

MUSCLES OF ABDOMEN

Anterior Abdominal wall

Muscles	Origin	Insertion	Innervation	Action
External Oblique	Fleshy slips from the outer surface of the lower 8 ribs (ribs 5 to 12)	Outer lip of iliac crest, Aponeurosis of external oblique which ends in Linea Alba	Lower 6 thoracic nerves (T7- T12)	Compresses the abdominal viscera. Both muscles flex the trunk forward. Each muscle bends the trunk to that side and rotates the abdomen to the opposite side

Middle Layer of Abdominal Musculature

Muscles	Origin	Insertion	Innervation	Action
Internal Oblique	Lateral 2/3rds of inguinal ligament, the middle lip of iliac crest, the thoracolumbar fascia	Inferior border of lower 3 or 4 ribs, the linea alba, aponeurosis fuses with that of external oblique to form rectus sheath	Lower 5 thoracic nerves and 1 st lumbar nerve	Compresses the abdominal viscera. Both muscles flex the trunk forward. Each muscle bends the trunk to that side and rotates the abdomen to the same side

Deep Layer of Abdominal Musculature

Muscles	Origin	Insertion	Innervation	Action
Transverse Abdominis	Lateral 1/3 rd of inguinal ligament and inner lip of iliac crest, thoracolumbar fascia, inner surface of lower six ribs	End in an aponeurosis <u>Upper fibers</u> to linea alba help form posterior layer of rectus sheath, <u>Lower fibers</u> attach to pubis to form conjoint tendon	Lower 6 thoracic and 1 st lumbar nerves (T7 – L1)	Tenses abdominal wall, compresses abdominal contents
Rectus Abdominis	5 th , 6 th and 7 th costal cartilages, costoxiphoid ligaments and xiphoid process	Crest of pubis and pubic tubercle, front of symphysis pubis	Lower 7 thoracic nerves (T6-T12)	Flexes vertebral column, Anterior abdominal wall, compresses abdominal contents
Cremaster	Midway along the inguinal ligament as a continuation of internal oblique muscles	Onto tubercle and crest of pubis and sheath of rectus abdominis muscle	Genital branch of genitofemoral nerve	Pull the testes upward toward superficial inguinal ligament
Pyramidalis	Anterior surface of pubis and anterior pubic ligament	Into linea alba between umbilicus and pubic symphysis	12 th thoracic nerve	Tenses linea alba