

Rapid Review

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Anatomy

1. Derived from neural crest are Melanocytes, adrenal medulla and Sympathetic ganglia.
2. Gastrulation establishes all the 3 germ layers.
3. Neurons of dorsal root ganglia have centrally located nuclei, are derived from neural crest cells and they contain lipofuscin granules.
4. Elastic cartilage is found in Auditory tube.
5. Weight of the upper limb is transmitted to the axial skeleton by Coracoclavicular ligament.
6. Superficial external pudendal artery is a branch of Femoral artery.
7. Diaphragmatic hernia can occur through Esophageal opening, Costovertebral triangle and Costal and sternal attachment of diaphragm.
8. Ureteric constriction could be seen at Ureteropelvic junction, Ureterovesical junction and Crossing of iliac artery.
9. Regarding blood supply to the kidney, stellate veins drain superficial zone, renal artery divides into five segmental arteries before entering hilum and its segmental arteries are end arteries.
10. Nerve mediating pain during passing stools in patient with external hemorrhoids is Pudendal nerve.
11. Tensor veli palati is supplied by Mandibular nerve.
12. Sensory supply of palate includes Facial nerve, Glossopharyngeal nerve and Maxillary division of trigeminal nerve.
13. Large intestine is a site of mucocutaneous junction, its epithelium contains goblet cells in large numbers and it absorbs salt and water.

Physiology

1. SI unit for measuring blood pressure is kPa.
2. Glucose mediated insulin release is mediated through ATP dependent K⁺ channel.
3. Sudden decrease in serum calcium is associated with increased excitability of muscles and nerve.
4. Ablation of the 'somatosensory area 1' of the cerebral cortex leads to Loss of tactile localisation and two point discrimination.
5. Non shivering thermogenesis in adults is due to Noradrenaline.
6. In metabolic acidosis there is decreased K⁺ excretion.
7. Tropomyosin covers myosin and prevents attachments of actin and myosin.
8. TRH stimulation testing is useful in diagnosis of disorder of Growth hormone.

Biochemistry

1. "All enzymes are not proteins". This statement is justified by fact that RNAs acts as ribozymes.
2. Enzymes mediating transfer of one molecule to another are Transferases.
3. In phosphatase reactions Magnesium is required.
4. In oxidative phosphorylation, the ATP production and respiratory chain are linked by Chemiosmotic methods.
5. Thiamine level is best monitored by Transketolase level in blood.
6. Vitamin B12 and folic acid supplementation in megaloblastic anemia leads to the improvement of anemia due to increased DNA synthesis in bone marrow.
7. Nitric oxide synthase requires NADPH, FAD, FMN and heme iron.
8. Phenylalanine is the precursor of Tyrosine, epinephrine and thyroxine.
9. In a well fed state, acetyl CoA obtained from diet is least used in the synthesis of Acetoacetate.
10. Substrate level phosphorylation is seen in the conversion of Succinyl CoA to succinate.
11. Apo B48 and Apo B100 are expressed as two different apoproteins because of difference in RNA editing.
12. Methods which could be used to detect mutations are Single strand conformational polymorphism, polymerase chain reaction and DNA sequencing.
13. Hydroxyl ethyl starch is a plasma expander.
14. Elasticity of corneal layer of skin is due to the presence of Keratin.
15. In dividing cells, spindle is formed by Tubulin.

Pharmacology

1. Entropy of a biological system does not increase because it is an open system.
2. Positive feedback system favours oscillatory response.
3. Regarding efficacy and potency of a drug, in a clinical setup. Efficacy is more important than potency, in the log dose response curve, the height of curve corresponds with efficacy and Drugs that produce a similar pharmacological effect can have different levels of efficacy.
4. Selective beta blockers includes Atenolol, esmolol and bisoprolol.
5. Factors increasing risk of aminoglycoside renal toxicity includes Elderly person, hypokalemia and aminoglycoside administration in recent past.
6. Administration of barbiturates is contraindicated in Acute intermittent porphyria.
7. Mechanism of action of Tianeptine in the brain is selective serotonin reuptake enhancer.
8. Proton pump inhibitors are most effective when they are given shortly before meals.
9. Penicillamine is given in copper poisoning.
10. Digoxin is contraindicated in hypertrophic obstructive cardiomyopathy.
11. Drugs which could cause renal failure includes Cephaloridine, amphotericin B and gentamicin.
12. Losartan is a competitive angiotensin receptor antagonist, has a long acting metabolite and is associated with negligible cough.
13. Gemcitabine is effective in pancreatic cancer.
14. Drugs that cross placenta includes Phenytoin, diazepam and morphine.
15. Truck driver has profuse rhinorrhea and sneezing. Drug preferred is cetirizine.
16. Mechanism of action of sodium nitroprusside is increased guanylate cyclase.
17. Steroid receptor superfamily includes Vitamin D3 receptor, thyroid receptor and retinoid receptor.
18. Drugs which undergo hepatic metabolism before excretion includes Phenytoin, diazepam and cimetidine.
19. In a patient taking oral contraceptives, chance of pregnancy increases after taking of Phenytoin, griseofulvin and ampicillin.
20. Primary mechanism of action fluoride on topical application is conversion of hydroxyapatite to fluorapatite by replacing OH⁻ ions.

Pathology

1. Epithelioid cell and multinucleated giant cells of granulomatous inflammation are derived from monocytes-macrophages.
2. Host tissue responses which could be seen in acute infection are exudation, vasodilation and margination.
3. Feature common to both cytotoxic T cells and NK cells is both require antibodies to be present for action.
4. In intra-epithelial region region of mucosa of intestine predominant cell population is that of T cells.
5. In primary TB, things which could be seen are caseation, calcification and langerhans giant cells.
6. Myocardial infarct showing early granulation tissue has most likely occurred within 1 month.
7. 10 year old died of acute rheumatic fever. Expected on autopsy includes aschoff nodules, Mccullum patch and fibrinous pericarditis.
8. Seen in asbestosis are calcified pleural plaques, diffuse pulmonary interstitial fibrosis and mesothelioma.
9. Macrophages containing large quantities of undigested and partially digested bacteria in intestine are seen in Whipple's disease.
10. Histological features of coeliac disease includes Crypt hyperplasia, increase in intraepithelial lymphocytes and increase in inflammatory cells in lamina propria.
11. Liver granulation may be associated with Candida, halothane and sarcoidosis.
12. IN chronic alcoholic changes seen in liver includes fatty degeneration, chronic hepatitis and cholestatic hepatitis.
13. Crescent formation is characteristic of Rapidly progressive glomerulonephritis.
14. Necrotising papillitis may be seen in sickle cell disease, diabetes mellitus and analgesic nephropathy.
15. Disease of infarction of neurological tissue causes it to be replaced by Neuroglia.

Microbiology

1. Bacteria may acquire characteristics by taking up soluble DNA fragments across their cell wall from other species, through bacteriophages and through conjugation.
2. Neonatal thymectomy leads to decrease in size of paracortical areas.
3. Staphylococcus aureus differs from staphylococcus epidermidis by that it is coagulase positive.
4. Positive schick test indicates that person is susceptible to diphtheria.
5. In a patient with typhoid, diagnosis after 15 days of onset of fever is best done by Widal.
6. Leptospira are transmitted by rat urine.
7. Listeria are transmitted by contaminated milk, causes abortion in pregnancy and causes meningitis in neonates.
8. Bacteroides may cause peritonitis.
9. HEat stable enterotoxin causing food poisoning is caused by Bacillus cereus, yersinia enterocolitica and staphylococcus.
10. HIV virus contains single stranded RNA.HIV contains reverse transcriptase, it may infect host CD4 cells other than T lymphocytes and it caused a reduction in host CD4 cells at late stage of disease.
11. CMV retinitis in HIV occurs when CD4 counts fall below 50.
12. Epstein barr virus causes infectious mononucleosis, nasopharyngeal carcinoma and non hodgkins lymphoma.
13. Corneal scraping revealing narrow angled septate hyphae is likely caused by Aspergillus.
14. Globi in lepromatous leprosy consists of macrophage filled with AFB.
15. Ziehl Neelsen staining is used for detection of mycobacteria, immunofluorescence is used for influenza and specific IgM antibodies for detection of acute infection.
16. IL-1 produces T lymphocyte activation.

Forensic Medicine

1. Race of individual with skull having rounded nasal openings, horseshoe shaped palette, round orbit and cephalic index above 80 is Mongol.
2. A sample to look for uric crystals (gouty typhus) would be submitted to the pathology laboratory in Alcohol.
3. Features of brain death includes complete apnea, absent pupillary reflex and heart rate unresponsive to atropine.
4. At autopsy, a body is found to have copious fine leathery froth in mouth and nostrils which increased on pressure over chest. Death was likely due to Drowning.
5. In firearm injury, entry wound blackening is due to Smoke.
6. Tentative cut is a feature of Suicidal attempt.
7. Gastric lavage is indicated in all cases of acute poisoning ideally because of fear of aspiration.
8. Methods used for detecting heavy metals includes Harrison & Gilroy test, neutron activation analysis and atomic adsorption spectroscopy.
9. 60 year old man presents with history of opium addiction for the last 20 years. He has given up opium from 2 days. Withdrawal symptoms will include Rhinorrhea.
10. Sensation of creeping bugs over body is a feature of cocaine poisoning.
11. Hydrocyanic acid poisoning occurs due to ingestion of LINSEED plant in cattle.
12. 10 year old presents with snakebite since 6 hours, no systemic signs and lab investigation are normal except localised swelling over the leg of <5 cm. Next step of management is to observe for progression of symptoms and wait for antivenom therapy.

Preventive and Social Medicine

1. Iron and folic acid supplements form specific protection.
2. Most important function of sentinel surveillance is to find the total amount of disease in the population.
3. Serial interval is the time gap between primary and secondary case.
4. Advantages of case control studies includes, it is useful in rare diseases, odds ratio can be calculated and that it is cost effective and inexpensive.

5. In a prospective study comprising 10,000 subjects, 6000 subjects were put on beta carotene and 4000 were not. 3 out of 1st 6000 developed lung cancer and 2 out of second 4000 developed lung cancer. Then study shows that there is no relation between beta carotene and lung cancer.
6. Indirect standardisation a standard population is needed, population should be comparable and 2 populations are compared. Rubella vaccine is contraindicated in pregnancy.
7. Erythromycin prevents spread of pertussis between children.
8. Infectivity of chickenpox lasts for 6 days after onset of rash.
9. Carriers are important in polio, typhoid and diphtheria.
10. Acute flaccid paralysis is reported in child aged 0-15 years.
11. 2 years old boy with cough, fever, difficulty in breathing, RR of 50/min, no chest indrawing, bilateral crepitations. Most probable diagnosis is Pneumonia.
12. Active and passive immunity should be given together in tetanus, rabies and hepatitis B.
13. Cereals and pulses are considered complementary as Cereals are deficient in lysine and pulses are deficient in methionine.
14. For a 60 kg Indian male, minimum daily protein requirement has been calculated to be 40 gm (mean) & standard deviation is 10. the recommended daily allowance of proteins would be 60 gms/day.
15. Population study showed a mean glucose of 86 mg/dL. In a sample of 100 showing normal curve distinction, then 50% of people have glucose above 86%.
16. Best method to show association between height and weight of children in a class is by Scatter diagram.
17. Correlation between variables A and B in a study was found to be 1:1. This indicates computational mistake in calculating correlation.
18. Biological oxygen demand indicates organic matter.
19. If in a surveillance center method of testing Hepatitis B in low prevalence area is changed from single ELISA to double testing in series result would affect specificity and positive predictive value.
20. In a study, variation in cholesterol was seen before and after giving a drug. Then paired t test would give its significance.
21. 2 students of same hostel, 1 develops infection with group B meningococcus and another develops group C meningococcus after few days. Then students should be educated about meningococcal transmission and preventive measures should be taken, chemoprophylaxis should be done for all against both group B and C and vaccine prophylaxis of contacts of other student.
22. Common causes of postneonatal infant mortality in India includes malnutrition, diarrhoeal diseases and acute respiratory infection.

Medicine

1. Diseases associated with an increased anion gap type of metabolic acidosis includes shock, ingestion of antifreeze and diabetic ketoacidosis.
2. Acute metabolic acidosis decreases urinary K⁺ excretion.
3. Urinary anion gap is an indication of excretion of NH₄⁺.
4. Commonest mode of inheritance of congenital heart disease is Multifactorial.
5. Hereditary spherocytosis is an Autosomal dominant disorder.
6. Type 1 diabetes is HLA associated.
7. Sexually transmitted diseases includes Candida albicans, Molluscum contagiosum and Group B streptococcus.
8. Organisms transmitted via blood includes Parvo B19, Cytomegalovirus and Hepatitis G virus.
9. Hypoglycaemia is a recognised feature of Uremia, Addisons disease and Hepatocellular failure.
10. Features seen in Thrombotic thrombocytopenic purpura includes Fever, Haemolysis and Low platelet count.
11. Laboratory determinants which are abnormally prolonged in ITP includes APTT, Prothrombin time and Clotting time.
12. PNH is associated with Aplastic anemia, Venous thrombosis and Iron deficiency anemia.
13. 20 year old with severe hypoplastic anemia. Most effective treatment is Bone marrow transplant.

14. Features seen in Polycythemia Vera includes Thrombosis, Hyperuricemia and Spontaneous severe infection.
15. Conditions associated with Antiphospholipid syndrome includes Venous thrombosis, Recurrent foetal loss and Neurological manifestations.
16. Hypergastrinemia with hypochlorhydria is seen in Pernicious anemia.
17. In Jugular Venous pulse, 'a-x' descent corresponds to atrial relaxation, 'v-y' to emptying of blood from right atrium into right ventricle and 'y-a' ascent to filling of the right atrium from the vena cava.
18. In JVP Cannon wave corresponds to complete heart block.
19. If a patient develops Respiratory distress while insertion of central Venous catheter then most likely cause of this is Pneumothorax.
20. Clinical features of Myxoma includes Fever, Clubbing and Embolic phenomenon.
21. Renal vein thrombosis is most commonly associated with Membranous Glomerulonephritis.
22. Blood stools is found in Henoch Schonlein purpura.
23. Renal osteodystrophy differs from nutritional and genetic forms of osteomalacia in having Hyperphosphatemia.
24. Medullary cystic disease of kidney is best diagnosed by Biopsy.
25. Patient with nephrotic syndrome on longstanding corticosteroid therapy may develop Hyperglycemia, Neuropsychiatric symptoms and Suppression of the pituitary adrenal axis.
26. 40 year old man with repeated episodes of bronchospasm and hemoptysis, perihilar bronchiectasis on chest X-ray. Most likely diagnosis is Bronchopulmonary aspergillosis.
27. Tobacco smoke is not characteristically associated with development of interstitial lung disease.
28. 35 year old man is found to have HBsAg and HBeAg on screening. SGOT and SGPT are normal. Next Investigation is HBV-DNA estimation.
29. 25 year old woman with bloody diarrhea is diagnosed to have Ulcerative colitis. Association conditions are Sclerosing cholangitis, Iritis and Ankylosing spondylitis.
30. Investigation of choice for invasive amebiasis is ELISA.
31. Diabetic with blood glucose 600 mg/dL and Na 122 mEq/L was treated with insulin then blood glucose decreased to 100 mg/dL. So there will be resulting increase in blood Na⁺ level.
32. 20 year old with exertional dyspnoea, headache and giddiness, hypertension and LVH. X-ray shows notching of anterior ends of ribs. Most likely diagnosis is Coarctation of aorta.
33. Rheumatoid factor in rheumatoid arthritis is important because it is associated with bad prognosis.
34. Conn's syndrome is associated with Hypertension, muscle weakness and Hypokalemia.
35. Triad originally described by Zollinger Ellison syndrome is characterized by Peptic ulcer, gastric hypersecretion and non-beta cell tumour. Features of pheochromocytoma includes Hypertensive paroxysm, Headache and Orthostatic hypertension.

Surgery

1. Patient suddenly experienced pain radiating along medial border of dorsum of foot. This could be due to accidental ligation of Saphenous nerve.
2. In an adult patient of pleural effusion, most appropriate site for pleurocentesis done by inserting a needle in 7th intercostal space in mid axillary line.
3. Measurement of intravascular pressure by a pulmonary artery catheter should be done at the end of expiration.
4. 24 year old struck on right temple by a baseball falls on ground, on way to hospital he goes into coma, is unresponsive with dilated pupil when. Most important step in initial management is Craniotomy.
5. 75 year old woman presents with post myocardial infarction after 6 weeks with mild CHF. She has past history of neck surgery for parathyroid adenoma 5 years ago. ECG shows atrial fibrillation. Serum Ca⁺⁺ 13 mg/L and urinary Ca⁺⁺ is 300 mg/24h. On examination there is small mass in the paratracheal position behind the right clavicle. Appropriate management at this time is Ultrasound guided alcohol injection of the arms.
6. De Quervain's disease has features of increase in ESR, it tends to regress spontaneously and it is painful and is associated with enlargement of thyroid.

7. 35 year old woman has had recurrent episodes of headache and sweating. Her mother had renal calculi and died of thyroid cancer. Thyroid nodule and ipsilateral enlarged cervical lymph nodes were noted. So before performing thyroid surgery estimation of urinary metanephrines, VMA and catecholamines should be done.
8. Thyroid storm is associated with Surgery for thyrotoxicosis, stressful illness in thyrotoxicosis and I-131 therapy for thyrotoxicosis.
9. Needle biopsy of solitary thyroid nodule in a young woman with palpable cervical lymph nodes on the same sides demonstrates amyloid in stroma of lesion. Likely diagnosis is Medullary carcinoma thyroid.
10. 26 year old woman with palpable thyroid nodule, amyloid in stroma on needle biopsy, ipsilateral palpable lymph node. Preferred treatment should be total thyroidectomy and modified neck dissection on side of enlarged lymph node.
11. Most common tumors of salivary gland is Pleomorphic adenoma.
12. Premalignant condition with highest probability of progression to malignancy is Erythroplakia.
13. Edentulous old man developed squamous cell carcinoma in buccal mucosa that has infiltrated to the alveolus. Indicated treatment includes Radiotherapy, Segmental mandibulectomy and Marginal mandibulectomy involving removal of Upper half of mandible.
14. Corkscrew esophagus is seen in diffuse esophageal spasm.
15. Treatment of achalasia associated with high rate of recurrence is Botulinum toxin local injection.
16. Barrett's esophagus is Lower esophagus lined by columnar epithelium.
17. Adenocarcinoma of esophagus develops in Barrett's esophagus.
18. Lowest recurrence of peptic ulcer is associated with Vagotomy + Antrectomy.
19. Intestinal metaplasia type 3 is a risk factor for development of gastric Carcinoma.
20. In hypertrophic pyloric stenosis metabolic disturbance is Metabolic alkalosis with paradoxical aciduria.
21. Early gastric cancer is indicated by involvement of mucosa, submucosa and adjacent lymph nodes.
22. In gastric outlet obstruction in a peptic ulcer patient, most likely site of obstruction is Duodenum.
23. Most suitable route for the administration of proteins and calories for case of deep coma since last 15 days is Jejunostomy tube feeding.
24. 10 month old infant with acute intestinal obstruction and contrast enema x-ray shows intussusception. Likely cause is Peyer's patch hypertrophy.
25. After undergoing surgery for carcinoma of colon, a patient developed single liver metastasis of 2 cm. Next step of management is Resection.
26. Sentinel lymph node biopsy is an important part of management of Carcinoma of breast.
27. Clinical feature of thromboangiitis obliterans includes Raynaud's phenomenon, Claudication of extremities and Migratory superficial thrombophlebitis.
28. 16 year old girl has non pitting edema of recent onset affecting her right leg but no other symptoms. On evaluation A lymphangiogram will show hypoplasia of the lymphatics.
29. Acute adrenal insufficiency usually is secondary to exogenous glucocorticoid administration, it presents with weakness, vomiting, fever and hypotension and Hyponatremia occurs because of impaired renal tubule sodium reabsorption.
30. For radiological evaluation of a patient with Cushing's syndrome Petrosal sinus sampling is the best way to distinguish a pituitary tumour from an ectopic ACTH producing tumors, MRI of the adrenals may distinguish adrenal adenoma from carcinoma and adrenal CT scan distinguished adrenal cortical hyperplasia from an adrenal tumour.

Pediatrics

1. If a healthy 12 weeks old infant does not vocalise it would warrant further evaluation of developmental status.
2. 2 year old child 6.7 kg presents with history of vomiting and diarrhea for last 2 days, skin pinch over anterior abdomen goes quickly to its original position. Interpretation of skin pinch is that it cannot be evaluated in this child.
3. Infant with history of seizures and skin rashes shows metabolic acidosis, increased blood ketone levels. Child is likely to be suffering from Multiple carboxylase deficiency.

4. RDS usually occurs in infants born before 34 weeks of gestation, it is more common in babies born to diabetic mothers and it leads to cyanosis.
5. Manifestations of congenital Rubella includes Deafness, PDA and Mental retardation.
6. 8 year old with fever, bilateral cervical lymphadenopathy, prior history of sore throat, no hepatomegaly, >20% lymphoplasmacytoid cells on peripheral blood smear. Most likely diagnosis is Tuberculosis.
7. Most common genetic cause of liver disease in children is α 1antitrypsin deficiency.
8. Neuroblastoma most frequently metastasizes to bone.
9. 6 month old girl with recurrent UTI, bilateral hydronephrosis on USG, micturating cystourethrogram (MCU) showing bilateral grade 4 vesico ureteral reflux. Treatment of choice is Ureteric reimplantation.
10. Most common cause of ambiguous genitalia in newborn is 21 hydroxylase deficiency.

Obstetrics

1. In normal pregnancy there are increased number of lactobacilli in vagiina.
2. Increased production of clotting factors by liver is associated with increased risk of Thromboembolism in a normal pregnancy.
3. Cephalohematoma does not vary in tension with crying.
4. Pregnant woman developed idiopathic cholestatic jaundice. Associated conditions are intense itching, SGOT, SGPT less than 60 IU and markedly increased levels of alkaline phosphatase.
5. 35 year old woman with bilateral deep vein thrombosis in legs. Past h/o recurrent foetal loss and one attack of pulmonary embolism. Screening tests of coagulation reveals a prolonged APTT. Likely diagnosis is Antiphospholipid syndrome.
6. 20 year old woman having mitral stenosis class II and rheumatic disease becomes pregnant. Management includes prophylactic antibiotics, outlet forceps in 2nd stage of labor and IV furosemide at delivery of anterior shoulder.
7. I¹³¹ is an absolute contraindication for treatment of thyrotoxicosis in pregnancy of 6 months.
8. Fetal malformation, Uterine anomaly and Cornual implantation of placenta are associated with breech presentation at normal full term pregnancy.
9. Polycythemia is seen in infant of a diabetic mother.
10. Abruptio placentae is not always an indication of Caesarean section.
11. Episiotomy can be either midline or mediolateral, involvement of anal sphincter is classified 3rd-4th degree perineal tear and midline episiotomies bleed less, are easier to repair and heal more quickly.
12. In instrumental vaginal delivery Forceps may be used if ventouse fails.
13. 2 year old has Down's syndrome with karyotype of 21/21 translocation. Risk of recurrence in subsequent pregnancies if the father is a balanced translocation carrier is 100%.
14. Short retroviral regimen administration in the peripartum period decreases the risk of vertical transmission by 50%.

Gynaecology

1. Complete failure of mullerian duct fusion will result in Uterus didelphys.
2. Commonest cause of female pseudohermaphroditism is Congenital adrenal hyperplasia.
3. 45 year old woman presents with hot flush after stopping of menstruation. This can be relieved by administration of Ethinyl estradiol.
4. Contraceptive LNG IUD has cumulative pregnancy rate at 5 year of 0.5.
5. 25 year old infertile male semen analysis shows, sperm count - 15 million/ml, pH - 7.5, volume - 2 ml, no agglutination, morphology shows 60% normal & 60 % motile sperms. Most likely diagnosis is Oligospermia.
6. For diagnosing polycystic ovarian disease LH and FSH are best taken on 8-10th days of menstrual cycle.
7. 20 year old girl presents with rapidly developing hirsutism and amenorrhea with change in voice. To establish diagnosis Testosterone blood test should be done.
8. 35 year old mother of 2 is suffering from amenorrhea for last 12 months, has history of failure of lactation following 2nd delivery but remained asymptomatic thereafter. Skull x-ray shows empty sella. Most likely diagnosis is Sheehan's syndrome.

9. 35 year old having 5 and 6 year old children, has amenorrhea, galactorrhea and increased prolactin. CT head is likely to reveal Pituitary adenoma.
10. 45 year old presents with history of polymenorrhea for last 6 months. 1st line of management is Oral contraceptive for 3 cycles.
11. NSAIDs, Norethisterone and Tranexamic acid are indicated in menorrhagia.
12. Most common genital prolapse is Cystocele.
13. 30 year old with infertility, shows 'Bead like' fallopian tube and clubbing of ampulla on hysterosalpingography. Most likely cause is Mycobacterium tuberculosis.
14. 25 year old with vaginal discharge revealing chlamydial infection. Treatment of choice is Azithromycin + contact tracing.
15. Predisposing factors for endometrial carcinoma are Unopposed estrogen, radiation and tamoxifen therapy.

Orthopaedics

1. Carpal tunnel syndrome is due to compression of Median nerve.
2. Most common nerve involved in fracture of surgical neck of humerus is Axillary nerve.
3. Supracondylar fracture of humerus is uncommon after 15 years of age, in it extension type fracture is more common than the flexion type and cubitus varus deformity commonly results following malunion.
4. 40 year old with fracture of shaft of femur became disoriented on 2nd day, was found to have tachypnea and conjunctival petechiae. Most likely diagnosis is Fat embolism.
5. 31 year old with injury to right hip joint showing posterior dislocation seen on x-ray. Clinical attitude of affected limb will be Internal rotation, flexion and adduction.
6. 7 year old had fracture of lateral condyle of femur. He developed malunion as fracture was not reduced anatomically. So malunion will produce Genu valgum.
7. Patellar tendon bearing POP cast is indicated in Tibial fracture.
8. Inversion injury at the ankle can cause fracture of tip of lateral malleolus, fracture base of 5th metatarsal and fracture of sustentaculum tali.
9. 45 year old suddenly develops acute lower back pain with right leg pain and weakness of dorsiflexion of right great toe. So appearance of foot drop indicates early surgical intervention.
10. Acute osteomyelitis is most commonly caused by Staphylococcus aureus.
11. 45 year old with expansile lesion in center of femoral metaphysis showing endosteal scalloping and punctate calcifications. Most likely diagnosis is Chondrosarcoma.
12. 10 year old child presents with predisposition to fractures, anemia, hepatosplenomegaly and a diffusely increased radiographic density of bones. The most likely diagnosis is Osteopetrosis.
13. 9 year old child with scoliosis, hairy tuft in skin of back, neurological deficit, plain x-ray showing multiple vertebral anomalies and a vertebral bony spur overlying lumbar spine on AP view. Most probable diagnosis is Diastematomyelia.
14. In a patient with head injury, unexplained hypotension warrants evaluation of Thoracic spine.
15. Complete transection of spinal cord at the C₇ level produces Hypotension, anaesthesia below level of brain and areflexia below level of lesion.

Ophthalmology

1. In a normal human right eye, peripheral field of vision is usually least in the upward direction.
2. Tonography helps to determine facility of outflow of aqueous.
3. More red colour is needed for matching than normal person in Protanomaly.
4. Colours best appreciated by central cones of our foveomacular area are Red and Green.
5. Epiphora is an abnormal overflow of tears due to obstruction of lacrimal duct.
6. 35 year old hypermetrope is using 1.50 D sphere both eyes. Whenever glasses slip downward on his nose he will feel that his near vision becomes enlarged.
7. Oculomotor nerve palsy affects Medial rectus, Inferior oblique and Levator palpebrae superioris.
8. Woman presents with acute painful red eye and mild dilated vertically oval pupil. Most likely diagnosis is Acute angle closure glaucoma.
9. Cupping of disk is a feature of open angle glaucoma.

10. In a case of hypertensive uveitis, most useful drug to reduce IOP is Latanoprost.
11. A patient with glaucoma may develop blepharoconjunctivitis after instillation of Timolol.
12. 12 year old with headache, decreased vision, visual acuity 6/36 in right eye, left eye showed correction of 1.5 D and the right eye of 5 D, normal anterior chamber and fundus. Cause of decreased vision may be Amblyopia.
13. Werick's hemianopic pupillary response is seen in lesion at Optic tract.

ENT

1. Weber's test is best elected by placing the tuning fork on the forehead and asking him to report in which ear he hears better.
2. On otological examination positive fistula test will be seen in Labyrinthine fistula, Hypermobile stapes footplate and following fenestration surgery.
3. Acute otitis media in children is most commonly due to Streptococcus pneumoniae.
4. Ramsay Hunt syndrome has viral etiology, involves VIIth nerve and it may involve VIIIth nerve.
5. 7 month old with failure of gaining weight, noisy breathing worsening on crying, reddish mass in subglottis on laryngoscopy. Treatment may include Steroids, Tracheostomy and Carbon dioxide laser treatment.
6. 50 year old male chronic smoker has hoarseness for past 4 months, keratosis of larynx on microlaryngoscopic biopsy. Suggested treatment modalities includes Laser vaporizer, stop smoking and stripping of vocal cord.
7. Treatment of choice of a T₁N₀M₀ glottic carcinoma is External beam radiotherapy.

Skin

1. Multiple erythematous annular lesions with peripheral collarette of scales arranged predominantly over trunk are seen in Pityriasis rosea.
2. Treatment of Pityriasis versicolor includes Ketoconazole, Clotrimazole and Selenium sulphide.
3. A patient with psoriasis was started on systemic steroids. After stopping treatment patient developed generalised pustules all over body. Most likely cause is Pustular psoriasis.
4. Wickham's striae are seen in Lichen planus.
5. Griseofulvin is given for treatment of fungal infection in fingernail dermatophytosis for 3 months.
6. After 3 days of fever patient developed maculo erythematous rash that lasted for 48 hours. Most likely diagnosis is Roseola infantum.
7. Exfoliative dermatitis can be due to Drug hypersensitivity, Pityriasis rubra and Psoriasis.
8. Genital elephantiasis is caused by Lymphogranuloma venereum.

Anaesthesia

1. Gas that produces systemic toxicity without causing local irritation is Carbon monoxide.
2. In a patient with fixed respiratory obstruction, Helium is used along with oxygen instead of plain oxygen because it decreases turbulence.
3. Complication of URTI in children includes Bacteremia, increased mucosal bleeding and Laryngospasm.

Radiology

1. γ radiation have most penetrating power.
2. Increased 'ma' is needed for proper radiographic image in a heavy bony built person.
3. 2 year old boy with sudden onset stridor and respiratory difficulty, decreased breath sounds and wheeze in right side, opaque right hemithorax on x-ray. Most likely diagnosis is Foreign body aspiration.
4. Child with acute respiratory distress shows hyperinflation of unilateral lung in chest x-ray. Most likely cause is Foreign body aspiration.
5. Abdominal USG of a 3 year old boy shows solid well circumscribed hypoechoic renal mass. Most likely diagnosis is Wilms tumor.
6. Newborn with intestinal obstruction, constipation, multiple air fluid levels on x-ray. Probable diagnosis includes Duodenal atresia, Ileal atresia and Ladd's bands.

7. Loculated pleural effusion forms obtuse angles against mediastinum/ chest wall viewed in profile, have unsharp margins when viewed en face and do not conform to segmental distribution.
8. Radiographic appearance of Pindborg tumor is Driven snow appearance.
9. Craniospinal irradiation is employed in treatment of Medulloblastoma.
10. Prophylactic cranial irradiation is indicated in treatment of Small cell ca of lung, ALL and NHL.

Psychiatry

1. Hallucinations occurs in inner subjective space, is a vivid sensory perception and it occurs in the absence of perceptual stimulus.
2. Prominent visual hallucination is suggestive of an organic cause of behavioral symptoms.
3. Delusion is present in Delirium, Mania and Depression.
4. An alcoholic after 3 days of quitting alcohol has irrelevant talking, disoriented to time, place and person, visual illusions and hallucinations. No history of head injury. Most probable diagnosis is Delirium tremens.
5. 45 year old complains continuous, dull, non-progressive headache of last 8 years, all investigations conducted by various neurologists are normal, patient insists that he had a brain tumor. Most probable diagnosis is Hypochondriasis.
6. Patient presents with short lasting episodic behavioural changes which include agitation, dream like state with thrashing movements of his limbs, does not recall these episodes and has no apparent precipitating factor. Most likely diagnosis is Temporal lobe epilepsy.
7. Young lady with repeated episodes of overeating followed by purging after use of laxatives. She probably suffers from Bulimia nervosa.
8. 11 year old is all time so restless that other students are not able to concentrate in class because of him. He hardly ever in his seat and roams around the hall. He has difficulty in playing quietly. Most likely diagnosis is Attention deficit hyperactivity syndrome.