

Fcps-1 past paper Medicine and Allied (2nd Release) February 2019.

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Most effective agent to prevent motion sickness is
Hyoscine

Which of the following drugs has covalent interaction with its target ?
Aspirin

Alprostadil is not used for :
Patent ductus arteriosus

The antifungal which has a bactericidal mode of action against dermatophyte infections in therapeutic doses is :
Terbinafine

A drug 'X' primarily reduces the static component of urinary obstruction in benign hypertrophy of prostate and takes more than 3 months to exert its beneficial effect. Which of the following is 'X' ?

Finasteride

The following is a marker of acute hepatitis B infection -
DNA polymerase

Isolated 3rd nerve palsy is Seen in-
Diabetes

All of the following predispose to IHD except
Alcoholism

The following are characteristic of tumour lysis syndrome except -
Hypercalcemia

Picture frame vertebrae is seen in -
Paget's disease

Malignant tertian fever: falciparum
type of malaria

Autoimmune diseases: . **Haematological**
as it acts via immune system

Loss of inhibitory hypothalamic hormone: **prolactin**

Lady palpitation on exertion: **sinus tachycardia**
Sinus tachycardia is usually a response to normal physiological situations, such as exercise and an increased sympathetic tone with increased catecholamine release—stress, fright, flight, anger.

Extra systole: **low stroke volume**
less time for filling

Post-thyroidectomy: **hypocalcaemia tetany**
Postoperative hypocalcemia is a common complication following thyroidectomy. Decreased serum calcium, secondary to hypoparathyroidism, may present clinically with muscle cramps, perioral and peripheral paresthesias, carpopedal spasm or tetany, and/or confusion.

Chlorpromazine: **dystonic reactions**
primarily used to treat psychotic disorders such as schizophrenia.[2] Other uses include the treatment of bipolar disorder, attention deficit hyperactivity disorder, nausea and vomiting, anxiety before surgery, and hiccups that do not improve following other measures.[2] It can be given by mouth, by injection into a muscle, or into a vein.[2]

Common side effects include movement problems, sleepiness, dry mouth, low blood pressure upon standing, and increased weight.[2] Serious side effects may include the potentially permanent movement disorder tardive dyskinesia, neuroleptic malignant syndrome, and low white blood cell levels.[2]

Anti-Depressant in epileptic Child: **Fluoxetine**
(*fluoxetine*) is the only approved antidepressant for *children* ages 8 and older.

Help killing Tumour cells: **MHC1**
the function of the class I MHC is to display intracellular proteins to cytotoxic T cells (CTLs). class I MHC itself can serve as an inhibitory ligand for natural killer cells (NKs). Reduction in the normal levels of surface class I MHC, a mechanism employed by some viruses[4] and certain tumors to evade CTL responses, activates NK cell killing.

Capnometer: saturation of CO2

a monitoring device that measures and numerically displays the concentration of carbon dioxide in exhaled air

Nasopharyngeal carcinoma: EBV

Injury to middle meningeal artery: blood b/w meninges and calvaria

The middle meningeal artery (Latin: arteria meningea media) is typically the third branch of the first portion of the maxillary artery, one of the two terminal branches of the external carotid artery. After branching off the maxillary artery in the infratemporal fossa, it runs through the foramen spinosum to supply the dura mater the outer meningeal layer, and the calvaria. The middle meningeal artery is the largest of the three (paired) arteries that supply the meninges, the others being the anterior meningeal artery and the posterior meningeal artery.

An injured middle meningeal artery is the most common cause of an epidural hematoma. A head injury (e.g., from a road traffic accident or sports injury) is required to rupture the artery. Emergency treatment requires decompression of the haematoma, usually by craniotomy. Subdural bleeding is usually venous in nature, rather than arterial.

The middle meningeal artery runs in a groove on the inside of the cranium. This can clearly be seen on a lateral skull X-ray, where it may be mistaken for a fracture of the skull.

Increased hydrostatic pressure: CCF

pooling of blood in veins → increase hydrostatic → edema

Intervertebral disc joint: symphyses

An intervertebral disc (or intervertebral fibrocartilage) lies between adjacent vertebrae in the vertebral column. Each disc forms a fibrocartilaginous joint (a symphysis), to allow slight movement of the vertebrae, to act as a ligament to hold the vertebrae together, and to function as a shock absorber for the spine.

Clearance of defective proteins: proteasome

Proteasomes are protein complexes which degrade unneeded or damaged proteins by proteolysis, a chemical reaction that breaks peptide bonds. Enzymes that help such reactions are called proteases.

Mandibular nerve: for. Ovale

H/o repeated transfusion, sibling: **hb electrophoresis**
thalassemia?

Steatorrhea: lipase

pancreatitis?

Impaired digestion or absorption can result in fatty stools. Possible causes include exocrine pancreatic insufficiency, with poor digestion from lack of lipases, loss of bile salts, which reduces micelle formation, and small intestinal disease producing malabsorption

Autoimmune Example of single organ involvement: hashimoto thyroiditis

antibodies directed against the **thyroid** gland lead to chronic inflammation.

Uterine fibroids in pregnancy: **red degeneration**
characteristic of fibroid

3rd branchial arch: stylopharyngeus

Pharyngeal Arch	Nerve	Artery	Neural Crest (Skeletal Structures)	Muscles	Ligaments
1 (maxillary/man- dibular)	trigeminal (CN V)	maxillary artery (terminal branches)	mandible, maxilla, malleus, incus	muscles of mastication, mylohyoid, tensor tympanic, ant. belly digastric	ant lig of malleus, sphenomand- ibular ligament
2 (hyoid)	facial (CN VII)	stapedial (embryonic) corticotym- panic (adult)	stapes, styloid process, lesser cornu of hyoid, upper part of body of hyoid bone	muscles of facial expression, stapedius, stylohyoid, post. belly digastric	stylohyoid ligament
3	glossophary- ngeal (CN IX)	common carotid, internal carotid arteries	greater cornu of hyoid, lower part of body of hyoid bone	stylophary- ngeus	

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Uterus in Late pregnancy Sensitive: **oxytocin**

Right Optic Tract Lesion: **left hemianopia**

Homonymous hemianopsia) is hemianopic visual field loss on the same side of both eyes. Homonymous hemianopsia occurs because the right half of the brain has visual pathways for the left hemifield of both eyes, and the left half of the brain has visual pathways for the right hemifield of both eyes. When one of these pathways is damaged, the corresponding visual field is lost.

Keratitis, xerosis: **sjogren syndrome**

is a **disorder** of your immune system identified by its two most common symptoms — dry eyes and a dry mouth.

Sjogren complication = **pulmonary Fibrosis**

characterised by diffuse lymphocytic infiltration of the airway. It is sometimes responsible for a crippling chronic cough. It can also present in the form of bronchial hyperresponsiveness, bronchiectasis, bronchiolitis or recurrent respiratory infections.

Vitamin E deficiency: **Muscular dystrophy**

Muscular dystrophy, hematologic changes, and the excretion of urinary nitrogenous constituents. ... Anemia was the first sign of **vitamin E deficiency** which was observed

Idiopathic thrombocytopenic purpura: **anti-platelet antibodies**

Idiopathic thrombocytopenic purpura (ITP) is a disorder that can lead to easy or excessive bruising and bleeding. The bleeding results from unusually low levels of platelets. also called immune thrombocytopenia, affects children and adults. Children often develop ITP after a viral infection and usually recover fully without treatment. In adults, the disorder is often long term.

Botulinum toxin: **respiratory muscles paralysis**

Botulism is a rare presynaptic neuromuscular junction disorder caused by potent **toxins** produced by the anaerobic, spore-forming, Gram-positive bacterium *Clostridium botulinum*.

Vibrio cholera: water and food transfer

Vibrio cholerae is a Gram-negative, comma-shaped bacterium. The bacterium's natural habitat is brackish or saltwater. *V. cholerae* pathogenicity genes code for proteins directly or indirectly involved in the virulence of the bacteria. During infection, *V. cholerae* secretes cholera toxin, a protein that causes profuse, watery diarrhea (known as "rice-water stool"). Colonization of the small intestine also requires the toxin coregulated pilus (TCP). Cholera infections are most commonly acquired from drinking water in which *V. cholerae* is found naturally or into which it has been introduced from the feces of an infected person. Other common vehicles include contaminated fish and shellfish, produce, or leftover cooked grains that have not been properly reheated. Transmission from person to person, even to health care workers during epidemics

A female patient presented after delivery with C/O sudden Chest pain, breathlessness and haemoptysis.

ECG shows S1 Q3 T3 pattern. ::: **Gallium scan/CT P angiography.**

A **gallium scan** is a test to look for swelling (inflammation), infection, or cancer in the body. It uses a radioactive material called **gallium** and is a type of nuclear medicine exam

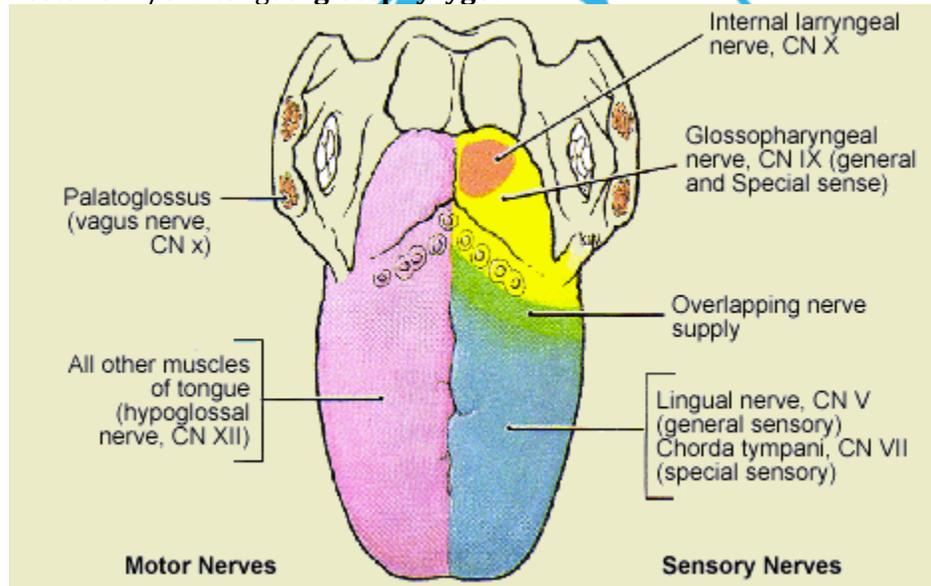
Anti- tumour cells: NK cells

Natural killer cells, or NK cells, are a type of cytotoxic lymphocyte critical to the innate immune system. The role NK cells play is analogous to that of cytotoxic T cells in the vertebrate adaptive immune response. NK cells provide rapid responses to virus-infected cells, acting at around 3 days after infection, and respond to tumor formation. Typically, immune cells detect major histocompatibility complex (MHC) presented on infected cell surfaces, triggering cytokine release, causing lysis or apoptosis.

Weak part of rib: angle

The **portion** of the **rib** that curves toward the front of the **rib** cage (the angle of the **rib**) is the **weakest part** of the **rib** and therefore likely to be fractured. ... If the costal cartilage becomes detached from the sternum, this is known as a **rib** dislocation. The most frequent site for **rib** dislocation involves **ribs** 8-10

Posterior 1/3rd tongue: glossopharyngeal



Ultra violet radiation: cataract

Ultraviolet radiation as a risk factor for *cataract* and macular degeneration. ... This radiation exposure can lead to impaired vision and transient or permanent blindness. Both ultraviolet-A (UV-A) and UV-B induce *cataract* formation

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Acutely raised pulse = high stroke volume

Acclimatization = hyperventilation

mostly in people living on high altitudes

Negative inotropic: acetylcholine

parasympathetic and vagus nerve activation that releases **acetylcholine** onto your sinoatrial node This action decreases pacemaker rate by increasing potassium and decreasing calcium and sodium movement. As the

pacemaker slows, so does your **heart** rate. Please don't die ☺

Multiple transfusions, 2000 Ferritin= DEFEROXAMINE

is a medication that binds iron and aluminium. It is specifically used in iron overdose, hemochromatosis either due to multiple blood transfusions or an underlying genetic condition, and aluminium toxicity in people on dialysis.

UTI: CIPROFLOXACIN

Cipro and Macrobid are commonly used to treat urinary tract infections (**UTI**). ... It should not be used for more severe **UTIs** or kidney infections. **Cipro** is sometimes used for more severe **UTIs** or kidney infections,

ASPIRIN MOA = THROMBOXANE A-2

Aspirin's ability to suppress the production of prostaglandins and thromboxanes is due to its irreversible inactivation of the [cyclooxygenase](#)

Reabsorption Of Na And H2O: aldosterone

Aldosterone, the main mineralocorticoid hormone, is a steroid hormone produced by the zona glomerulosa of the adrenal cortex in the adrenal gland.[1][2] It is essential for sodium conservation in the kidney, salivary glands, sweat glands and colon.[3] It plays a central role in the homeostatic regulation of blood pressure, plasma sodium (Na⁺), and potassium (K⁺) levels. It does so primarily by acting on the mineralocorticoid receptors in the distal tubules and collecting ducts of the nephron.[3] It influences the reabsorption of sodium and excretion of potassium (from and into the tubular fluids, respectively) of the kidney, thereby indirectly influencing water retention or loss, blood pressure and blood volume.[4]

Apraxia related question: premotor area involved

Apraxia is a motor disorder caused by damage to the brain (specifically the posterior parietal cortex) in which the individual has difficulty with the motor planning to perform tasks or movements when asked, provided that the request or command is understood and the individual is willing to perform the task.

The *posterior parietal cortex* (the portion of *parietal neocortex posterior* to the primary somatosensory cortex) plays an important role in planned movements, spatial reasoning, and attention.

Rate and duration of respiration controlled by: Pneumotaxic

Calcitonin is given in: Paget's disease

Calcitonin is recommended for treatment of **Paget disease** if bisphosphonates are contraindicated. This agent is a peptide hormone that binds to **calcitonin** receptors on osteoclasts and rapidly inhibits bone resorption. ... Levels of urinary hydroxyproline may decrease quickly, indicating inhibition of bone resorption