**SURGICAL ANATOMY:**

After incising skin the following structures may be encountered in different sites of operation:

* Superficial fascial layer
* Abdominal tunic
* External oblique abdominal muscle
* Internal oblique abdominal muscle
* Nerves and blood vessels on the deep face of internal oblique abdominal muscle
* Rectus abdominal muscle
* Cranial and caudal deep epigastric blood vessels (on the inner face of rectus abdominal muscles)
* Transverse abdominal muscle
* Transverse fascia
* Parietal peritoneum

The external oblique abdominal muscle is the most extensive of all the abdominal muscles. Its fibers are mostly directed ventral & caudal but in the area of the paralumbar fossa are horizontal. It is originated from the caudal border and lateral surface of the last eight ribs over the intercostal muscle. It is inserted by means of aponeurotic tissue on the tuber-coxae, prepubic tendon and linea-alba.

The fibers of internal oblique abdominal muscles are mostly directed ventral, cranial and medial. The muscle originates from the coxal tuber and deep lumber fascia. It inserts on the caudal border of last fib, the pre-pubic tendon and linea-alba.

The transverses abdominal muscle originates from the deep lumber fascia and thus indirectly to the first five lumber transverse processes and the medial surface of the false ribs. It inserts on the linea-alba. The direction of its fibers is transverse. Therefore, this muscle forms a muscular sheet on the deep face of oblique internal abdominal & rectus abdominal muscle.

The rectus abdominal muscle is confined to the ventral abdominal wall. It extends from the sternum to the pubis. It originates from ventral and lateral surfaces of the sternum as cranial as third or fourth costal cartilage. It inserts on prepubic tendon.

The nerve supply to the abdominal area is through:

* Lateral and ventral branches of last thoracic (T13 )
* Ventral branches of L1 & L2
* Lateral cutaneous femoral nerve formed by fibers of L3 & L4 .

The blood supply to abdominal wall is through

* Costo abdominal vessels
* Branches of lumber vessels
* Deep circumflex iliac
* Cranial & caudal epigastric vessels.