agent for 5 year old suffering from Duchenne muscular dystrophy undergoing tendon lengthening procedure is Induction with IV suxamethonium and N2O and oxygen for maintenance.
10. Most efficient anaesthetic circuit for 25 year old undergoing I&D of abscess under GA is Mapleson A.

Radiology

1. Endocrine disorder associated with epiphyseal dysgenesis is Hypothyroidism.
2. Fraying and cupping of metaphyses of long bones in a child occurs in Rickets, metaphyseal dysplasia and Hypophosphatasia.
3. High resolution CT of chest is ideal modality for evaluating Interstitial lung disease.
4. Bone erosion is recognised X-ray feature of rheumatoid arthritis.
5. Extensive pleural thickening and calcification especially involving diaphragmatic pleura are classical features of Asbestosis.
6. CT of patient with head injury shows biconvex hyperdense lesion displacing grey-white matter interface. Most likely diagnosis is Extradural hematoma.
7. MRI is best choice to evaluate radiologically a posterior fossa tumor.
8. 8 year old boy with back pain, mild fever, X-ray of dorsolumbar spine reveals solitary collapsed dorsal vertebra with preserved disc spaces and no associated soft tissue shadows. Most likely diagnosis is Histiocytosis.
9. Most suitable radioisotope of iodine for treating hyperthyroidism is I-131.
10. Cobalt-60 is commonly used as a source for external beam radiotherapy.

Psychiatry

1. Impulse control disorders includes Pyromania, Trichotillomania and Kleptomania.
2. Delirium tremens is characterized by confusion associated with Autonomic hyperactivity and tremors.
3. Alcoholic brought to emergency with irrelevant talking, stopped alcohol 3 days back, no disorientation, has visual illusions and hallucinations, no h/o head injury. Most likely diagnosis is Delirium tremens.
4. 41 year old married female with headache for last 6 months, all investigations normal, still thinks she is unwell. Most likely diagnosis is Hypochondriasis.
5. 20 year old with increased alcohol consumption, sexual indulgence, irritability, lack of sleep, not feeling fatigued even on prolonged periods of activity. All changes have been present for 3 weeks. Most likely diagnosis is Mania.
6. Behaviour therapy to changes maladaptive behaviours using response as reinforcer uses principles of Operant conditioning.
7. 15 year old thinks dirt has hung onto him when he passes through dirty street which causes much distress and anxiety. Most likely diagnosis is Obsessive compulsive disorder.
8. 50 year old with pain in back, lack of interest, low mood, lethargy, decreased sleep and appetite, no h/o mental illness or family history, tests normal. Patient should be treated with Sertraline.
9. Features of hallucinations includes independent of will observer, sensory organs are not involved and it occurs in absence of perceptual stimulus.
10. Male child of 15 years, with mental age of 9 years has an IQ of 60.