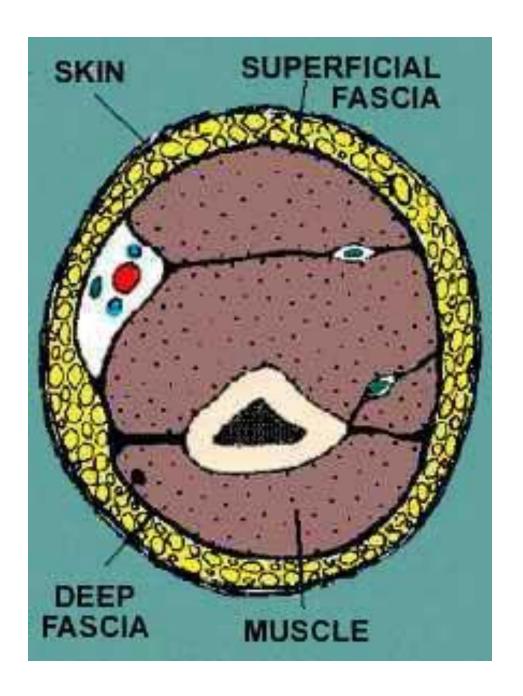


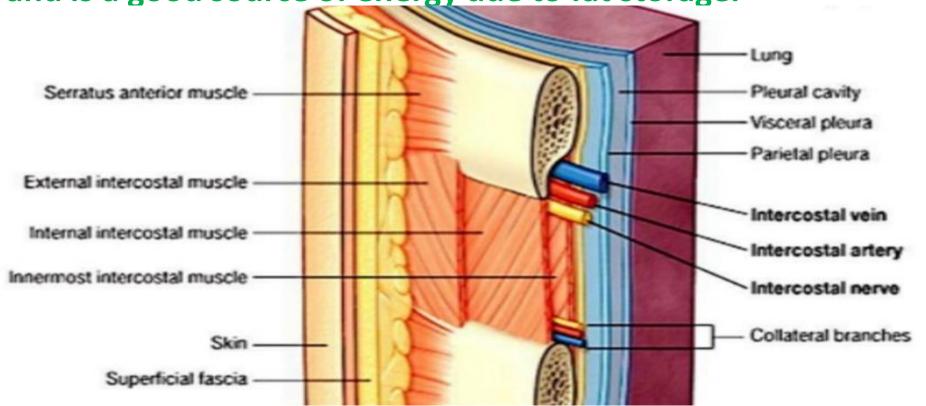
The superficial fascia, lying under the skin is composed of loose areolar and adipose tissue (fat) that unites the skin with the deep fascia. In the scalp, palms and soles, it contains a lot of collagen fibers that attach the skin firmly to the deeper structures.

The superficial fascia is devoid of adipose tissue in the eyelids, auricle of the ear and scrotum. The nerves, blood vessels and lymphatics pass to the skin via superficial fascia. The panniculus carnosus are muscles present in superficial fascia of face which are attached to skin superficially and bone deeply, helping in facial expression.



Fats are abundant in lower part of body like abdomen, back and gluteal region. In female fat quantity is more in subcutaneous tissue as compared to male. Brown fat is a rapid source of energy but yellow fat (abundant in body) can also be utilized as source of energy during dieting.

Superficial fascia facilitates skin movements, provide route to nerves and vessels to pass to the skin, conserve body heat and is a good source of energy due to fat storage.



#### **CLINICAL ANATOMY:**

It connects skin to underlying organ in a flexible way. Protect the deeper structures by providing a flexible and shock absorbing surface. If contain a lot of fats which is a store house of energy. Female have more fat content in superficial fascia which provide her more protection to fight against cold as well as hot environmental hazards apart from starvation.

It provides a passage for nerve and blood supply to skin. It does not bleed much due to less blood supply.

Brown fat in the body is an urgent source of energy for the body during starvation.

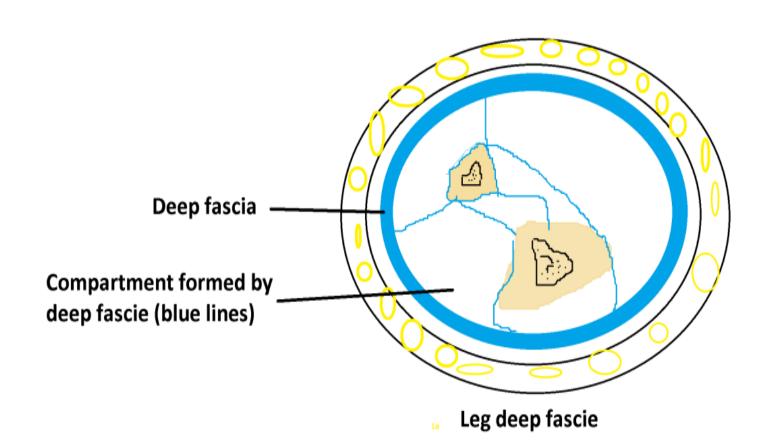


## **Practical:**

Write True or False against each Statement.

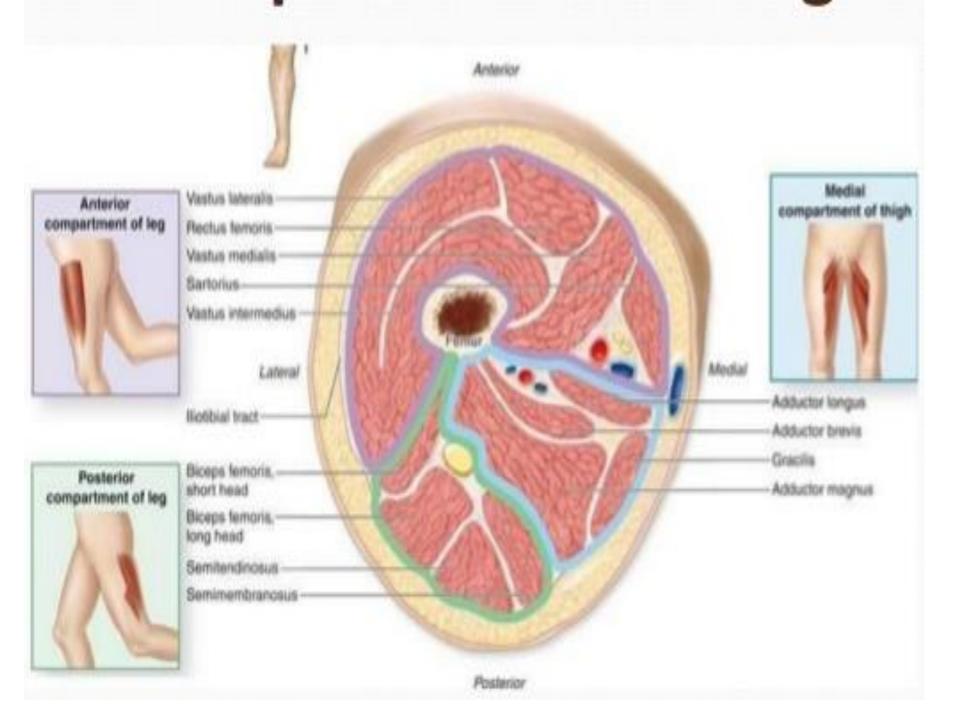
- 1. Superficial fascia contains adipose tissue which could be used as a source of energy.
- 2. Subcutaneous tissue contains more fat in female as compared to male.
- 3. Superficial fascia contains nerve and vessels related to skin.
- 4. It does not bleed profusely due to poor blood supply.

## **DEEP FASCIA**

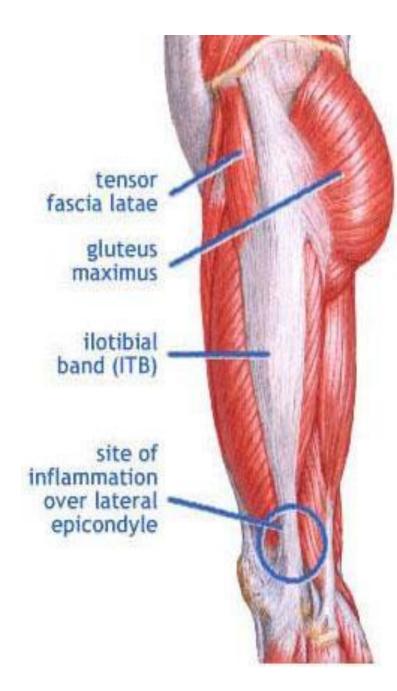


Deep fascia is a membranous layer of connective tissue which surrounds the body wall and lie beneath the superficial fascia. The skin, superficial fascia and deep fascia form the first second and third outermost layer around the body respectively.

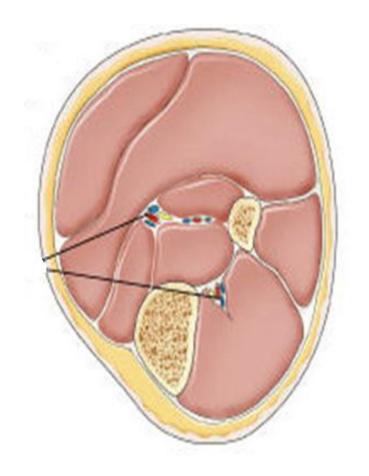
The deep fascia is very much tough and inelastic in nature due to this nature it is more developed in limbs particularly lower limb. It is very sensitive to pain and supplied by braches from local cutaneous (skin) nerves.



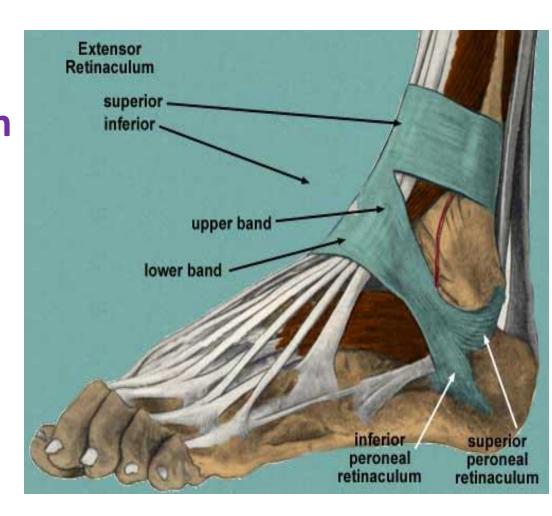
It is well developed in those part of body which do not expands like limbs and neck and considered to be absent from those parts of the body which have to expand, such as thorax (during respiration), abdomen (food intake and digestion etc.) and face (fascial expression and food intake).



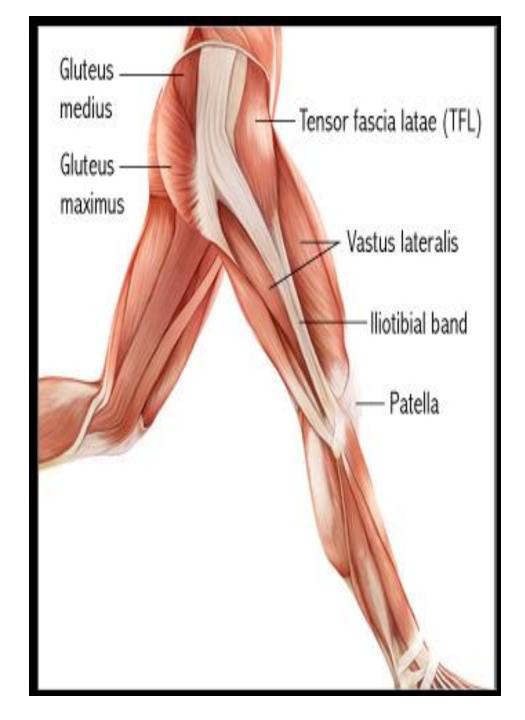
In upper and lower limbs the deep fascia forms a few compartments as a result of extension of fibrous septa from the deep surface of the membrane to be attached to bones. These compartments provide a close space for muscles and neurovascular bundle to perform their role without being disturbed by surrounding structures. It also stop the microorganism to spread from one compartment to other.



The flexor retinaculum and extensor retinaculum represent modified deep fascia in the region of joint which form a strap for holding the structures in appropriate place during different movements at the joint. It also forms pulleys for tendons of some of the muscles.



It blends with periosteum of bone at certain regions, like medial surface of tibia, where bone lies under the skin without intervening muscles. The iliotibial tract is example of welldeveloped thickened part of deep fascia which is present in the lateral aspect of thigh. In the palm the deep fascia is thicken to form palmer aponeurosis.

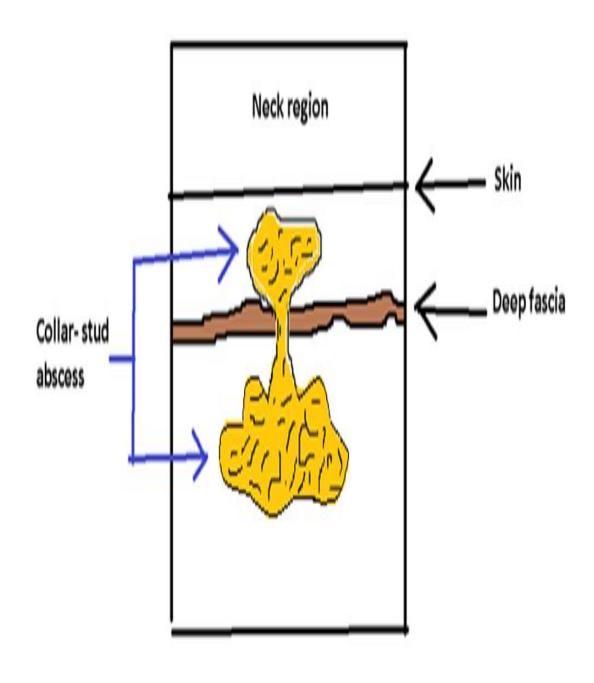


### **CLINICAL ANATOMY**

It provides a tight compartment for muscle which helps in venous return from lower limb when muscles contract during walking or running.

It also provides a plane for pus to travel from one region to another region. Knowledge of these planes guides us towards the source of pus. In this way it helps us to locate the infected part in order to manage of patient accordingly. 2- Pus from retropharyngeal space can travel to superior mediastinum in the chest.

Similarly tuberculous infection of deep cervical nodes can cause collection of pus which can erode the deep fascia to allow the pus to pass from deep to superficial part of neck. This phenomenon is called **Dumbbell or collar** stud abscess.



# 1-Compartment syndrome

Is a condition in which the leg muscles are crushed and swollen causing pressure on leg vessels to close. This causes leg ischemia and gangrene, if fasciotomy is not done well in time, for decompression of leg.

**THANKS** 

