# Rapid Review AIPGMEE 2001

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## Anatomy

- 1. In inguinal canal conjoint tendon forms part of the posterior wall, superficial ring is found in external oblique aponeurosis and internal oblique forms both anterior and posterior wall.
- 2. Right gastroepiploic artery is a branch of gastroduodenal artery.
- 3. Motor supply of diaphragm is phrenic nerve.
- 4. Pudendal nerve is sensory and motor, is derived from S2,3,4 and it comes out through lesser sciatic foramen.
- 5. In a post polio case ilio tibial tract contracture is likely to result in Extension at the knee.
- 6. Facial nerve supplies Lacrimal gland, Submandibular gland and Nasal glands.
- 7. In the fracture of middle cranial fossa, absence of tears is due to lesion in Greater petrosal nerve.
- 8. Occlusion of the anterior descending branch of LAD will lead to infarction of Anterior wall of the left ventricle.
- 9. Right coronary artery lies in right anterior coronary sulcus, Left anterior descending artery is a branch of left coronary artery and In 85% of the cases posterior descending interventricular artery arises from right coronary artery.

# **Physiology**

- 1. Tidal volume is calculated by Inspiratory capacity minus inspiratory reserve volume.
- 2. Surfactant production in lungs starts at 28 weeks.
- 3. Initiation of nerve impulse starts at axon hillock because is has a lower threshold than the rest of the axon.
- 4. Albumin contributes the maximum to oncotic pressure because it has Low molecular weight and high concentration.
- 5. After 5 days of fasting if a man undergoes oral GTT, his GH levels will be increased, insulin level decreased and glucagon levels are increased.
- 6. Metalloprotein help in jaundice by inhibiting heme oxygenase.
- 7. Tropomyosin prevents contraction by covering binding sites on actin and myosin.
- 8. Capillaries have greatest cross sectional area, contains less blood than vein and have single layer of cells bounding the lumen.
- 9. 0.5 liters of blood loss in 0 minutes will lead to slight increase in heart rate and normal BP.
- 10. Single most important factor in control of automatic contractility of heart is Sympathetic stimulation.
- 11. BP, GH formation and ACTH release are mediated through negative feedback mechanism.
- 12. Force generating proteins are Dynein and kinesin.
- 13. BP measured with sphygmomanometer gives higher reading compared to intra arterial pressure measurement.
- 14. Secondary hyperparathyroidism due to Vitamin D deficiency shows Hypophosphatemia.
- 15. Maximum absorption of water takes place in Proximal convoluted tubules.

# **Biochemistry**

- 1. Basic amino acids are Lysine and Arginine.
- 2. Amino acids with dissociation constant closest to physiological pH is Histidine.
- 3. Sources of nitrogen in urea cycle are Aspartate and ammonia.
- 4. In alkaptonuria, the urine sample darkens on standing.
- 5. Baby with refusal to feed, skin lesions, seizures, ketosis, organic acids in urine with normal ammonia most likely has Multiple carboxylase deficiency.
- 6. Van Der waals force do not act in an enzyme substrate complex.
- 7. Cellular oxidation is inhibited by Cyanide.
- 8. Triple bonds are formed between CG.
- 9. tRNA has abnormal purine bases.
- 10. Gout is due to increased metabolism of purines, uric acids might not be elevated in it and it has predilection for the great toe.
- 11. VLDL transports endogenous lipids, LDL transports lipids to the tissues and increased HDL is associated with decreased risk of coronary disease.

- 12. Destitute woman with altered sensorium, dehydration and mild proteinuria, no sugar on urine analysis. Next desired tests Rothera's test.
- 13. Docosahexaenoic acid is found exclusively in breast milk.
- 14. Blood is not a newtonian fluid because its viscosity changes with velocity.

# **Pathology**

- 1. Superoxide dismutase protects brain from free radical injury.
- 2. Autoimmune hemolytic anemia is seen in CLL.
- 3. Thromboxane A2 synthesis is inhibited by low dose aspirin, it causes vasoconstriction in blood vessels and bronchoconstriction.
- 4. Metabolic alkalosis is likely to result after several units of blood transfusion.
- 5. A child to Mother with sickle cell disease and normal father is having chances of having sickle cell disease and sickle cell trait respectively are 0 and 100%.
- 6. A child with blood group B father and blood group AB mother is not likely to have O group.
- 7. Connexins are involved in intercellular connections.

# Microbiology

- 1. NK cells are activated by IL-2, expresses CD3 receptors and is a variant of large lymphocyte.
- 2. Adenosine deaminase deficiency is seen in Severe combined immunodeficiency.
- 3. Vancomycin resistant βhemolytic bacteria showing growth on 6.5% NaCl and is non bile resistant is Enterococcus.
- 4. In streptococcal M protein is responsible for virulence, mucoid colonies are virulent and no resistance to penicillin is reported to it.
- 5. Toxin involved in streptococcal toxic shock syndrome is Pyrogenic toxin.
- 6. Diagnosis by culture for a child with white patch over tonsils is made by Loeffler medium.
- 7. 14 days fever suspected of typhoid should be investigated with Widal test.
- 8. EHEC ferments sorbitol, causes HUS and it elaborates shiga like exotoxin.
- 9. Pseudomonas shows green coloured colonies on agar.
- 10. Congenital syphilis can be best diagnosed by IgM FTA abs.
- 11. Ureaplasma urealyticum causes Non gonococcal urethritis, epididymitis and bacterial vaginosis.
- 12. In HIV, p24 is used for early diagnosis, lysis of CD4 cells is seen and macrophage is a reservoir for the
- 13. Likely diagnosis for pregnant lady from bihar with hepatic encephalopathy is hepatitis E.
- 14. Adenovirus causes hemorrhagic cystitis, diarrhea and conjunctivitis.
- 15. Cystine lactose enzyme deficient medium CLED is preferred over McConkey agar in UTI is because it prevents growth of pseudomonas.
- 16. In early adenolymphangitis stage of filariasis microfilariae are seen in peripheral blood.
- 17. Pancreatic Ca is caused by Clonorchis.
- 18. E. Coli is an aerobic and facultative anaerobe and has a peritrichous flagella, Proteus causes deamination of phenylalanine to phenylpyruvic acid.
- 19. Consumption of uncooked pork is likely to cause Taenia solium.

# Pharmacology

- 1. Drug dosage in elderly has to be reduced because they are lean, their body mass is less, they have decreased renal function with age and their body water is decreased.
- 2. Inverse agonist binds to receptor and causes opposite action.
- 3. In 1st order kinetics a constant proportion of plasma concentration is eliminated.
- 4. Diabetic female on INH and rifampicin for TB sufferers from DVT, she is started on warfarin, PT is not raised, next step should be to use LMW heparin.
- 5. Beta blocker that can be used in renal failure are Propranolol, Pindolol and Oxprenolol.
- 6. Steroid inhibit release of arachidonic acid from vessel wall through action of phospholipase A2, also inhibits vascular membrane permeability and increases glucose synthesis, glycogen deposition in liver.

- 7. Prostaglandins and leukotrienes are derived from arachidonic acid, CX2 is induced by cytokines at the site of inflammation and Leukotrienes cause smooth muscle constriction.
- 8. IV adrenaline increases systolic, decreases diastolic BP and causes tachycardia, IV isoproterenol causes no change in systolic, decreases diastolic BP and causes tachycardia and Dopamine decreases peripheral resistance, improves renal perfusion.
- 9. Digoxin is indicated in atrial flutter, atrial fibrillations and PSVT.
- 10. Theophylline increases cAMP, increase in its dose is required in smokers and it inhibits phosphodiesterase.
- 11. Mechanism of action of tetracycline is by binding to A site and inhibiting attachment of tRNA.
- 12. Selegiline does not cause cheese reaction, it may be used in on off phenomenon and it is rarely used in parkinsonism.
- 13. Patient of phenytoin for treatment of seizures develops depression for which he is given tricyclic antidepressants. He now complaints of lassitude and his Hb reads 8, next step is to estimate MCV>
- 14. Salicylates are removed by dialysis.
- 15. Low dose of aspirin acts on Cyclo oxygenase.
- 16. Ticlopidine onset of action is delayed, its duration of action is long and it is used as an alternative to aspirin in patients with cerebrovascular disease.
- 17. Methotrexate inhibits dihydrofolate reductase, non proliferative cells are resistant to it and it is used in treatment of psoriasis.
- 18. BAL contains 2 sulfhydryl groups in a molecule.

### Forensic Medicine

- 1. Gettlers test is done for death by Drowning.
- 2. Grass and weeds grasped in hand indicates anti mortem drowning.
- 3. Boy with 20 permanent and 8 temporary teeth most likely is 11 years old.
- 4. Sensation of bugs crawling all over body could be due to cocaine.
- 5. A person comes in contact with other. This is called Locard's principle.
- 6. For a patient with head injury, no relatives and required urgent cranial decompression Doctor should operate without formal consent.
- 7. A boy attempts suicide, is brought to a private doctor and he is successfully cured, Then doctor should inform police.

## Preventive and Social Medicine

- 1. In DOTS continuation phase drugs are given in a multi blister combipack, medication is to be taken in presence of a health worker and it improves compliance.
- 29 years old female from bihar presents with active TB. She delivers baby. Indicated things are to administer INH to baby, give ATT to mother for 2 years and ask mother to ensure proper disposal of sputum.
- 3. Under national TB programme, for PHC to be called a PHC-R, requisite is have microscopy and radiology facility.
- 4. A person with complete tetanus immunisation 10 years ago presents with clean wound without any lacerations from an injury sustained 2.5 hours ago. He should now be given a Single dose of tetanus toxoid.
- 5. For tetanus 5 doses of immunisation provides lifelong immunity. TT affords no protection in the present injury and TT serves no use once 12 hours have elapsed following injury.
- 6. A community has 100 children out of whom 28 are immunised against measles, 2 of them acquired measles simultaneously, subsequently 14 got measles. Assuming the efficacy of the vaccine to be 100%, attack rate is 20%.
- 7. Population of 10,000 and birth rate of 36 per 1000, 5 maternal deaths were reported in the current year, MMR is 13.8.
- 8. 10 babies weighing 2.8 kgs each were borne in an hospital, Standard deviation is 0.
- 9. Out of 11 births in a hospital, 5 babies weighed over 2.5 kg and 5 weighed less than 2.5 kg. Then median is 2.5.

- 10. A man weighing 68 kgs consumes 325 gm carbohydrate, 65 gm protein and 35 gm fat in diet, then proportion of proteins, fats and carbohydrates is correct and in accordance with balanced diet.
- 11. Country with population of 1000 million, birth rate is 23 and death rate is 6, then country is in Late expanding phase.
- 12. In a population of 10,000 beta carotene was given to 6000, and not to remainder. 3 out of 1st group got lung cancer, then it concludes that Beta carotene and lung cancer have no relation to one another.
- 13. A subcenter in a hilly area caters to a population of 3000.
- 14. Ina community an increase in new cases denotes increase in incidence rate.
- 15. More false positive cases in a community signifies that the disease has Low prevalence.
- 16. Same screening test when applied to X and Y communities and Y shows more false positive cases as compared to X then Y community has a low prevalence.
- 17. ELISA is performed on a population with low prevalence. Result of performing double screening test will be increased specificity and negative predictive value.
- 18. Paired T test is suited for testing a hypolipidemic drug where serum lipid levels were tested both before and after its use.
- 19. Sampling error is classified as alpha error.
- 20. Virulence of a disease is indicated by Case fatality ratio.
- 21. Worker of dye industry of Gujarat has to be tested for Anemia.
- 22. Best test to detect iron deficiency in a community is Serum ferritin.
- 23. Absolute alcohol is not a complete sterilisation agent.

## Medicine

- 1. In type 1 respiratory failure there is decreased PaO2, decreased PaCO2.
- 2. 60 year old man with non productive cough, grade 2 clubbing and lesion in the apical lobe on x ray. Most likely diagnosis is non small cell Ca.
- 3. 60 year old man is suspected of having bronchogenic carcinoma, TB is ruled out, Next investigation should be bronchoscopy and biopsy.
- 4. Man with fever, weight loss and cough, induration of 17 x 19 mm on mantoux and negative for AFB sputum cytology. Most likely diagnosis is Pulmonary Tuberculosis.
- 5. Pulmonary edema associated with normal PCWP could be observed in High altitude, cocaine overdose and in post cardiopulmonary bypass surgery.
- 6. ABG analysis shows pH 7.2, raised pCO2 and decreased HCO3. Diagnosis is Respiratory and metabolic acidosis.
- 7. In a patient with inferior wall MI best modality of treatment is IV fluids.
- 8. 26 year old asymptomatic female is found to have arrhythmias and systolic murmur associated with midsystolic clicks, investigation of choice is Echocardiography.
- 9. Patient complaints of intermittent claudication, dizziness and headache, likely cardiac lesion is Coarctation of aorta.
- 10. In ASD there is right ventricular hypertrophy, right atrial hypertrophy and pulmonary hypertension.
- 11. Mitral valve vegetations do not usually embolise to Lungs.
- 12. Vegetations from tricuspid valve of a woman with septic abortion is likely to go to Septic infarct of lung.
- 13. Kussmaul's sign is seen in Restrictive cardiomyopathy, constrictive pericarditis and RV infarct.
- 14. A patient with engorged neck veins, BO 80/50 and pulse 100 following blunt trauma most likely has Cardiac tamponade.
- 15. HbA is not seen on hemoglobin electrophoresis in sickle cell anemia.
- 16. In DIC there is thrombocytopenia, decreased fibrinogen and increased PT.
- 17. Thrombocytopenia occurs in TTTP, DIC and cavernous hemangioma.
- 18. A patient with Hb 6, WBC 2000, normal differential count except having 6% blast cells, platelets are reduced to 80,000, moderate splenomegaly is present, most likely diagnosis is Leukemia.
- 19. A patient investigated for anemia has dry bone marrow tap, peripheral smear reveals tear drop cells, most likely diagnosis is Myelofibrosis.
- 20. Tumour associated with polycythemia vera is Cerebellar hemangioblastoma.

- 21. A your patient with jaundice, Total bilirubin 21, direct bilirubin 9.6, alkaline phosphatase 84 KA, most likely diagnosis is Obstructive jaundice.
- 22. Young male with gallbladder stones, serum bilirubin 2.5, Hb 6, urine positive for urobilinogen, most likely diagnosis is Hemolytic jaundice.
- 23. An 18 year old male with massive hematemesis, history of fever for past 14 days which was managed with drugs, moderate splenomegaly, most likely diagnosis is Esophageal varices.
- 24. Likely source of urine showing RBC cast is Kidney.
- 25. Young man developed gross hematuria 3 days after an attack of URTI, renal pathology is IgA nephropathy.
- 26. CSF repost with sugar 40, proteins 150, chloride 550, lymphocytosis present is suggestive of TB meningitis.
- 27. Lacunar infarcts are caused by Lipohyalinosis of penetrating arteries.
- 28. Most likely diagnosis of a 56 year old man with slowness of movements, postural instability, tremors, rigidity and memory loss is Parkinsonism.
- 29. Cerebellar ataxia, dysphagia and chorea are seen in Wilson's disease.
- 30. Elderly man with features of dementia, ataxia, difficulty in downwards gaze and a history of frequent falls. Likely diagnosis is Progressive supranuclear gaze palsy.
- 31. Chromosomal anomaly associated with alzheimer's dementia is Trisomy 21.
- 32. Huntington's disease includes chorea, behavioural disturbances and cogwheel rigidity.
- 33. 30 year old male with loss of erection, low testosterone and high prolactin level in blood. Most likely diagnosis is Pituitary adenoma.
- 34. Patient with accident with resultant transection of the pituitary stalk, resulting conditions will include Diabetes insipidus, Hyperprolactinemia and Hypothyroidism.
- 35. Woman has bilateral headache that worsens with emotional stress, she has 2 children, both are doing badly in school, diagnosis is Tension headache.
- 36. A female age of 30, presents with episodic throbbing headache for past 4 year nausea and vomiting, most likely diagnosis is migraine.
- 37. Woman presents with headache associated with paresthesias of the upper and lower limb, likely diagnosis is Migraine.
- 38. Features of MEN 2a are Pheochromocytoma, medullary carcinoma of thyroid and Neuromas.
- 39. Patient with cushingoid features presents with hemoptysis, no response to dexamethasone suppression test, most likely diagnosis is Ca lung with ectopic ACTH production.
- 40. Obese patient presents in unconscious state, blood sugar 400 mg%, urine positive for sugar and ketones. Most useful drug in management i=of this patient is Chlorpropamide.
- 41. Red cell aplasia, Myasthenia gravis and compression of superior mediastinum are associated with Thymoma.
- 42. Basketball player with 188 cm height and arm span of 197 cm has a diastolic murmur best heard in second right intercostal space, likely cause of murmur is AR.
- 43. Patient with arthritis, hyperpigmentation of skin and hypogonadism, likely diagnosis is Hemochromatosis.
- 44. In myasthenia gravis thymectomy should be done in all cases.
- 45. Most common fungal infection in febrile neutropenia is Candida.
- 46. For treatment of neurocysticercosis Albendazole is superior to praziquantel.
- 47. In patient with acid peptic disease Misoprostol is the drug of choice in patients on NSAIDs, DU is preventable by the use of single night time H2 blockers and Omeprazole may help ulcers refractory to H2 blockers.
- 48. Man with mass at duodenojejunal flexure invading renal papillae, histopathology reports it as lymphoma, then it is stage 4E.
- 49. 45 year old with hypertension and sudden abnormal flinging movements in right upper and lower limb. Most likely site of hemorrhage is Subthalamic Nuclei.
- 50. In haemophilia A, PTT is increased, clotting time is increased and serum levels of factors VIII are decreased.
- 51. IPPV can cause Pleural effusion.
- 52. Characteristic finding on CT in case of TB is Exudate seen in basal cistern.

- 53. Vegetations on undersurface of AV valves are found in Libman sacks endocarditis.
- 54. Triage means sorting out if cases on availability of medical resources and severity of patients condition.

## Surgery

- 1. 60 year old male has foul breath and regurgitation of food eaten 3 days ago, most likely diagnosis is Zenker's diverticulum.
- 2. Most common site for squamous cell carcinoma of esophagus is Middle third.
- 3. In congenital hypertrophic pyloric stenosis there is Hypochloremic alkalosis.
- 4. Procedure of choice for a patient with recurrent duodenal ulcer of 2.5 cm size is Truncal vagotomy and antrectomy.
- 5. Features of hyperplastic TB of GI tract are a mass in Right iliac fossa, 'pulled up ceacum' on barium meal and it's most common site is ileocecal junction.
- 6. 56 year old female has not passed stools in last 14 days and x ray doesn't show any air fluid levels, probable diagnosis is Intestinal pseudo obstruction.
- 7. 60 year old man has history of IHD and atherosclerosis. He presents with abdominal pain and maroon stools, likely diagnosis is Acute mesenteric ischemia.
- 8. Intersphincteric type of "Fistula in ano' is most common.
- 9. Most common cause of colovesical fistula in 27 year old male is crohns disease.
- 10. Following trauma patient presents with a drop of blood at the tip of urinary bladder and complained of inability to pass urine. Next step should be Catheterise, drain bladder and retain the catheter thereafter.
- 11. 45 year old male shows calcification on the right side of his abdomen in an AP view, in lateral view calcification is seen to overlie the spine. Most likely diagnosis is Renal stones.
- 12. Ca prostate commonly metastasises to the vertebra because valveless communications exists with batson's plexus.
- 13. Following sexual intercourse, a person develops pain in left testes that does not get relieved on elevation of scrotus, diagnosis is Torsion of testis.
- 14. A testicular tumour in a man aged 60 years is most likely to be Lymphoma.
- 15. A patient presents with bilateral proptosis, heat intolerance and palpitations most unlikely diagnosis here would be Riedel's thyroiditis.
- 16. Patient with long standing multinodular goiter develops hoarseness of voice, also swelling undergoes sudden increase in size, most likely diagnosis is Follicular Ca.
- 17. Most likely resulting complication to a patient with swelling in the neck following a thyroidectomy is Respiratory obstruction.
- 18. Patient on the same evening of his thyroidectomy presents with a swelling in the neck and difficulty breathing, next management would be to open immediately.
- 19. A patient undergoes thyroid surgery following which he develops perioral tingling, blood calcium levels is 8.9 meq, next step is intravenous calcium gluconate and serial monitoring.
- 20. Case of blunt trauma in state of shock, not responding to IV crystalloids, next step in his managements would be Immediate laparotomy.
- 21. A case of road traffic accident is hypotensive. Most likely ruptures organ is spleen.
- 22. Case of head injury following head on collision road traffic accident. His BP is 90/60 mmHg, tachycardia is present. Most likely diagnosis is Intra Abdominal bleed.
- 23. Ulcers developing in burn tissue are Marjolin's.
- 24. Elderly man with history of abdominal pain is found to have fusiform dilatation of the descending aorta. Most likely cause is Atherosclerosis.
- 25. In AV fistulae there is arterialisation of veins, overgrowth of limbs and it causes enlargement of left ventricle and LVF.
- 26. Axillary thrombosis may be caused by a cervical rib, it could be treated with IV anticoagulant and may occur following excessive exercise.
- 27. 80 year old patient with midline tumor of the lower jaw involving alveolar margin. He is edentulous. Treatment of choice is Segmental mandibulectomy.
- 28. Most common cause of unilateral parotid swelling in a 27 year old male is Pleomorphic adenoma.
- 29. 45 year old woman presenting with hard, mobile lump in the breast. Next investigation is FNAC.

- 30. 45 year old man presenting with progressive cervical lymph nodes enlargement since 3 months. Most diagnostic investigation is lymph node biopsy.
- 31. Fibrolamellar carcinoma of liver is more common in females, has better prognosis in females and it occurs in younger individuals.
- 32. Most likely diagnosis of child presenting with an expansile swelling on medial side of the nose is Meningocele.

# Obstetrics and Gynaecology

- 1. Rokitansky Kuster Hauser syndrome is associated with Vaginal atresia.
- 2. Patient with 47 XXY karyotype presents with features of hypogonadism, most likely diagnosis is Klinefelters syndrome.
- 3. Girl with primary amenorrhea, grade 5 thelarche, grade 2 pubarche, no axillary hair. Likely diagnosis is Testicular feminisation.
- 4. Woman with amenorrhea of 6 weeks and lump in right iliac fossa. Investigation of choice id USG abdomen.
- 5. Woman with amenorrhea of 2 months and lower abdominal pain, facial pallor, fainting and shock. Diagnosis is Ruptured ectopic pregnancy.
- 6. Young woman with 6 weeks amenorrhea presents with mass in abdomen. USG shows empty uterus. Diagnosis is Ectopic pregnancy.
- 7. 30 year old female presents with sudden severe abdominal pain, abdominal mass is palpable on examination. Most likely diagnosis is Twisted ovarian cyst.
- 8. 28 years old female with history of 6 weeks of amenorrhea presents with pain in abdomen. USG shows fluid in pouch of douglas. Aspiration yields dark colour blood that fails to clot. Most probable diagnosis is Ruptured ectopic pregnancy.
- 9. Patient with post coital bleed and no growth seen on per speculum examination, next step should be Colposcopy biopsy.
- 10. 50 year old female with post coital bleed and visible growth on cervix is detecte on per speculum examination. Next investigation is Punch biopsy.
- 11. 45 year old woman has negative pap smear with positive endocervical curettage. Next step of management is Wertheim's hysterectomy.
- 12. Patient with cervical carcinoma is found in altered sensorium and is having hiccups. Likely cause is Uremia.
- 13. Bilateral ovarian cancer with capsule breached, ascites positive for malignant cells. Stage is 1.
- 14. Adenomyosis presents with menorrhagia, dysmenorrhea and an enlarged uterus.
- 15. In infertile woman endometrial biopsy reveals proliferative changes. Hormone preferred is MDPA>
- 16. Semen sample reveals 15 million sperms, 60% normal morphology, 60% motile, sperm volume is 2 ml, no agglutination is seen. Diagnosis is Oligospermia.
- 17. Primary Peritonitis is more common in females because ostia of fallopian tubes communicate with abdominal cavity.
- 18. HCG acts on same receptor as LH, has luteotrophic action and is a glycoprotein.
- 19. Oxytocin sensitivity is increased during delivery, prostaglandins may be given for inducing abortion during 3rd trimester and in lactating women genital stimulation enhances oxytocin release.
- 20. Snow storm appearance on USG is seen in Hydatidiform mole.
- 21. Indications for termination of pregnancy in APH are 37 weeks, IUD and continuous bleeding.
- 22. 37 weeks pregnant lady presents with bleeding PV. Investigation shows severe degree of placenta previa. Treatment is Immediate LSCS.
- 23. Management for pregnant lady presenting with red degeneration of fibroid is Conservative.
- 24. Management of ovarian cyst detected in a pregnant women is Removal by laparotomy in 2nd trimester.
- 25. Most useful investigation in the 1st trimester to identify risk of fetal malformation in a fetus of a diabetic mother is Glycosylated Hb.
- 26. Condition associated with lack of a single pelvic ala is Naegele's pelvis.
- 27. Consequence of maternal use of cocaine is Cerebral infarction.
- 28. DNA analysis of chorionic villus or amniocentesis is not likely to detect Tay sachs disease.

29. A woman has had 2 previous anencephalic babies, risk of having 3rd one is 10%.

## **Pediatrics**

- 1. Neonate presents with jaundice and clay white stools. On liver biopsy giant cells are seen. Most likely diagnosis is Neonatal hepatitis with extra biliary atresia.
- 2. Newborn has dribbling after feeds, respiratory distress and froth at the mouth. Diagnosis is Tracheoesophageal fistula.
- 3. 8 year old boy presents with upper GI bleed, splenomegaly, no sign of ascites or hepatomegaly, esophageal varices are found on UGIE. Most likely diagnosis is Non cirrhotic portal fibrosis.
- 4. 5 year old boy with nephrotic syndrome is responding well to steroid therapy. On light microscopy there won't be any finding.
- 5. Most common cause of urinary obstruction in am male infant is Posterior urethral valves.
- 6. 5 year old child has calculus of size 2 cm in upper ureter. He also complains of hematuria, USG shows no further obstruction in the urinary tract. treatment of choice for this patient would be ESWL.
- 7. A patient presents with LVH and pulmonary complications, ECG shows left axis deviation. Most likely diagnosis is Tricuspid atresia.
- 8. Potts shunt is descending a rta to left pulmonary artery.
- Neonate with recurrent attacks of abdominal pain, restless irritability and diaphoresis on feeding.
  Cardiac auscultation reveals a nonspecific murmur. He is believed to be at risk of MI. Most likely diagnosis is Anomalous coronary artery.
- 10. Child aged 2 years presents with nonspecific symptoms of anemia, target cells on peripheral smear, hypochromic microcytic picture, Hb 6 gm%. He also has a positive family history. Next investigation of choice is Hb electrophoresis.
- 11. Most common cause of meningitis in children between 6 months to 2 years is H. influenza.
- 12. Child with seborrheic dermatitis, lytic skull lesions, ear discharge and hepatosplenomegaly. Likely diagnosis is Histiocytosis X.
- 13. In cretinism short limbs and short stature are present.
- 14. Manifestations of endemic cretinism includes Strabismus and spastic diplegia.
- 15. 10 days old male pseudohermaphrodite child with 46 XY karyotype presents with BP of 100/80 mmHg. Most likely enzyme deficiency is 17 hydroxylase.
- 16. Treatment of kawasakis disease in children is I.V. Ig.
- 17. Neonate delivered on 32 weeks is on ventilator. X ray shows 'white out lung' and ABG reveals PO2 of 75. Ventilator settings are on Fio2 of 70 and rate of 50/minute. Next step to be taken should be to continue ventilation with the same settings.

# Orthopaedics

- 1. Following anterior dislocation of the shoulder, a patient develops weakness of flexion at elbow and lack of sensation over lateral aspect of forearm, nerve injured is Musculocutaneous nerve.
- 2. 10 year old boy presents with fracture of humerus. X ray reveals a lytic lesions at the upper end. Likely condition is Unicameral bone cyst.
- 3. Patient sustained injury to the upper limb 3 years back, now he presents with valgus deformity in the elbow and paresthesia over the medial border of the hand. Likely fracture is of Lateral condyle of humerus.
- 4. 60 year old female suffered from fall, her lower limb is extended and externally rotated likely diagnosis is Fracture of neck of femur.
- 5. Triple arthrodesis involves calcaneocuboid, talonavicular and talocalcaneal.
- 6. 19 year old male has a small circumscribed sclerotic swelling over diaphysis of femur, likely diagnosis is osteoid osteoma.
- 7. Most common site of osteogenic sarcoma is lower end of femur.
- 8. Involvement of PIP joint, DIP joint and carpo metacarpal joint of base of thumb with sparing the srist is seen in Osteoarthritis.
- 9. Pivot test is for Anterior cruciate ligament.

# **Ophthalmology**

- 1. Patient has miotic pupil, IOP 25, normal anterior chamber, hazy cornea and a shallow anterior chamber in fellow eye. Diagnosis is Acute anterior uveitis.
- 2. Woman complains of coloured haloes around lights in the evening, with nausea and vomiting, IOP is normal. Diagnosis is Prodromal stage closed angle glaucoma.
- 3. 5 year old child presents with large cornea lacrimation and photophobia. Diagnosis is Congenitial gloucoma.
- 4. Ocular symptoms not seen in herpes zoster is Glaucoma.
- 5. Bilateral ptosis is seen in Myasthenia gravis, Myotonic dystrophy and Kearns sayre syndrome.
- 6. Eye is deviated laterally and downwards, patient is unable to look up or medially, likely nerve involved is Oculomotor.
- 7. Left sided lateral gaze is affected in lesion of Right frontal lobe.
- 8. Elderly male with heart disease presents with sudden loss of vision in one ye, examination reveals cherry red spot. Diagnosis is Central retinal artery occlusion.
- 9. Features of diabetic retinopathy on fundus examination includes Microaneurysm, retinal hemorrhage and neovascularization.
- 10. Vitamin B12 deficiency is likely to cause Centrocecal scotoma.
- 11. In optic neuritis there is decreased visual acuity, decreased pupillary reflex and abnormal visual evoked response retinogram.
- 12. Chalky white optic disc on fundus examination is seen in Syphilis, lebers hereditary optic neuropathy and post papilledema optic neuritis.

#### **ENT**

- 1. 3 months old child presents with intermittent stridor. Most likely cause is Laryngomalacia.
- 2. Patient has facial nerve palsy following head trauma with fracture of the mastoid. Best intervention is immediate decompression.
- 3. Case of bells palsy on steroids shows no improvement after 2 weeks, next step in management is Physiotherapy and electrical stimulation.
- 4. 15 year old boy presents with unilateral nasal blockade, mass in the cheek and epistaxis, likely diagnosis is Angiofibroma.
- 5. 40 years old diabetic presents with blackish nasal discharge and a mass in the nose. Likely diagnosis is Mucormycosis.
- 6. One of the most radiosensitive tumours is Ca glottis.

#### Skin

- 1. 30 year old male presents with alopecia, boggy scalp swelling and easily pluckable ahir. Next step in establishing diagnosis would be KOH smear.
- 2. Most common organism causing tinea capitis is Trichophyton tonsurans.
- 3. 19 year old man develops a painless penile ulcer 9 days after sexual intercourse with a sex worker. Likely diagnosis is chancre.
- 4. Infant presents with itchy lesions over the groin and prepuce. Indicated are bath and apply scabicidal solution, treatment should be extended to all family and dispose all clothes by burning.
- 5. 8 year old boy from tamilnadu presents with a white non anaesthetic, non scaly, hypopigmented macule on his face. Likely diagnosis is Indeterminate leprosy.
- 6. 20 year old male from jaipur presents with an erythematous lesion on the cheek with central crusting. likely diagnosis is Cutaneous leishmaniasis.
- 7. 19 year old girl presents with light brown pigmentation over malar eminence. Likely diagnosis is Chloasma.
- 8. 19 year old girl presents with arthritis and a photosensitive rash on the cheek. likely diagnosis is SLE>

#### Anaesthesia

1. Drugs which could be used for induction of anesthesia in children are Halothane, sevoflurane and nitrous oxide.

- 2. Anaesthetic agent of choice in renal failure is Isoflurane.
- Man with alcoholic liver failure requiring general anaesthesia for surgery. Anaesthetic of choice is Isoflurane.
- 4. Halothane sensitises the heart to action of catecholamines, it relaxes bronchi and is preferred in anaesthetics and it may cause liver cell necrosis.

# Radiology

- 1. Neonate with respiratory distress, contralateral mediastinal shift and multiple cystic air filled lesions in the chest. Most likely diagnosis is Congenitial diaphragmatic hernia.
- 2. Ground glass appearance is seen in Hyaline membrane disease, pneumonia and obstructive TAPVC.
- 3. Radioprotective drug is Amifostine.
- 4. One of the most radiosensitive tumour is Ca cervix.

# **Psychiatry**

- 1. Patient with pneumonia for 5 days is admitted to the hospital. He suddenly ceases to recognise doctors and staff. thinks that he is in jail and complaints of scorpion attacking him. He is in altered sensorium, this condition is Acute delirium.
- 2. Person missing from home, is found wandering purposefully. He is well groomed and denies having any amnesia. Most likely diagnosis is DIssociative fugue.
- 3. 40 year old male complains of sudden onset palpitations and apprehension. He is sweating for the last 10 minutes and fears of impending death. Diagnosis is Panic attacks.
- 4. A lady while driving car meets accident. She was in ICU for 6 months and being discharged she often gets up in night and feels terrified. She is afraid to sit in a car again. Diagnosis is Post traumatic stress disorder.
- 5. Patient presents with waxy flexibility, negativism and rigidity. Diagnosis is Catatonic schizophrenia.
- 6. 32 year old male presents with abdominal pain and vomiting, complains of some psychiatric symptom and visual hallucinations. Most likely diagnosis is Intermittent porphyria.
- 7. 27 year old female thinks her nose is ugly, her idea is fixed not shared by anyone else. Whenever she goes out of home, she hides her face with cloth. She visits s surgeon. Next step would be Refer to psychiatrist.