

AIIMS PG
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Rapid Review

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Anatomy

1. Unilateral injury to hypoglossal nerve leads to Hemiatrophy of involved side, deviation of tongue towards same side and Fasciculation of the tongue.
2. Muscle spared by complete transection of cranial part of accessory nerve is Stylopharyngeus.
3. After mastectomy patient is not able to extend, adduct and internally rotate the arm. This is due to damage to nerve supply of Latissimus dorsi.
4. Occipital lobe is a part of the Cerebrum.
5. Cervical vertebra is differentiated from the thoracic vertebra by the presence of Foramen transversarium.

Physiology

1. Ventricular depolarization starts from left part of interventricular septum.
2. During moderate exercise, blood flow to the brain does not change.
3. ADH is a neurosecretion which increases post-operatively and acts on distal tubule and increases permeability.
4. Stewart-Hamilton principle is the basis for Thermodilution method used in measurement of cardiac output by pulmonary catheter.
5. Critical closing volume is close to residual volume.
6. CSF pressure is mainly regulated by rate of CSF absorption.
7. Left lobe is responsible for Written and Spoken language.
8. In Lewis Triple response, redness when skin is scratched with a pointed object is seen due to Histamine release due to local injury to mast cells.
9. Mechanisms for heat production in neonates includes breakdown of brown fat with adrenaline secretion, Universal flexion like a fetus and cutaneous vasoconstriction.
10. If the external cues are removed, the sleep-wake cycle in humans continue with cycle length of 24 hours.

Biochemistry

1. Gluconeogenesis in fasting state is indicated by Pyruvate carboxylase activation by Acetyl CoA.
2. Same amino acid is coded by multiple codons due to Degeneracy.
3. Fluorescence means release of longer wavelength light on absorbing of shorter wavelength.
4. DNA estimation can be done by Spectrophotometer.

Forensic Medicine

1. Choking is seen in Shotgun.
2. After a murder by gunshot, primary and secondary markings on a metal bullet can be used for Identification of weapon.
3. A man with suicidal shot on right temple with gun in right hand had skull burst open and there was charring and cherry red colouration in the track inside. This points at Contact shot.
4. Bluish green frothy discharge at the angle of mouth and nostrils is seen in Copper poisoning.
5. In Breslau's second life test, organs tested are Stomach and Intestine.
6. Last organ to be dissected during autopsy in asphyxial death is Neck.
7. If person breaks someone's mandible in alleged fight, police can arrest without warrant.
8. Heat stiffening in muscles occurs above 60 degree C.
9. Active partner in lesbianism is called 'Butch' or 'Dyke' and passive partner is called 'Femme'.
10. According to a recent SC judgement, doctor can be charged for Medical Negligence under section 304-A, only if there is Gross negligence.
11. Patient with pinpoint pupil, salivation, tremors, red tears and cholinesterase activity was 30% of normal. Probable diagnosis is Organophosphate poisoning.

PSM

1. In WHO 'Road to health' chart, upper and lower limit of represents 50 percentile for boys and 3 percentile for girls.
2. In 13-15 year girl, recommended daily protein intake is 1 g/kg/day.
3. Common to both acute and chronic malnutrition is weight for age.
4. Rashtriya Swasthya Bima Yojna is government run insurance scheme for all poor.
5. In vision 2020, the target for Secondary service centre is for 5 lakhs population.
6. Leprosy is not yet eradicated because there is no effective vaccine for it.
7. Role of social worker is health professional involved in coping strategies, interpersonal skills, adjustment with family.
8. In AFP surveillance, evaluation for residual paralysis is done at 60 days.
9. Bias can be eliminated by Matching, Blinding and Randomization.
10. A study revealed lesser incidence of carcinoma colon in pure vegetarians than non-vegetarians by which it was concluded that beta carotene is protective against cancer. This may not be true because the vegetarian subjects may be consuming high fiber diet which is protective against cancer. This is an example of Confounding factor.
11. Food with maximum cholesterol content is egg.
12. Factors helpful for elimination of Filariasis includes Microfilaria do not multiply in vectors and they multiply in humans.
13. Incubation period is used to differentiate co-primary cases from secondary cases, to find out time for Quarantine and to prevent infection to the contacts of the infected person.

14. Indian reference male is of age 18-29 years.
15. Hydrological natural disaster causes maximum deaths.
16. According to the Workmen's Compensation Act, 1923, Anthrax is considered an occupational disease.
17. In vision 2020, ophthalmic personnel per population ratio is 50000.
18. A sexually active, long distance truck driver's wife has vaginal discharge. Under syndromic approach, Metronidazole, Azithromycin and Fluconazole should be given.
19. A person found some correlation between fatty food intake and a disease due to obesity. He did this by collecting data from the food manufacturers and hospitals. Such a study is Ecological study.
20. In a certain population, there were 4050 births in last 1 year, 50 stillbirths, 50 infants died within 7 days whereas 150 died within 1st 28 days. So Neonatal mortality rate is 50.

Surgery

1. Most important pathophysiological cause of GERD is transient LES relaxation.
2. After removal of parotid gland, patient is having sweating on cheeks while eating. In this complication seen after parotidectomy, the auriculotemporal nerve which contains parasympathetic secretomotor fibers to parotid gland is fused with Great auricular nerve.
3. Epigastric hernia is located above the umbilicus and always in the midline.
4. Jaw cyst which is premalignant is Odontogenic keratocyst.
5. Lady had Meningioma with inflammatory lesion was planned for surgery. Wrong thing to do pre-op would be to stop steroids.
6. Toddler had few drops of blood coming out o rectum. Probable diagnosis is Juvenile Rectal Polyp.
7. Female patient had dysphagia, intermittent epigastric pain and on endoscopy esophagus was dilated above and narrow at the bottom. Treatment is Heller's cardiomyotomy.
8. Due to advances in cancer treatment, the prognosis of ALL in children has become better.
9. Barrett's esophagus is diagnosed by Intestinal metaplasia.
10. Ca breast Stage T4b involves skin ulcer over swelling, dermal edema and satellite nodule.
11. Patient of Crohn's disease underwent resection anastomosis. Now presents on 7th post op day with anastomotic site leak (150-200 ml/day) from a fistula. No intra-abdominal collection and patient is stable without any complains. Next line of management is conservative treatment and hope for spontaneous resolution.
12. 40 year old male with hematemesis, BP 90/60 mmHg, Heart rate 120/min and splenomegaly. Most probable cause of bleeding is Portal hypertension.
13. External hemorrhoids below dentate line are painful.
14. Early complication of ileostomy in the postoperative period is Necrosis.
15. Patient with pain and tenderness in left iliac fossa. USG shows 3 cm stone in renal pelvis without any hydronephrosis. Most appropriate management is Percutaneous Nephrolithotomy (PCNL).
16. Drug used in estrogen dependent breast cancer is Tamoxifen.

17. After doing a graft repair of thoracoabdominal aneurysm, patient developed weakness in both legs. Most probable cause for this is discontinuation of arteria radicularis magna.
18. Due to decelerations, aorta can be ruptured at places where it is fixed except at behind the esophagus.
19. 40 year old male patient presented with mild abdominal pain, mild constipation with a feeling of incomplete evacuation and mucus in stools for the past 4 years. On examination, tenderness is present in left iliac fossa. Most likely diagnosis is irritable bowel syndrome.
20. Characteristic of basal cell carcinoma is Nuclear palisading.

Orthopaedics

1. Newborn child presents with inverted foot and dorsum of foot cannot touch anterior tibia. Most probable diagnosis is CTEV.
2. After RTA with injury to left knee, Dial test was positive. Cause could be Posterolateral corner injury.
3. Middle aged woman with lower back pain and weakness of extension of right toe with no sensory impairment. MRI of lumbosacral spine would most probably reveal prolapsed intervertebral disc at L4-L5.
4. 8 year old child has fever with pain and swelling in mid-thigh. Lamellated appearance and Codman's triangle is seen on X-ray. Histopathology shows small round cell tumor positive for MIC-2. Diagnosis is Ewing's sarcoma.
5. After a fall woman couldn't move, has leg externally rotated, tenderness in Scarpa's triangle and limb movement could not be done due to pain. No hip fracture was seen on X-ray. Next step is MRI.
6. Gallow's traction is used for fracture of Shaft of femur.
7. Patient with alcohol binge previous night and sleeping on arm chair. In morning he is unable to move his hand and diagnosis of ulnar nerve palsy is made. Next line of management is Knuckle Bender splint.
8. A person is able to abduct his arm, internally rotate it, place the back of hand on lumbosacral joint but is not able to lift it from back. Etiology is Subscapularis tendon tear.

Ophthalmology

1. Corneal dystrophies are usually Primarily unilateral.
2. Area of fundus seen with direct ophthalmoscope is 2 DD.
3. Weakness of both adduction and abduction is seen in Duane's retraction syndrome type 3.
4. Gyrate atrophy patient with defective ornithine aminotransferase will be benefited by Arginine free diet.

5. In patient with anterior uveitis, decrease in vision due to posterior segment involvement can occur because of Cystoid Macular Edema (CME).
6. Patient with h/o hit by tennis ball, on fundoscopy shows red dot. Probable cause is Berlin's edema.
7. Ocular dendritic cells have HLA 2.
8. Patient with unilateral proptosis which is compressible and increases on bending forward. No thrill or bruit was present. MRI shows a retro orbital mass with enhancement. Likely diagnosis is Orbital varix.
9. Cause of vitreous hemorrhage in 40 year old diabetic male is most probably Neovascularization at disc.
10. Young adult with diminished vision, anterior uveitis, vitritis, focal necrotizing granuloma and macular spot. Most probable diagnosis is Ocular toxoplasmosis.

ENT

1. Initial screening test for newborn hearing disorder is otoacoustic emissions (OAE).
2. Vestibular evoked myogenic potential (VEMP) detects lesion of Inferior vestibular nerve.
3. Second primary tumor of Head and Neck is most commonly seen in malignancy of Oral cavity.
4. In Electrocochleography, evoked potential generated in cochlea and auditory nerve.
5. In right handed person, Direct laryngoscope is held by Left hand.
6. 6 year old child with h/o recurrent URTI, mouth breathing, nasal obstruction, hearing impairment and high arched palate. Management will be Adenoidectomy with grommet insertion.

Radiology

1. 'Bracket calcification' on skull X-ray is seen in Lipoma of corpus callosum.
2. Child was taken for CECT chest and contrast was injected, child had swelling which gradually increased, there is numbness, pain on passive extension of fingers and he is not allowing to touch the arm. Pulse is present. Next step is Immediate Fasciotomy.
3. Stereotactic Radiotherapy is used in Inoperable Stage I lung tumor.
4. Anastrozole is non-iodine containing contrast.
5. Maximum radiation exposure occurs in CT scan.
6. Most reliable test for diagnosing spinal TB is CT guided biopsy.

Pharmacology

1. Phenytoin and carbamazepine acts by prolonging Na⁺ channel activation.
2. Carbamazepine is also used in trigeminal neuralgias.

3. Despite their short half-life (2 hours), PPIs cause a prolonged suppression of acid secretion (up to 48 hours) because they irreversibly inhibit the proton pump molecule and hence, acid secretion requires synthesis of new proton pumps.
4. fluphenazine is antipsychotic available as depot injection.
5. In 1st order kinetics, rate of elimination is proportional to the plasma concentration.
6. Drug induced colitis is most frequently associated with Clindamycin.
7. Woman on treatment for depression took a massive dose of amitriptyline for suicide. Her management should include gastric lavage, sodium bicarbonate to treat acidosis and Diazepam to control seizures.
8. SLE like syndrome could be caused by INH, hydralazine and Sulphonamides.
9. Tamoxifen is used to treat hormone responsive breast cancer.
10. Sodium cromoglycate is banned for players by International olympic Committee (IOC).
11. Traditional medicine which is effective in treatment of heart failure is Terminalia Arjuna.
12. Amifostine is a Radioprotector.

Microbiology

1. Sputum can be disinfected by Autoclaving, Boiling and Cresol.
2. 5 year old boy has h/o pyogenic infections by bacteria with polysaccharide-rich capsules. Investigation of choice is IgA and IgG2 deficiency test.
3. A abattoir (slaughterhouse) worker presented with pustule on his right hand that progressed to form an ulcer. Smear for laboratory investigation should be stained with Polychrome methylene blue (For cutaneous Anthrax).
4. Antibiotic resistance is most commonly by production of neutralizing enzymes by bacteria, complete elimination of target is mechanism by which enterococci develop resistance to vancomycin and alteration of resistance to antibiotics in streptococcus pneumoniae.
5. Person with pneumonia on sputum culture shows gram positive cocci in chains and alpha hemolytic colonies on sheep agar. Diagnosis can be confirmed by Optochin.
6. Young male with urethral discharge and on urine examination pus cells were found but no organisms. Best method for culture in this patient is McCoy cell line.
7. Synthesis of an immunoglobulin in membrane bound or secretory form is determined by differential RNA processing.

Pathology

1. Young woman on routine examination had mid systolic click but no RHD. Histopathological examination will most likely show myxomatous degeneration and prolapse of mitral valve.
2. Characteristic of irreversible injury on electron microscopy is amorphous densities in mitochondria.
3. Acute lymphoid leukemia in less than 1 year old has poor prognosis.

4. In Bombay blood group there is lack of H, A and B antigen on RBCs, lack of H, A and B substance in saliva and H, A and B antibody will always be present in serum in it.
5. Hematopoietic stem cell differs from progenitor stem cell in that they can cause long term reconstitution of bone marrow.
6. In inflammation, Bradykinin increases vascular permeability.
7. 23 year old woman with jaundice and pallor for 2 months and spherocytes on peripheral blood smear. Most relevant investigation to arrive at a diagnosis is Coomb's test.
8. Fixative used in histopathology is 10% buffered neutral formalin.
9. Newborn baby with profuse bleeding from umbilical stump after birth and PT, APTT are within normal limits. Most probable diagnosis is Glanzmann thrombasthenia.

Medicine

1. Corticospinal injury is associated with Babinski sign positive, Superficial abdominal reflex absent and Clasp knife rigidity.
2. In porphyrias, enzyme defects which leads to photosensitivity includes Uroporphyrinogen decarboxylase, protoporphyrinogen oxidase and Coproporphyrinogen oxidase.
3. 50 year old male with complains of unilateral headache, diplopia, difficulty in chewing food, MRI normal and high ESR. Most appropriate drug for treatment is Prednisolone.
4. 20 year old male with jaundice for past 2 weeks, serum bilirubin 0.9 mg/dL, SGOT/SGPT is 1240/1450 IU, HBsAg and IgM anti HEV positive and negative IgM anti HBc. Most likely diagnosis is superinfection of hepatitis E virus with chronic hepatitis B infection.
5. Patient with normal hemoglobin had sudden massive acute hemorrhage. Finding will include high reticulocyte count, high neutrophil count and high packed cell volume.
6. Treatment of a patient with myocardial infarction is thrombolytic therapy if the patient presents within 24 hours of chest pain.
7. Small vessel disease is not related to cerebral amyloid angiopathy but not correlated to Alzheimer's disease.
8. Cerebral amyloid angiopathy is associated with Alzheimer's disease.
9. 40 year old woman with dyspnoea on exertion grade III, palpitations, atrial fibrillation with fast ventricular rate on ECG and echocardiography shows severe mitral stenosis with left atrial appendage clot. Management includes Diltiazem to control ventricular rate, start warfarin and follow-up with repeat echocardiography and open mitral commissurotomy with clot removal.
10. Most common clinical presentation of juvenile myoclonic epilepsy is Myoclonus.
11. Most common form of spinocerebellar ataxia (SCA) in India is SCA2.
12. Type of wave in Metabolic encephalopathy is Delta waves.
13. In 2 patients with Atherosclerosis, 1 is diabetic and other non-diabetic. In relation to non-diabetic, diabetic patient has 100 times increased risk of Lower limb ischemia.
14. In Pneumonia severity scale, most important factor is Age.
15. Pseudotumor cerebri is seen in Obese males 20-40 years old.

16. Most prominent feature of Immunoproliferative small intestinal disease (IPSID) is Abdominal pain.
17. 25 year old person with h/o repeated episodes of Rheumatic fever is hypersensitive to penicillin. Drug which should be prescribed to him is Sulfisoxazole.
18. Patient with PCO₂ 30 mm Hg, PO₂ 105 mm Hg and pH 7.45 is having partially compensated Respiratory alkalosis.
19. Post-transplant lymphoma is most likely associated with EBV.
20. Hepatitis B most significantly increases the risk of hepatocellular carcinoma.
21. 60 year old male had sudden fall in toilet. BP 90/50 mm Hg, pulse 100/min, stool was dark coloured, known hypertensive and coronary artery disease patient and was regularly taking aspirin, atenolol and sorbitrate. Most likely diagnosis is Gastric ulcer with bleeding.
22. Study of skin biopsy of SLE patient using FITC labelled human IgG antiserum shows deposition of irregular particles at dermoepidermal junction. This means there is presence of Immune complex deposits.
23. Hereditary spherocytosis is associated with an intrinsic defect in RBC membrane.
24. Fever blisters can occur due to reactivation of HSV-1.
25. Woman of 40 years with intolerance to cold, constipation and hoarseness of voice had cardiomegaly on chest X-ray. Best investigation to determine cause of cardiomegaly is Echocardiography.
26. Elderly male with headache, fever and hemiparesis was found to have brain abscess. Antibacterial effective in this patient would be a combination of Cephalosporin and Metronidazole.
27. 45 year old woman with pneumococcal meningitis had blood sample sent for culture. Best time to start as an empirical treatment is Vancomycin + Ceftriaxone.
28. Oculomotor nerve is most likely to be affected in an aneurysm of posterior cerebral artery (PCA).
29. Adult hypertensive male with sudden onset severe headache and vomiting, marked neck rigidity and no focal neurological deficit. Most likely cause is Subarachnoid hemorrhage.
30. Elderly woman with transmural MI. Based on her ECG, she was started on thrombolytic therapy with streptokinase. On further investigations, significant pericardial effusion on echocardiography would indicate that thrombolytic therapy is risky and should be stopped.
31. 60 year old woman with decreased movements for last 2 years with rigidity and vertical large square wave jerks. Most likely diagnosis is progressive supranuclear palsy.
32. For Hepatitis B, age of onset determines prognosis, period of communicability lasts several months and Virus can be found in blood 1 month before jaundice.
33. Most specific urinary ending in a boy suffering from acute pyelonephritis is WBC casts.
34. 25 year old woman presents with h/o recurrent abortions. Most relevant investigation to identify the cause is Dilute russell viper venom time.

Pediatrics

1. Side effects of growth hormone therapy includes slipped capital femoral epiphysis, Gynaecomastia and Pseudotumor cerebri.
2. Neonate is suspected to be suffering from necrotizing enterocolitis (NEC). He is diagnosed to have Bell's stage I NEC. management of choice is conservative management with IV fluids and antibiotics.
3. Cancer management in ALL in children has dramatically increased the survival.
4. 10 year old male child for evaluation of seizure disorder. On examination a vascular plaque was found along ophthalmic and maxillary divisions of trigeminal nerve. Mother informed lesions was present since birth and there was no change in morphology. Most likely possibility is Sturge Weber syndrome.
5. Pathology of edema in nephrotic syndrome is Reduced plasma protein.
6. Air bronchogram in a newborn suggests RDS.

Obstetrics and Gynaecology

1. 26 year old primigravida with severe rheumatic heart disease (MS with MR) is in early labour. For trial of normal labour, ideal intervention for labour analgesia is Neuraxial analgesia.
2. 26 year old primigravida at 32 weeks of gestation experienced faintness and nausea in lying down and recovers after turning on her side or getting up. These symptoms can be attributed to inferior vena caval compression.
3. Test used to differentiate between maternal and fetal blood is Apt test.
4. Treatment of Ca cervix IIB includes intracavitary brachytherapy followed by external beam radiotherapy.
5. 55 year old woman with Ca cervix, FIGO stage 2-3 locally advanced. Management is Radiotherapy and chemotherapy.
6. Endometrial cancer involving >50% of myometrium, extending to vagina, no pelvic extension, no pre and para aortic lymph nodes. Peritoneal lavage was positive staged as IIb.
7. 20 year old average weight woman complains of oligomenorrhea along with facial hair raised free testosterone levels and USG pelvis shows normal ovary. Likely etiology is PCOD.
8. After full term normal delivery patient went into shock. Most probable cause could be inversion of uterus or PPH.
9. Highest volume overload in a parturient due to maximum cardiac output is seen immediately after delivery.

Skin

1. Infant has papulovesicular lesions on palms, soles, face and trunk. Diagnosis is Scabies.

2. Young boy had itchy, excoriated papules on forehead and exposed parts of arms and legs for 3 years. Disease was most severe in rainy season improved completely in winter. Most likely diagnosis is Insect bite hypersensitivity.
3. 27 year old sexually active wife of long distance truck driver presented with copious vaginal discharge of 2 days duration. According to syndromic management of vaginal discharge, treatment should be Azithromycin + Metronidazole + Fluconazole.
4. Lady develops pigmentation of bridge of nose and cheeks on exposure to sunlight. Most likely diagnosis is Chloasma.
5. Characteristic feature of borderline leprosy is Inverted saucer shaped lesions.
6. Multiple hypoaesthesia, hypopigmented macules on right lateral forearm with numerous acid fast bacilli is indicative of Borderline leprosy.
7. 60 year old male with discoloration thickening and tunneling of 2 fingernails and 1 toenail. KOH mount will clinch the diagnosis at earliest.
8. 24 year old male had multiple, small hypopigmented macules on upper chest and back or last 3 months. Macules were circularly, arranged around follicles and many had coalesced to form large sheets. Surface of macules showed fine scaling. he had similar lesions 1 year ago which subsided on treatment. Most appropriate investigation to confirm diagnosis is KOH preparation.
9. Actinic keratosis is associated with sun exposure.

Anaesthesia

1. In a pregnant female, there is decreased requirement of the spinal anaesthetic agent because of decreased volume of subarachnoid space, engorgement of epidural space and increased sensitivity of nerves to anaesthetic agent.
2. Scoline apnea is due to succinylcholine, it can be inherited and patients usually do not die of it if properly managed.
3. 40 year old woman has to undergo incisional hernia surgery under general anaesthesia. She complains of awareness during her past cesarean section. Monitoring techniques which can be used to prevent such awareness is Bispectral index monitoring.
4. Patient with blunt trauma had HR 150/min and BP 80/50 mm Hg. Anaesthetic agent of choice for emergency laparotomy is Ketamine.
5. 32 year old male with injury in bomb blast had suspected injury to splenic injury and is supposed to undergo an emergency laparotomy. Ideal anaesthetic agent of choice is Etomidate.
6. Most important constituent in soda lime for reabsorption of CO₂ in a closed circuit is Calcium hydroxide.
7. Maximum dose of lignocaine with adrenaline for local blocks in ophthalmic surgeries is 7 mg/kg.
8. 10 year old child undergoing squint surgery suddenly developed increased HR, arrhythmia, high fever, metabolic and respiratory acidosis on ABG and elevation of end tidal CO₂. 1st agent of choice in management of this condition is Dantrolene.

Psychiatry

1. Diagnostic features that differentiated PTSD from other disorders that occur following a stressful incidence is recall of events and avoidance of trauma.
2. Disorders of form of thought includes Derailment, Tangentiality and loosening of association.
3. Brain is considered 'responsive' because it is a closed system responding to internal stimuli but not to external.