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### 1) Importance of Vasculature in Relation to Immune system and Covid-19

Vasculature is the function of vessels to transport nutrients to organs/tissues and transport wastes away from organs/tissues in the blood. A primary purpose and significant role of Vasculature is its participation in oxygenating the body.

The importance of immune system is that it helps fight off foreign substances called antigens. When the body senses these antigens, the immune system works to recognize the antigens and get rid of them.

Covid-19 (Coronavirus disease): this is an infectious disease caused by a novel Coronavirus now called severe acute respiratory virus which spreads primarily through droplets generated when an infected person coughs or sneezes or through droplets of saliva or discharge from the nose.

Relating these 3 points together, Vasculature participates in oxygenating the body which the immune system can work on to strengthen it so as to help fight the covid-19 as this is a respiratory disease that attacks majorly the lungs causing shortage of oxygen. Until a vaccine is available, our immune systems will need to adapt unaided to covid-19.

### 2) Importance of Subsartorial Canal in the Lower Limb

The subsartorial canal (adductor canal, Hunter's canal) is a narrow conical tunnel located in the thigh. It is approximately 15cm long, extending from the apex of the femoral triangle to the adductor hiatus of the adductor magnus. The canal serves as a passageway for structures moving between the anterior thigh and posterior leg.

It transmits the femoral artery, femoral vein (posterior to the artery), nerve to the vastus medialis and the saphenous nerve - the largest cutaneous branch of the femoral nerve. As the femoral artery and vein exit the canal, they are called the popliteal artery and vein respectively.

### 3) The extraocular muscles are the six muscles that controls the movement of the eye and one muscle that controls eyelid elevation (levator palpebrae). The actions of the six muscles depends on the position of the eye at the time of muscle contraction.

Some of the muscles include: Orbicularis oculi, levator palpebrae superioris, four rectus

Intraocular muscles: This include ciliary muscle, the sphincter papillae and the dilator papillae. The ciliary muscle is a smooth muscle ring that controls accommodation by altering the shape of the lens, as well as controlling the flow of aqueous humor into Schlemm's canal.

Nerve Supply: Oculomotor nerve (III), Superior oblique muscle, innervated by the Trochlear nerve (IV) and the Lateral rectus muscle, innervated by the Abducens nerve (VI).