

NAME: AKINTUNDE DOLAPO AYOMIDE.

MATRIC NUMBER: 18/MHS02/033.

COURSE TITLE: GROSS ANATOMY

COURSE CODE: ANA 201

ASSIGNMENT.

1. Describe the importance of vasculature in relation to immune system and outbreak of pandemic COVID-19 on the human body.
2. Subartorial canal is an important area in the lower limb, discuss.
3. Describe the Extraocular and intraocular muscles with their nerve supply.

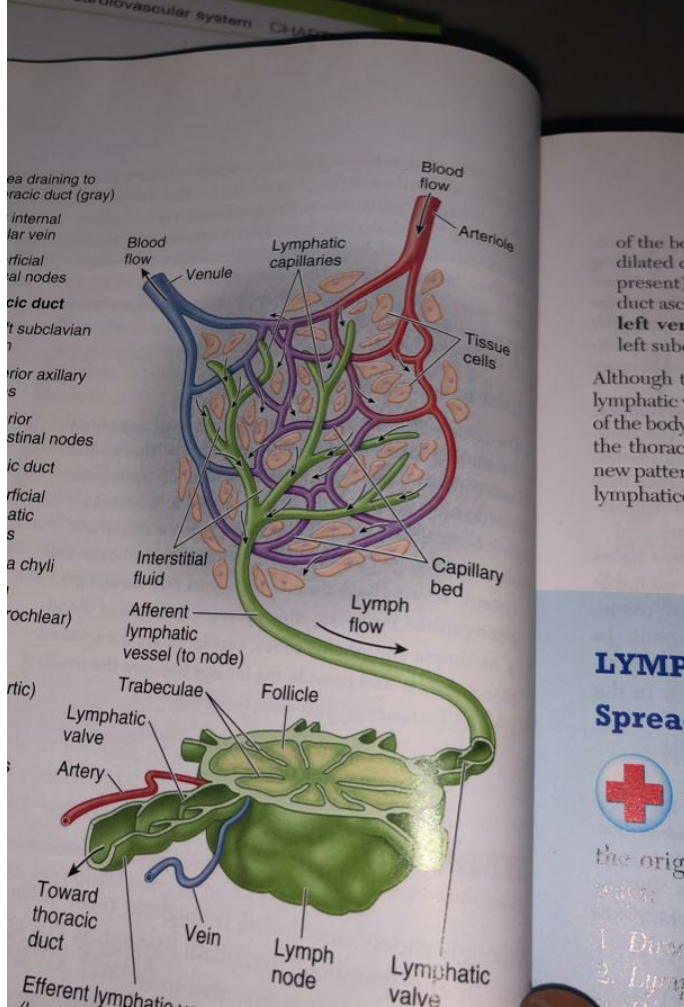
Answers.

Vasculature is the arrangement of blood vessels in the body or within an organ while Immune system differentiates self from non-self and protects the body from foreign substances and pathogenic organisms by producing an immune response. It includes organs such as the thymus, the spleen and lymph node; tissue such as bone marrow, and lymphoid tissues such as the tonsils cells such as lymphocytes including the B cells and T cells, and cell products such as antibodies.

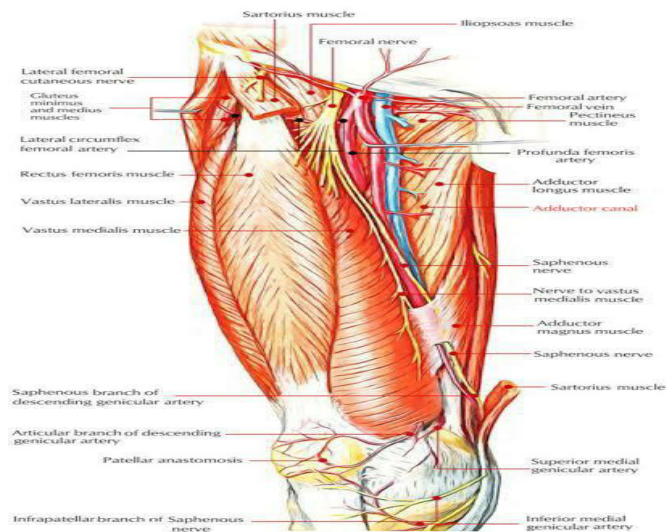
The Corona virus is so new that nobody has a reasonable immune response. It is believed that lifelong immunity is unlikely. This "privilege" is reserved for viruses that remain in the body for a long time and give our immune system a virtually permanent opportunity to get to know it. Since the coronavirus is an RNA (and not a DNA) virus, it cannot permanently settle in the body.

The coronavirus is like any other virus, not much more than a shell around genetic material and a few proteins. To replicate, it needs a host in the form of a living cell. Once infected, this cell does what the virus commands it to do: copy information, assemble it, release it. Within a few minutes, the body's immune defense system intervenes with its innate response: Granulocytes, scavenger cells and killer cells from the blood and lymphatic system stream in to fight the virus. They are supported by numerous plasma proteins that either act as messengers or help to destroy the virus.

For many viruses and bacteria, this initial activity of the immune system is already sufficient to fight an intruder. It often happens very quickly and efficiently. We often notice only small signs that the system is working when we have a cold or fever.



2. Subsartorial canal is also called adductor canal or Hunter's canal. Subsartorial canal provides an inter muscular passage for the femoral artery and vein, the saphenous nerve, and the slightly larger nerve to vastus medialis, delivering the femoral vessels to the popliteal fossa where they become popliteal vessels.



3. EXTRAOCULAR MUSCLE (DESCRIPTION).

The extraocular muscles are located within the orbit, but are extrinsic and separate from the eyeball and the superior eyelid.

There are seven extraocular muscles; the levator palpebrae superior, superior rectus, inferior rectus, lateral rectus, medial rectus, inferior oblique and superior oblique. Functionally, they can be divided into two groups:

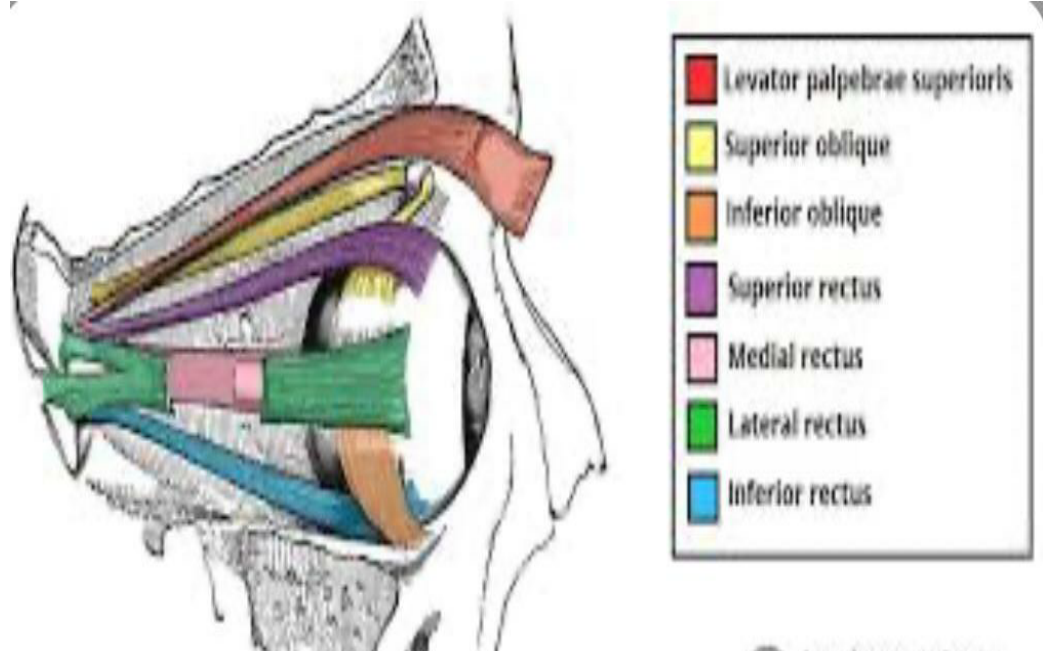
- RESPONSIBLE FOR EYE MOVEMENT: Recti and oblique muscles.

MUSCLES.

- RESPONSIBLE FOR SUPERIOR EYELID MOVEMENT: Levator palpebrae superioris.

NERVE SUPPLY OF EXTRAOCULAR MUSCLE.

1. Medial recti muscle: Innervated by the oculomotor nerve(III)
2. Inferior recti muscle: Innervated by the oculomotor nerve(III)
3. Superior recto muscle: Innervated by the oculomotor nerve(III)
4. Inferior oblique muscle: Innervated by the oculomotor nerve(III)
5. Levator palpebrae muscle: Innervated by the oculomotor nerve(III)
6. Superior oblique muscle: Innervated by the trochlear nerve(IV)
7. Lateral rectus muscle: Innervated by the abducens nerve(VI)



INTRAOCULAR MUSCLE (DESCRIPTION)

The intraocular muscles are responsible for the pupil accommodation and reaction to light; The intraocular muscles include the ciliary muscle, the sphincter pupillae and the dilator pupillae. They are all composed of smooth muscle.

There are 3 primary axes of ocular;

1. Vertical: Rotation around the vertical axis results in either adduction or abduction of the eye.
2. Transverse: Rotation around the transverse axis causes elevation or depression.
3. Anteroposterior: Rotation around the anteroposterior axis enables movement of the superior pole of the eye medially or laterally.

NERVE SUPPLY OF INTRAOCULAR MUSCLE.

1. Sphincter pupillae and ciliary muscles are innervated by the parasympathetic component of cranial nerve.
2. Dilator muscle is innervated by the ascending cervical sympathetic system.

