**NAME: OKOLO KOSISOCHUKWU ANN**

**COLLEGE: MEDICINE AND HEALTH SCIENCES**

**DEPARTMENT: NURSING SCIENCES**

**COURSE TITLE: GROSS ANATOMY (ANA 210)**

**DATE: 13TH APRIL, 2020**

ASSIGNMENT:

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

ANSWERS

1. When the virus enters your body, it binds with two cells in the lungs-goblet cells that produce mucus and cilia cells which have hairs on them and normally prevent your lungs from filling up with debris and fluid such as virus and bacteria and particles of dust and pollen. The virus attacks these cells and starts to kill them – so your lungs begin to fill with fluid making it hard for you to breathe. This phase of the disease is thought to last about a week. At this point, your immune system will start to kick in and fight off the invaders. You will develop a fever (high body temperature) will a hostile environment for the virus. You will start to get rid of the mucus in the form of coughing and runny nose. But in some people-particularly the elderly and those with underlying health conditions –the immune system can go into overdrive, i.e. as well as killing the virus it also kills healthy cells. This heightened immune response can trigger a “cytokine storm” –white blood cells active a variety of chemicals that can damage them even further. Scans of the lungs show “ground-glass” opacity and then “crazy paving” patterns, as they fill with mucus making it harder to breathe. Normally, when the body gets an infection, chemicals are released into the bloodstream to fight the infection. Sometimes, though the body creates an overwhelming response to an infection, and the chemicals released into the bloodstream can cause inflammation throughout the body. This reaction is called sepsis. The inflammation can cause blood clot and leaky blood vessels. The poor blood flow can then cause damage to multiple organs, systems, and can even cause them to fail.
2. The subsatorial canal is an important area in the body because it serves as a passageway from structures moving between the anterior thigh and the posterior leg. It is a common site of vowel herniation. A hernia is where an internal part of the body pushes through a weakness in the muscle or surrounding tissue wall.
3. The extra ocular muscles are the six (6) muscles that control movement of the eye and one muscle the controls eyelid elevation (lavatory palpebrae). The action of the six muscles responsible for eye movement depends on the position of the eye at the time of muscle contraction. These six(6) extra ocular muscles that move the globe(eyeball) include;
4. Superior rectus
5. Inferior rectus
6. Lateral rectus
7. Medial rectus
8. Superior oblique
9. Inferior oblique

ORIGIN AND INSERTIONS

The four (4) rectus muscles have their origin in the back of the orbit in a fibrous ring called the annulus of zinn: the four rectus muscles. The four rectus muscles attach directly to the front half of the eye (anterior to the eye’s equator), and are named after their straight paths. The superior oblique muscle originates at the back of the orbit (a little closer to the medial rectus, though medial to it), getting rounder as it courses forward to a rigid, cartilaginous pulley, called the trochlea, on the upper ,nasal wall of the orbit. The superior oblique muscle inserts on the lateral, posterior part of the globe (eyeball). The inferior oblique muscle originates at the lower front of the nasal orbital wall, and passes under the LR to insert on the lateral, posterior part of the globe.

NERVE SUPPLY

The four (4) rectus muscles are innervated by the oculomotor nerve. The superior oblique muscle is innervated by the trochlear never and the Inferior oblique muscle is innervated by the abduces nerve.

* The Intraocular muscles include the capillary muscle, the sphincter papillae, and the dilator pupillae.