

MYOLOGY COMPENDIUM

Complete Regional Muscle Anatomy Notes & Visual Diagrams

1. Deltoid (Upper Limb)

Origin

Lateral 1/3 of clavicle, acromion, and spine of the scapula.

Insertion

Deltoid tuberosity of the humerus.

Blood Supply

Posterior circumflex humeral artery.

Nerve Supply

Axillary nerve (C5, C6).

Action

Middle fibers: Abduct arm.
Anterior: Flex/medially rotate.
Posterior: Extend/laterally rotate.

Clinical Anatomy


Axillary nerve vulnerable in surgical neck fractures. Injury causes flattened shoulder.
Common IM injection site.



 Deltoid Muscle

2. Gluteus Maximus (Lower Limb)

Origin	Posterior gluteal line of ilium, posterior sacrum/coccyx, sacrotuberous ligament.
Insertion	Iliotibial (IT) tract and gluteal tuberosity of femur.
Blood Supply	Superior and inferior gluteal arteries.
Nerve Supply	Inferior gluteal nerve (L5, S1, S2).
Action	Powerful extensor and lateral rotator of the thigh.
Clinical Anatomy	Paralysis causes lurching gait. IM injections must be in the upper outer quadrant to protect the sciatic nerve.

 Gluteus Maximus

3. Sternocleidomastoid (Head & Neck)

Origin	Sternal head: Manubrium. Clavicular head: Medial 1/3 of clavicle.
Insertion	Mastoid process of the temporal bone and superior nuchal line.
Blood Supply	Occipital and superior thyroid arteries.
Nerve Supply	Spinal Accessory Nerve (CN XI).
Action	Unilateral: Tilts head to same side, rotates face opposite. Bilateral: Flexes neck.
Clinical Anatomy	Spasm or injury (often during childbirth) results in Torticollis (wry neck).

Sternocleidomastoid

4. Pectoralis Major (Thorax)

Origin	Medial half of clavicle, anterior sternum, superior 6 costal cartilages.
Insertion	Lateral lip of the intertubercular sulcus of humerus.
Blood Supply	Pectoral branches of thoracoacromial trunk.
Nerve Supply	Lateral and medial pectoral nerves.
Action	Adducts and medially rotates humerus.
Clinical Anatomy	Absence is a hallmark of Poland Syndrome. Landmark in breast surgeries.

 Pectoralis Major

5. Trapezius (Back)

Origin	External occipital protuberance, nuchal ligament, spinous processes C7-T12.
Insertion	Lateral 1/3 of clavicle, acromion, and spine of scapula.
Blood Supply	Transverse cervical artery.
Nerve Supply	Spinal Accessory Nerve (CN XI).
Action	Elevates, retracts, and depresses scapula. Upwardly rotates glenoid cavity.
Clinical Anatomy	Damage to CN XI leads to drooping shoulder and weakness in shrugging.

Trapezius

6. Rectus Abdominis (Abdomen)

Origin Pubic symphysis and pubic crest.

Insertion Xiphoid process and costal cartilages of ribs 5-7.

Blood Supply Superior and inferior epigastric arteries.

Nerve Supply Thoracoabdominal nerves (T7-T11) and subcostal nerve (T12).

Action Flexes lumbar spine, stabilizes pelvis, increases intra-abdominal pressure.

Clinical Anatomy Midline weakness causes diastasis recti. Enclosed in rectus sheath.

 Rectus Abdominis

7. Biceps Brachii (Anterior Arm)

Origin Short head: Coracoid process.
Long head: Supraglenoid tubercle.

Insertion Radial tuberosity and bicipital aponeurosis.

Blood Supply Brachial artery.

Nerve Supply Musculocutaneous nerve.

Action Powerfully supinates forearm and flexes elbow.

Clinical Anatomy Tendon rupture creates a 'Popeye deformity'. Used to test C5-C6 reflex.

 Biceps Brachii

8. Latissimus Dorsi (Posterior Back)

Origin	Spinous processes T7-L5, thoracolumbar fascia, iliac crest, lower ribs.
Insertion	Floor of the intertubercular sulcus of humerus.
Blood Supply	Thoracodorsal artery.
Nerve Supply	Thoracodorsal nerve.
Action	Extends, adducts, and medially rotates humerus.
Clinical Anatomy	Used in reconstructive surgery as a myocutaneous flap.

 Latissimus Dorsi

9. Rectus Femoris (Anterior Thigh)

Origin Anterior inferior iliac spine (AIIS) and groove above acetabulum.


Insertion Base of patella and tibial tuberosity via patellar ligament.

Blood Supply Lateral circumflex femoral artery.

Nerve Supply Femoral nerve.

Action Extends knee and assists in flexing hip.

Clinical Anatomy Explosive kicking can cause avulsion fracture at AIIS. L3-L4 reflex.

 Rectus Femoris

10. Gastrocnemius (Posterior Leg)

Origin Medial and lateral condyles of the femur.

Insertion Posterior calcaneus via Achilles tendon.

Blood Supply Sural arteries.

Nerve Supply Tibial nerve.

Action Plantarflexes foot and flexes knee.

Clinical Anatomy Achilles rupture diagnosed with Thompson test. S1-S2 ankle jerk reflex.

 Gastrocnemius

11. Masseter (Head/Mastication)

Origin	Zygomatic arch.
Insertion	Lateral surface of ramus and angle of mandible.
Blood Supply	Masseteric artery.
Nerve Supply	Masseteric nerve (CN V3).
Action	Elevates mandible to close jaw.
Clinical Anatomy	Hypertrophy from teeth grinding (bruxism). Spasm in tetanus (lockjaw).



12. Diaphragm (Thoracic/Respiratory)

Origin	Xiphoid process, lower 6 costal cartilages, L1-L3 vertebrae.
Insertion	Central tendon.
Blood Supply	Phrenic arteries, musculophrenic artery.
Nerve Supply	Phrenic nerve (C3, C4, C5).
Action	Contracts/flattens during inspiration.
Clinical Anatomy	Referred pain to shoulder (Kehr's sign). Weakness causes hiatal hernia.

