

Q16 – Gluteus Medius and Gluteus Minimus Muscle

Introduction / Definition Note

Gluteus medius and gluteus minimus are important abductor muscles of the hip joint situated in the gluteal region. They play a vital role in pelvic stabilization during walking and single limb stance and assist movements of the hip joint.

Gluteus Medius Muscle

Origin: Outer surface of ilium between anterior and posterior gluteal lines. Insertion: Lateral surface of greater trochanter of femur. Nerve supply: Superior gluteal nerve (L4, L5, S1). Actions: Abduction and medial rotation of hip; stabilization of pelvis during walking.

Gluteus Minimus Muscle

Origin: Outer surface of ilium between anterior and inferior gluteal lines. Insertion: Anterior surface of greater trochanter of femur and capsule of hip joint. Nerve supply: Superior gluteal nerve (L4, L5, S1). Actions: Abduction and medial rotation of thigh; assists gluteus medius in pelvic stability.

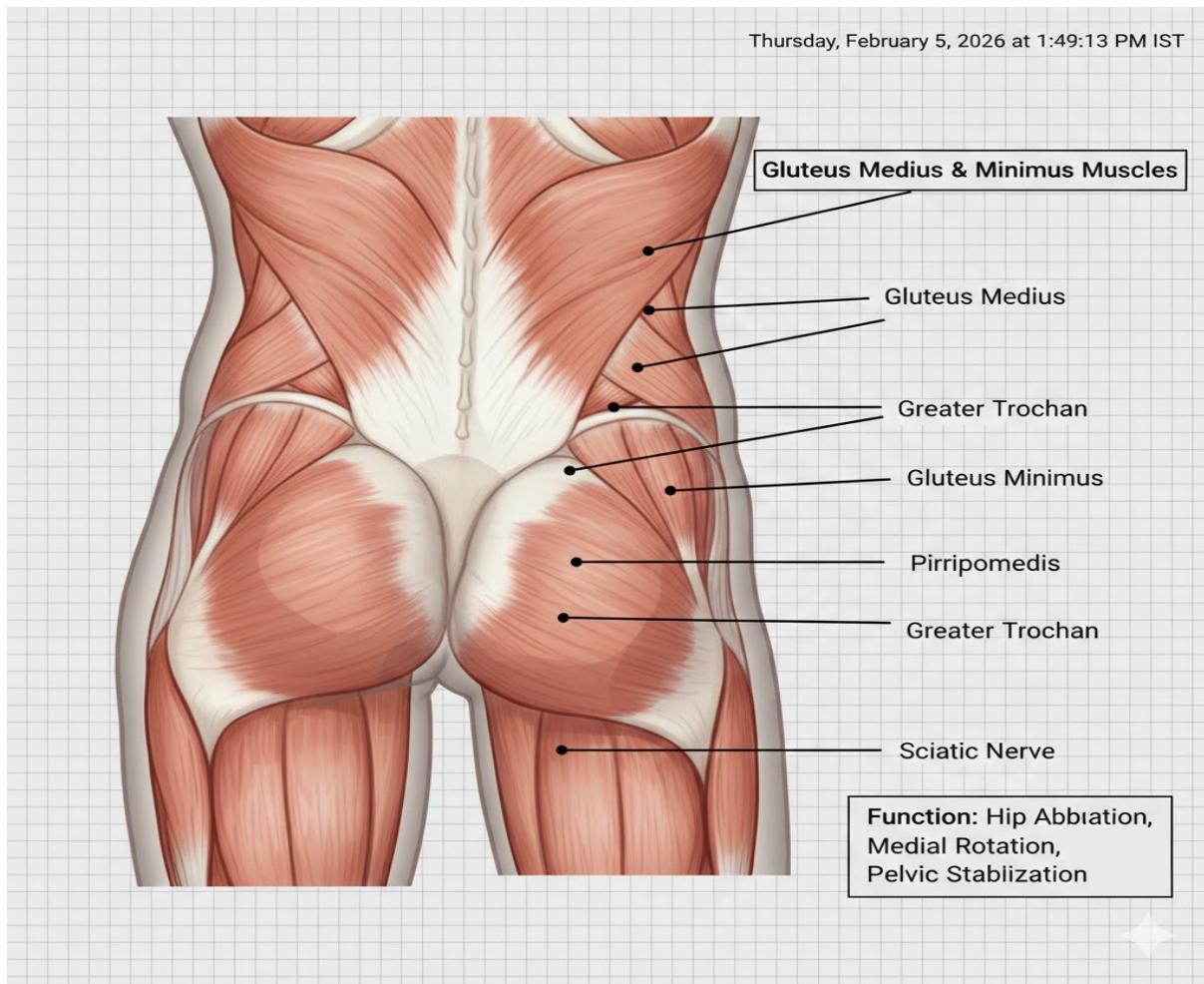
Combined Actions and Role in Gait

Together, gluteus medius and minimus act as primary abductors of the hip. During walking, they contract on the stance side to prevent dropping of pelvis on the unsupported side.

Applied Anatomy

Injury to superior gluteal nerve leads to paralysis of gluteus medius and minimus, resulting in Trendelenburg sign and Trendelenburg gait. Weakness of these muscles causes pelvic instability and difficulty in walking.

Labeled Diagram – Gluteus Medius and Minimus Muscles



Conclusion: Gluteus medius and minimus muscles are essential for abduction of hip and stabilization of pelvis. Their integrity is crucial for normal gait and balance during locomotion.