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Rapid Review

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Anatomy

1. Damage to ulnar nerve before division into superficial and deep branches produces numbness of little finger and atrophy of hypothenar muscles.
2. Nerve supply of the gluteal region includes Superior gluteal nerve, Inferior gluteal nerve and Nerve to obturator internus.
3. Gubernaculum is attached to the caudal end of testis.
4. Root value to long thoracic nerve is C5, C6, and C7.
5. Loss of extension of little and ring finger and hypothenar atrophy is produced by injury to Ulnar nerve.
6. Structures encountered during vasectomy surgery includes Testicular artery, Autonomic nerves and Pampiniform plexus.
7. Sternocleidomastoid is supplied by Occipital artery, Superior thyroid artery and Posterior auricular artery.
8. Organs developing in the mesentery of stomach includes Liver, Spleen and Pancreas.
9. Abnormal number of vertebrae are possible in Thoracic, Lumbar and Sacral region but not in cervical.
10. Ciliary muscle develops from Neural crest mesenchyme.
11. Epiglottis develops from 4th pharyngeal arch.

Physiology

1. cAMP, IP3 and Diacylglycerol are second messengers.
2. Factors which increases blood supply to muscle includes Local metabolites, Sympathetic stimulation and Cholinergic stimulation.
3. End diastolic volume increases with increase in negative intrathoracic pressure.
4. Right axis deviation is seen in thin and tall individuals, standing posture and at the end of deep inspiration.
5. Internal carotid artery ligation below the carotid sinus produces increase in vasomotor center activity.
6. Kinemyography is used for monitoring neuromuscular function.
7. Lack of Regeneration of nerves could be due to lack of endoneurial tubes, lack of growth factors, presence of glial scar and lack of myelin inhibiting substance.
8. Dobutamine decreases peripheral resistance.

Biochemistry

1. A patient complains of occurrence of skin bullae following exposure to sunlight. Defect most likely involves Thymidine dimers (Due to Xeroderma pigmentosum).
2. Enzymes found in CSF are CK-BB and LDH-3.
3. Ribozymes have peptidyl transferase activity.

4. Test to differentiate between chromosomes of normal and cancer cells is Comparative genomic hybridization.
5. GPI anchored protein is seen in association with membrane raft.
6. There is no loss of genetic material in case of Inversion.
7. In liver phosphorylating enzymes are more active in fasting state.
8. Ionizing radiation affects G2M stage of cell cycle the most.

Pharmacology

1. Lidocaine acts on Na channel in both active and inactive state, it is given IV in cardiac arrhythmias and it is DOC in ventricular tachycardia.
2. Most potent PPI is Lansoprazole.
3. PPIs are also called 'Hit and Run' drugs because they inhibit proton pump irreversibly.
4. Drugs used in erectile dysfunction includes PGE2, Vardenafil and Alprostadil.
5. Penicillin G is used for Rat bite fever.
6. Cholinomimetics could be used for Open angle glaucoma, Cobra bite and Myasthenia gravis.
7. Side effects of HAART includes Steatosis, Lipodystrophy and increased cholesterol.
8. Mechanism of gentamicin involves direct hair cell toxicity.
9. Fasudil is rho kinase inhibitor.
10. Best agent for premenstrual syndrome management is SSRI.
11. Cetirizine, Loratadine and Fexofenadine are 2nd generation antihistaminics.
12. Piperacillin- Tazobactam combination is used for expanded spectrum beta lactam resistance.

Pathology

1. Mutation of CoL4A5 chain confirms the diagnosis of Alport's syndrome.
2. A person with heterozygous sickle cell trait is protected against infection from P. falciparum.
3. Hyperacute rejection is due to preformed antibodies.
4. Omega-3 fatty acids from fish decreases LDL and Cigarette smoking and CRP are independent risk factors for myocardial infarction.
5. Granulomatous vasculitis is a feature of temporal arteritis.
6. Raised bilirubin, mild splenomegaly and nucleated RBCs indicate megaloblastic anemia.
7. Myelofibrosis leading to a dry tap on bone marrow aspiration is seen with Acute megakaryocytic leukemia.
8. CD95 is a marker of Extrinsic pathway of apoptosis.
9. Receptor on neuronal membrane that induces development of Glioma is CD133.
10. Marker of myeloid cancer cells is common leukocyte antigen.
11. Adult patient presents with generalized lymphadenopathy and blood film shows 70% immature looking lymphocytes. Next investigation of choice is Immunophenotyping.

12. Most common fixative used in electron microscopy is Glutaraldehyde.
13. Fibrinoid necrosis and onion peel appearance of kidney is seen in Hyperplastic arteriosclerosis.
14. Staining done for sebaceous cell carcinoma is Oil red O.

Microbiology

1. Aerosol spread leading to epidemics is a feature o Legionella.
2. T cells and B cells both have Class I MHC expression and antigen specific receptors.
3. Bacteroides fragilis is the most frequent anaerobe isolated from clinical sample, lipopolysaccharide formed by it is structurally and functionally different from conventional endotoxin and it is not uniformly sensitive to Metronidazole.
4. Farmer from sub-himalayan region presents with multiple leg ulcers. Most likely causative agent is Sporothrix schenckii.
5. Farmer presents with the features of high fever, painful inguinal lymphadenopathy, vomiting, diarrhea and hypotension. Stain which will help in diagnosis is Wayson's stain (Agent is Yersinia pestis).
6. Endotoxin of Vibrio cholerae has no role in pathogenesis of disease.
7. SARS is caused by Corona virus.
8. Prion disease is a slow virus disease with long incubation.
9. Organism which is acquired through fish consumption and which can be a cause of carcinoma of gallbladder is Clonorchis sinensis.

Forensic Medicine

1. Classification of injury when there is a fracture of teeth and injury around mouth is Grievous injury.
2. Double base smokeless gun powder contains Nitrocellulose and nitroglycerine.
3. A person had a fight with a neighbour where he assaulted him. he can be booked under IPC 351.
4. Blue-white colour in UV rays is seen with Semen.
5. Choking is seen in Shotgun.
6. Fetus of 2 cm length and 10 gm weight has age of 6 weeks.

PSM

1. Sampling schools then sampling divisions then sampling students. This method of sampling is known as Multistage sampling.
2. Transition from increased prevalence of infectious pandemic disease to man-made disease is known as Epidemiological transition.

3. Mass chemoprophylaxis is given for Lymphatic filariasis, Plague and Vitamin A deficiency.
4. Clostridium tetani cannot be eradicated.
5. Current percentage of Indian GDP spent on health is 1.1.
6. BI RADS stands for Breast imaging reporting and Data system.
7. Causes of neonatal mortality in India are Preterm birth complications - 35%, Severe infections - 15% and Complications during birth - 23%.
8. In a population of 5000, 500 are already myopic on January 1, 2011. Number of new myopic cases till December 31, 2011 is 90. So incidence is 0.02.
9. Current number of cancer patients in India reported annually is 9.4 lakhs.
10. In a certain population, there were 4050 births during the last 1 year. There were 50 stillbirths, 50 infants died within 7 days whereas 150 died after 7 days but within the 1st 28 days. Neonatal mortality rate is 50.
11. Millennium Development Goals (MDG) includes reduce prevalence of HIV-AIDS to half by 2015, reduce maternal mortality by 50% and combat PEM and diarrhoea.
12. Screening age for Trachoma is 1-9 years.
13. For National programme for prevention and control of cancer, diabetes, CVD and stroke (NPCDCS), CHC has facilities for diagnosis and treatment of CVD, Diabetes and stroke.
14. Rashtriya Swasthya bima Yojna applies to BPL families only.
15. HIV sentinel surveillance is used to calculate high risk, prevalence and trend finding.
16. Prevalence is very low as compared to the incidence for a disease. It implies that disease is very fatal and/or easily curable.
17. In a population of 200 (range 70-90) 68.7% i.e. 136 people would be included under 1 SD.
18. Roll back malaria includes Insecticide nets, Strengthening health system and developing new insecticides.
19. Highest mean lowest mode is seen in Positive skewing.
20. OPV is a live vaccine, it gets quick immune response and is used in epidemics. Breast feeding has no significant effect on the response of older infants to OPV.
21. District population of 10 lakh, with under 16 population of 30%. Prevalence of blindness is 0.8/1000 in under 16 population. Then number of blind under 16 years of age is 240.

ENT

1. Laser uvuloplasty is done for Snoring.
2. Cochlear implant can be done if Auditory nerve is intact.
3. In Dehiscent superior semicircular canal, 3rd window effect is seen.
4. Pseudosulcus in larynx is associated with laryngopharyngeal reflux.
5. High frequency audiometry is used in Ototoxicity.
6. In neonatal ICU, the best screening test to evaluate hearing is Otoacoustic emissions.
7. Calcification of Pinna is seen in Ochronosis, Frostbite and Addison's disease.

8. Grisel's syndrome (Spontaneous subluxation of the atlantoaxial joint following peri-pharyngeal inflammation) is seen post-adenoidectomy, in it inflammation of cervical spine ligament is seen and it is treated conservatively.
9. Diabetic patient with fungal infection of sinuses and peri-orbital region with significant visual impairment. DOC for this patient is Amphotericin B.

Ophthalmology

1. Maklakov tonometer is with a variation in application surface.
2. Most common complication after lens extraction in persistent hyperplastic primary vitreous is Retinal detachment.
3. Chloramphenicol and Methylcellulose can be given in corneal ulcer.
4. Disability certificate given for poor vision if vision is 4/60 in worse eye is 75%.20 year old male with photophobia and subnormal electrophysiological response. Likely diagnosis is Cone-rod dystrophy.
5. Toxoplasmosis could affect eye (Most frequent cause of infectious uveitis in immunocompetent individuals).
6. Secondary glaucoma, Iris atrophy and fixed dilated pupil are seen in Fuchs heterochromic iridocyclitis.
7. Bilateral proptosis is seen in Neurofibromatosis.

Medicine

1. Features of polymyositis includes Limb girdle weakness, paraneoplastic syndrome and Spontaneous discharge in EMG.
2. For a 35 year old woman with recurrent renal stones, restriction of calcium in diet increases the risk of stone formation by causing rise in urine oxalate levels.
3. Increased fluid intake, alkalinization of urine and Penicillamine are indicated in a patient with increased serum cysteine and multiple renal stones.
4. 28 year old man has lenticonus and end stage renal disease. His maternal uncle also died of similar illness. Most likely diagnosis is Alport syndrome.
5. With ageing, a slight decrease in cognitive impairment is seen due to increase in level of Homocysteine.
6. Chronic renal failure patient presents with pain in metatarsophalangeal joint. This is due to accumulation of Uric acid.
7. Blink reflex (Glabellar tap) is used to test Mid pontine lesions.
8. In cervical syringomyelia there is burning sensation in hands, extensor plantar reflex and absent biceps reflex.
9. Gait apraxia and lower limb paralysis is associated with lesions involving area supplied by anterior cerebral artery.
10. Patient on Amphotericin B develops hypokalemia of 2.3 mEq/L. Required K supplement is 120-160 mEq over 24 hours.

11. 70 year old previously normal retired military person complains of bitemporal headache which decreases on lying down. He reveals that he gets relief by giving pressure over both temples, also complaints of appetite and feeling feverish during episodes. Most likely diagnosis will be Temporal arteritis.
12. Patient with Rheumatoid arthritis develops sudden onset quadriparesis, increased muscle tone of limbs with exaggerated tendon jerks and worsening of gait. Investigation to be done is X-ray of neck in flexion and extension.
13. 70 year old females on treatment with Alendronate for severe osteoporosis, now she complains of pain in right thigh. Next investigation should be x-ray to detect atypical subtrochanteric fractures.
14. Features of Type I renal tubular acidosis includes renal stones, hypokalemia and urine pH >5.
15. Patient with hepatitis C, exhibits hypocomplementemia, proteinuria of 2g/day and hematuria. Most probable diagnosis is MPGN.
16. Patient with tuberculous meningitis on ATT, at the end of 1 month of develops deterioration in sensorium. Investigations required for emergency evaluation includes MRI, CSF examination and LFT.
17. Low risk Neuroblastoma does not need treatment.

Surgery

1. Acute anal pain can be caused by Thrombosed haemorrhoids, Acute anal fissure and Perianal abscess.
2. Ileal resection for intussusception in adults can be done in Carcinoid tumors, Lymphoma and Villous adenoma.
3. In Buerger's disease ulnar artery, peroneal arteries and small acral vessels of limbs are involved and neural involvement may be seen.
4. 1st investigation of lactating woman with painful breast lump should be USG breast.
5. Amoebic abscess, Pyogenic abscess and Subdiaphragmatic abscess are associated with elevation o right hemidiaphragm.
6. Stereotactic radiotherapy is used for the treatment of Brain tumor.
7. Patient presents with varicose vein with saphenofemoral incompetence and normal perforators. Treatments of choice will be Endovascular stripping.
8. Recurrence of prostate cancer treated by radiotherapy can be monitored biochemically by Prostate specific antigen.
9. Rupture of the urethra above the deep perineal pouch causes urine retention in True pelvis.

Obstetrics and Gynaecology

1. Treatment of Ca cervix stage IIIB includes concurrent chemoradiation.

2. Woman with 8 weeks amenorrhoea, pain over left lower abdomen and thick endometrium with mass in lateral adnexa on USG. Most probable diagnosis is Ectopic pregnancy.
3. In a study it is observed that the right ovary ovulates more than the left. Possible explanations for this phenomenon includes anatomical asymmetry, difference in blood supply to both sides and differing embryological origin of ovarian veins.
4. Patient with vaginal discharge without cervical discharge, empirical protocol treatment package includes Metronidazole + Fluconazole.
5. In leiomyoma of uterus, there could be Red degeneration, fatty degeneration, Hyaline degeneration and Sarcomatous change (least likely).
6. Feature which is seen during heart disease in pregnancy but not during normal pregnancy is Engorged neck veins.
7. Woman with 36 weeks amenorrhoea with blurred vision and headache. Management of choice is admit, administer antihypertensives, $MgSO_4$ and terminate.
8. Hysterosalpingography is not useful in case of tubal pregnancy.
9. 19 year old patient has primary amenorrhea, well developed breasts and pubic hair but absent vagina and uterus. Most likely diagnosis is mullerian agenesis.
10. 34 weeks multigravida with previous 2 normal deliveries is found to have unstable lie. Most likely diagnosis is Placenta previa.
11. Trial of labour is contraindicated in h/o previous classical caesarean section.
12. Investigation of choice in patient with infertility, dyspareunia and cyclical pain is Diagnostic laparoscopy.
13. Shock index (heart rate/BP) in pregnancy is considered abnormal beyond 0.5-0.7.
14. Retinal haemorrhage, intracranial hemorrhage and subgaleal hemorrhage are more common in ventouse delivery than forceps, cephalohematoma is more common with vacuum extraction and less maternal trauma by vacuum as compared with forceps.

Orthopaedics

1. Modified Allen's test is done at Wrist.
2. Ligaments connecting the menisci to the tibia are known as Coronary ligament.
3. Ankle sprain due to forced inversion of a plantar flexed foot is caused by injury to Anterior talofibular ligament.
4. Dennis stability concept (to evaluate thoracolumbar spinal stability) is based on 3 column.
5. Young male after sudden unconsciousness, on awakening finds that both his arms were adducted and internally rotated. Most probable diagnosis is Posterior dislocation.
6. After brawl, a young male presented with inability to extend his distal interphalangeal joint. X-ray was normal. Next step of management should be Splint.
7. 12 year old boy with symmetric, expansile cystic lesion in proximal humerus. Treatment includes Curettage, Intralesional steroids and Intralesional sclerosing agents.

8. Forced abduction from the lateral aspect of knee causes fracture. Fracture line is passing through intercondylar eminence. Most likely injured structure is Medial collateral ligament.

Pediatrics

1. Air bronchogram on chest X-ray favours diagnosis of RDS in newborn.
2. Child presents with seizures, oval hypopigmented macules on trunk, along with sub-normal IQ. Most likely diagnosis is Tuberous sclerosis.
3. Preterm baby of 32 weeks has RR 86/min with grunting after birth, mid chest indrawing is seen and abdomen lags behind the chest. No nasal flaring or xiphisternal recession. Silverman scoring for neonate is 4.
4. In Wilson's disease there is low serum and high urinary copper.
5. In a preterm baby with patent ductus arteriosus there is Necrotizing enterocolitis, Continuous murmur and Congestive heart failure.
6. Most common cause of sepsis in neonates in developing countries is E. coli.
7. Preterm infant with poor respiratory at birth develops seizures 10 hours after birth. Antiepileptic of choice will be Phenytoin.
8. Neurosurgeon in parent teacher meeting saw a child precocious puberty and uncontrollable laughing. He suggested MRI. Likely disorder is Hypothalamic hamartoma.
9. At 5 years of age child can wear his dress under supervision.
10. Natural reversal of shunt is not possible in Tetralogy of Fallot.
11. 7 year old girl is easily distracted in class and exhibits poor scholastic performance. She has h/o seizures following hyperventilation. Most likely diagnosis is Absence seizure.
12. If 1 of the parents has balanced translocation between chromosome 15 and 21. Couple should be advised Prenatal diagnosis and abortion if necessary.
13. Features associated with Trisomy 13 includes Neurofibroma, Capillary hemangioma and Dermoid cyst.
14. Child has seborrheic dermatitis, sinusitis, chronic draining ear discharge, exophthalmos with failure to thrive and hepatosplenomegaly. Most likely diagnosis is Histiocytosis X.
15. Child with low blood sugar is found to have impaired glycogenolysis and gluconeogenesis. Most likely enzyme deficiency is of Glucose 6 phosphate.
16. 6 year old punjabi child with h/o blood transfusion presents with Hb 3.5 g/dL, MCV 30 fl, microcytic hypochromic anemia with target cells and osmotic fragility reduced. Most probable diagnosis is Beta thalassemia.
17. Child with fever and tibial swelling exhibits periosteal reaction on x-ray and raised ESR. Next step in investigation is MRI. (DD of osteomyelitis or malignancy).

Skin

1. Young male with asymptomatic macules and papules over trunk, reddish patch over palate and flat, moist lesion on glans penis and generalized lymphadenopathy. DOC is Benzathine penicillin (For Syphilis).
2. 50 year old male presented with bullae on body and oral mucosa. Lesion is most likely Suprabasal. (Due to Pemphigus vulgaris).
3. Most likely cause of urticaria following sun exposure is Solar urticaria.

Anaesthesia

1. EEG monitoring is done in General anaesthesia.
2. ASA grade in controlled hypertension is 2.
3. Dose of Atracurium in an obese woman requires calculation of actual body weight instead of average body weight.
4. Nitrous oxide is one of the most potent analgesic agent.
5. If a child is intubated for craniotomy and 2 minutes into surgery, bellows of anaesthetic machines collapse. Next step should be to Ventilate manually.
6. Infant with respiratory distress intubated. Fastest and most accurate method to confirm intubation is Capnography.

Radiodiagnosis

1. Radiological findings in intestinal obstruction includes absence of air-fluid gap does not signify obstruction in supine position, volvulus shows a characteristic appearance on radiograph and small intestine dilation >3 cm is seen.
2. For a patient with obstructive jaundice due to surgical cause, USG can identify Peritoneal deposits, Gallbladder stones and Ascites.
3. In MRCP, T2 weighted images are used for bile and pancreatic secretions in biliary tree, MRCP has less spatial resolution than ERCP and Gadolinium based contrast is not used.

Psychiatry

1. 14 year old boy is not able to get good grades in his 9th standard final exam but he seems to be sharp and intelligent. Best test to diagnose his problem is Specific learning disability test.
2. In insomniacs, sleep is most accurately recorded by Actigraphy.
3. Male started alcohol at 20 years of age and is presently consuming 3 quarters daily over 30 years. Now he complains that he gets the 'kick' following intake of 1 quarter. Most likely diagnosis is Reverse tolerance.

4. Knowledge of own disease/ illness in mental stats examination is known as Insights.
5. For a child who is not eating vegetables, his mother starts giving a chocolate each time he finishes vegetables in the diet. The process is known as Operant conditioning.
6. In frontotemporal dementia there is loss of insight, changes in mood and occurs in less than 65 years of age.
7. Cognitive decline in old age is due to Homocysteine.
8. Young heroin addict is brought in unconscious state and pinpoint pupil. Treatment of choice is IV Naloxone.