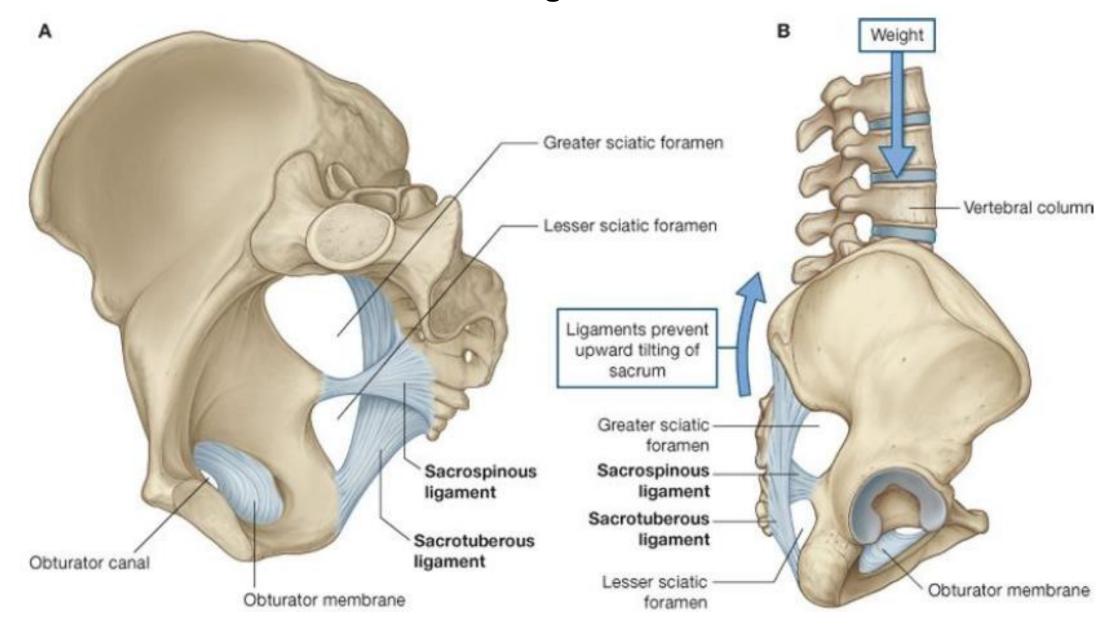
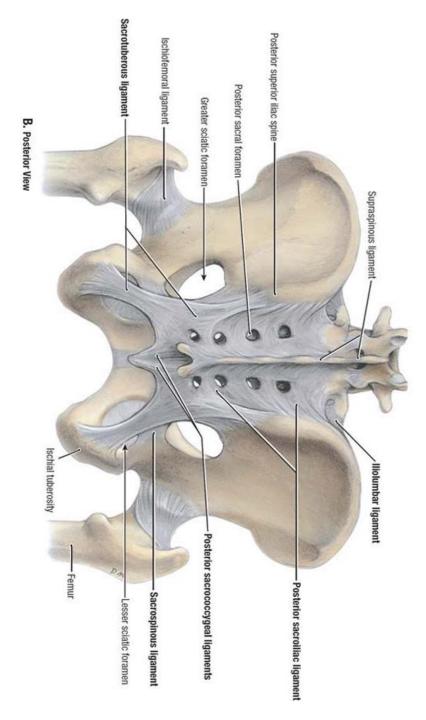
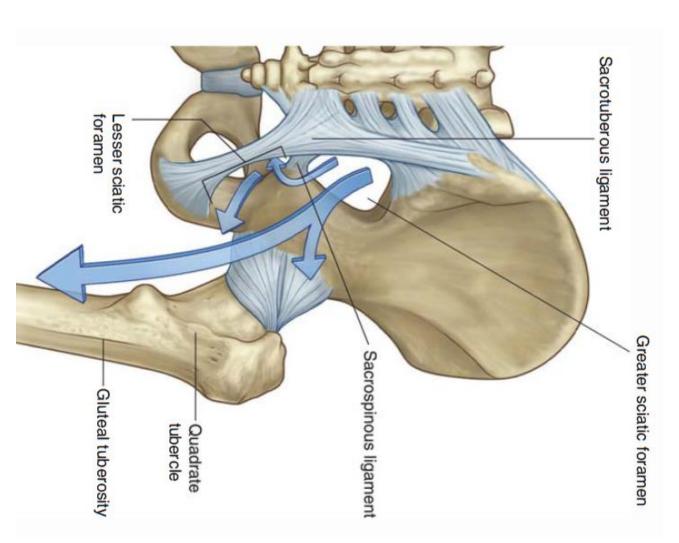
### **Bones & Ligaments**

Dr. Ali Mohsin

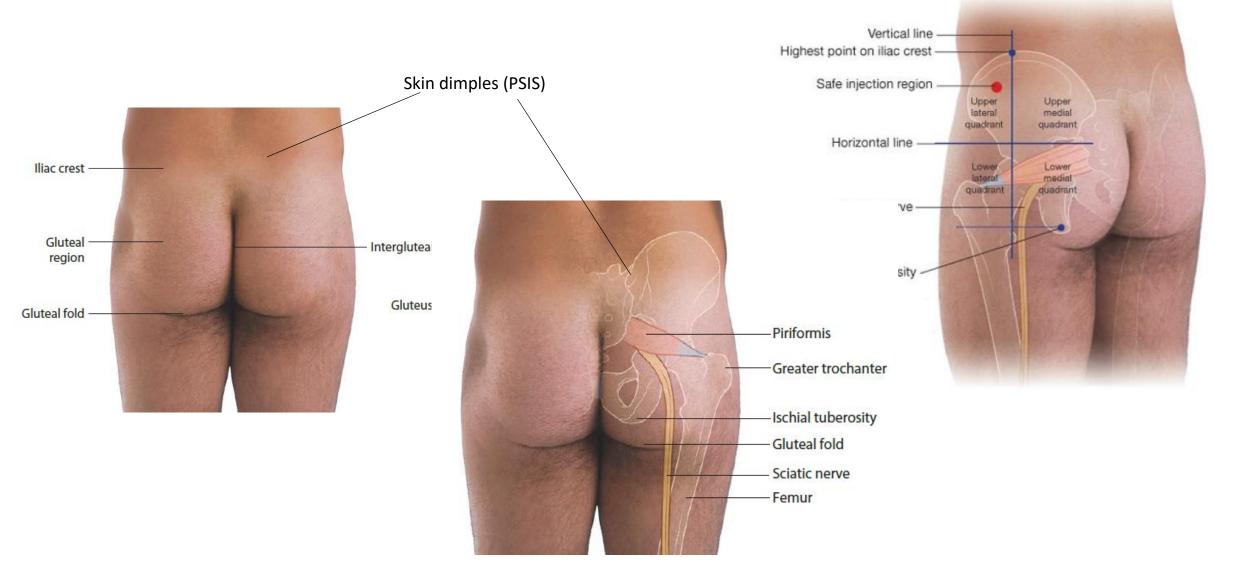


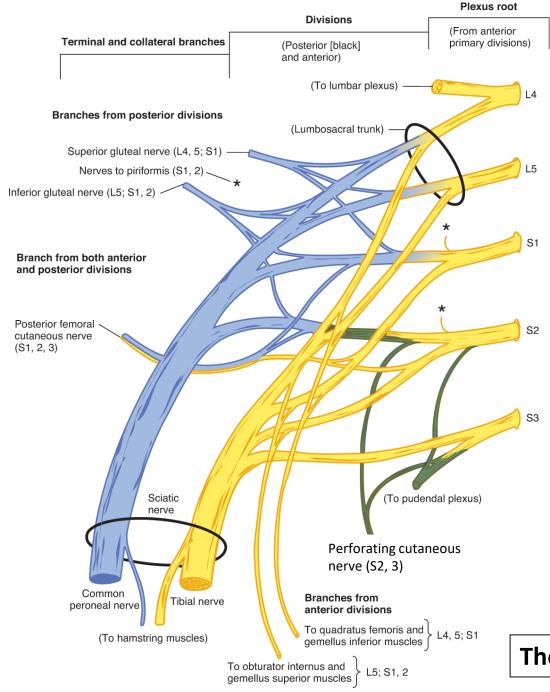
# Pelvic ligaments: posterior view

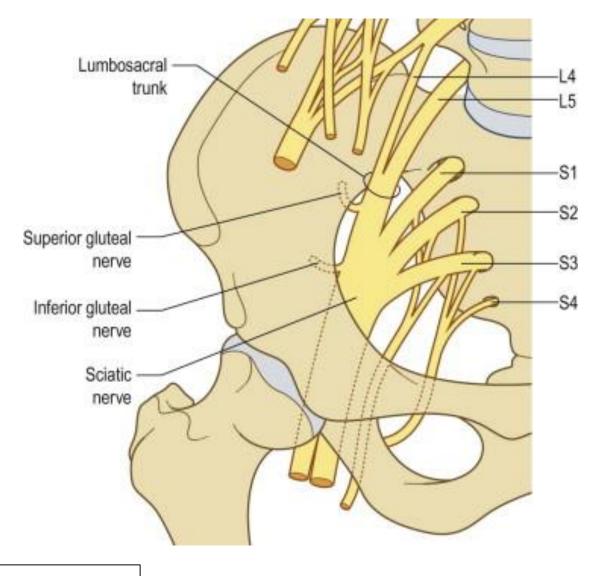




### **Surface Anatomy**

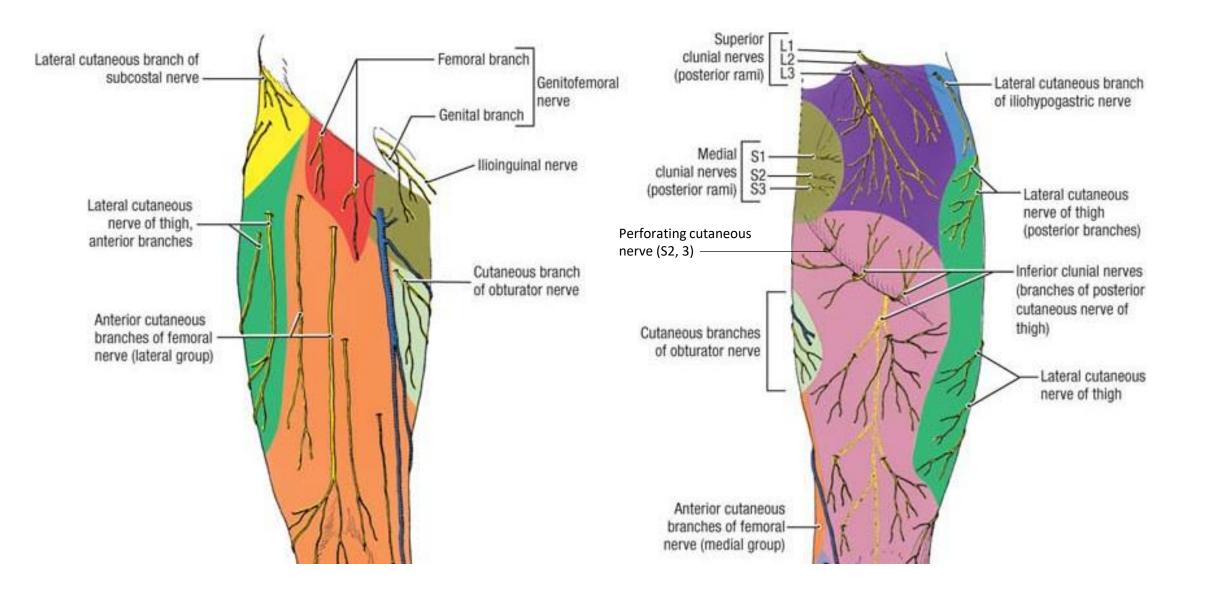


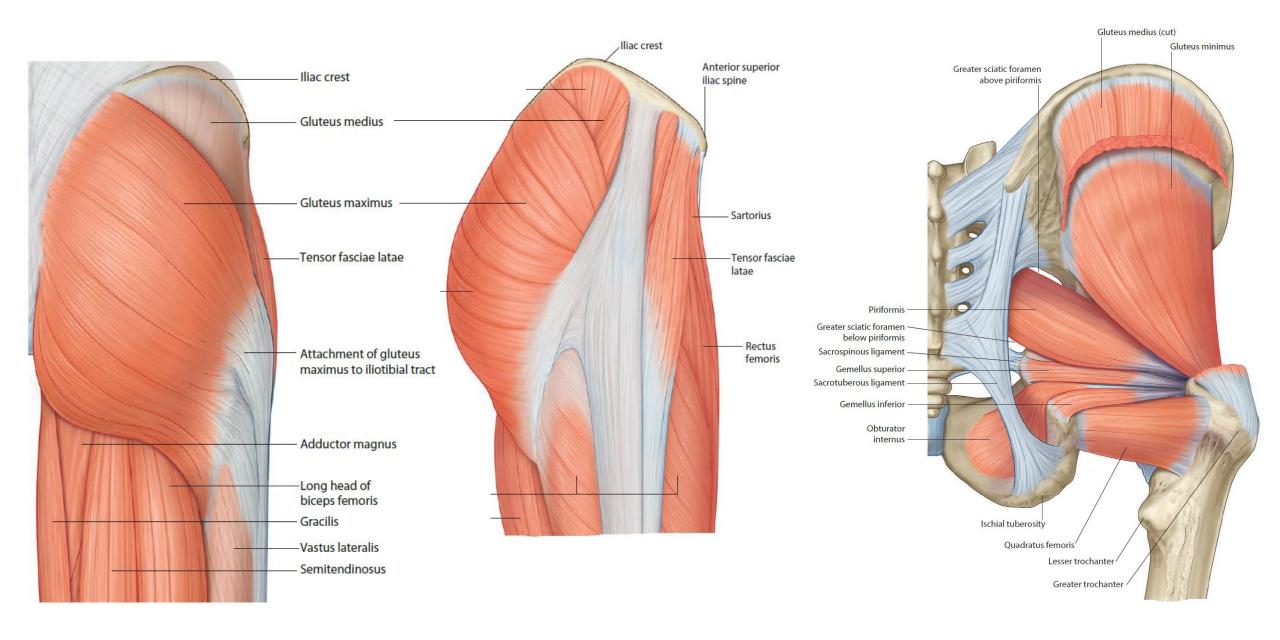


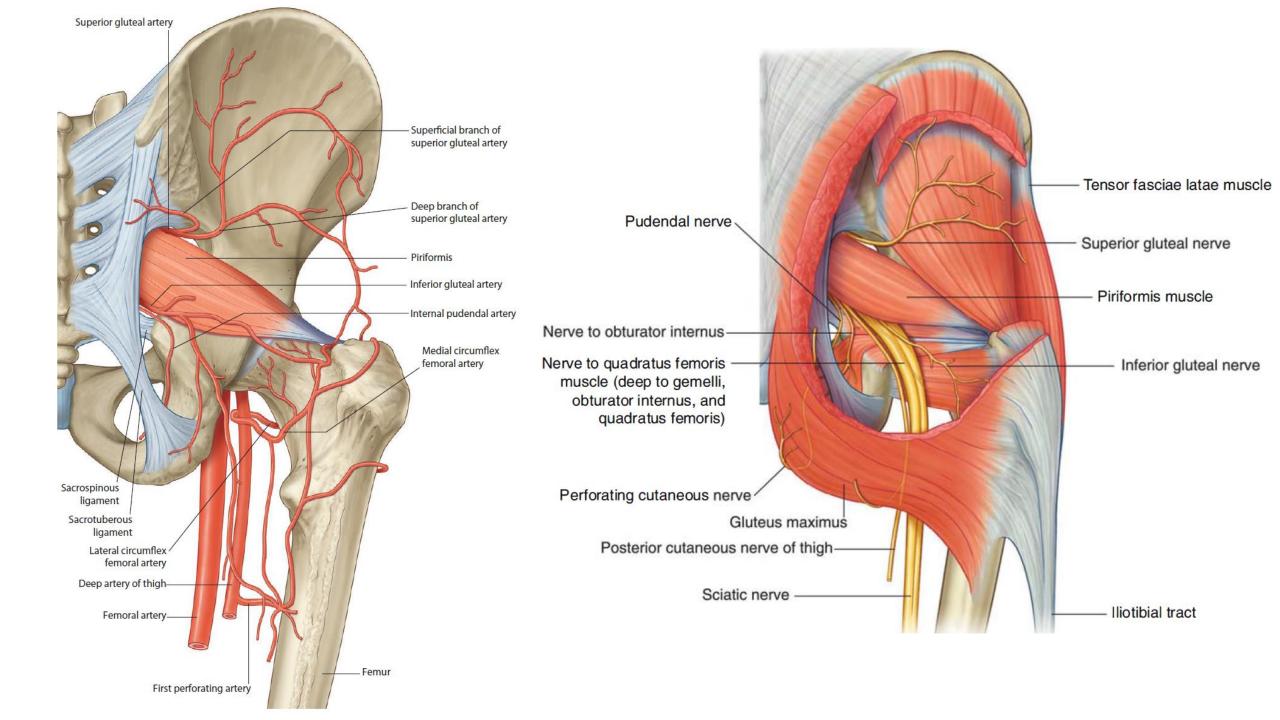


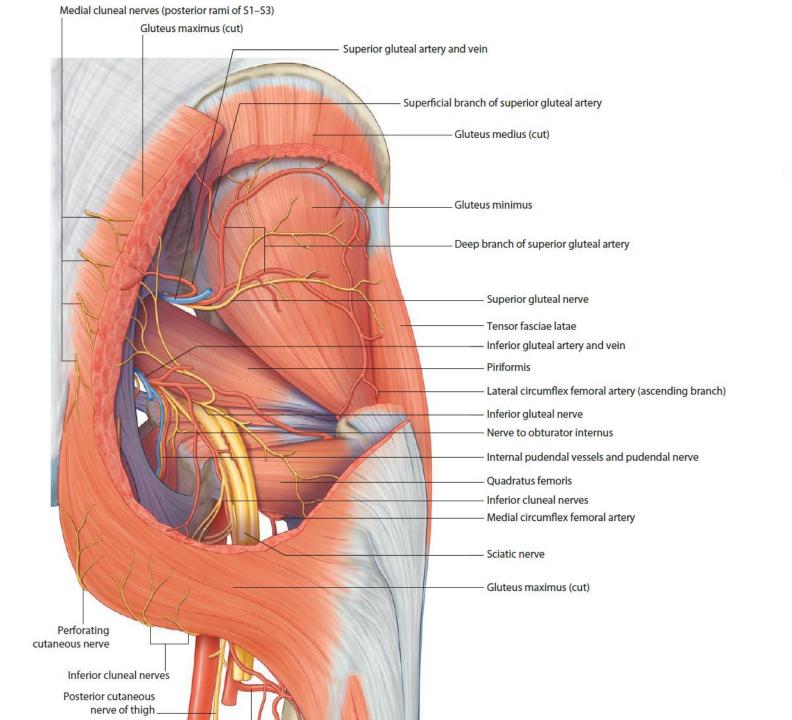
**The Sacral Plexus** 

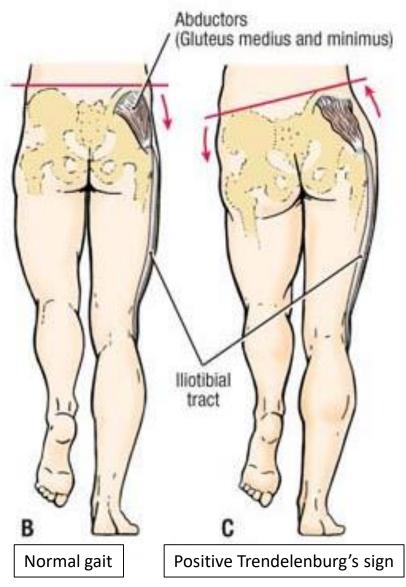
### Cutaneous Innervation

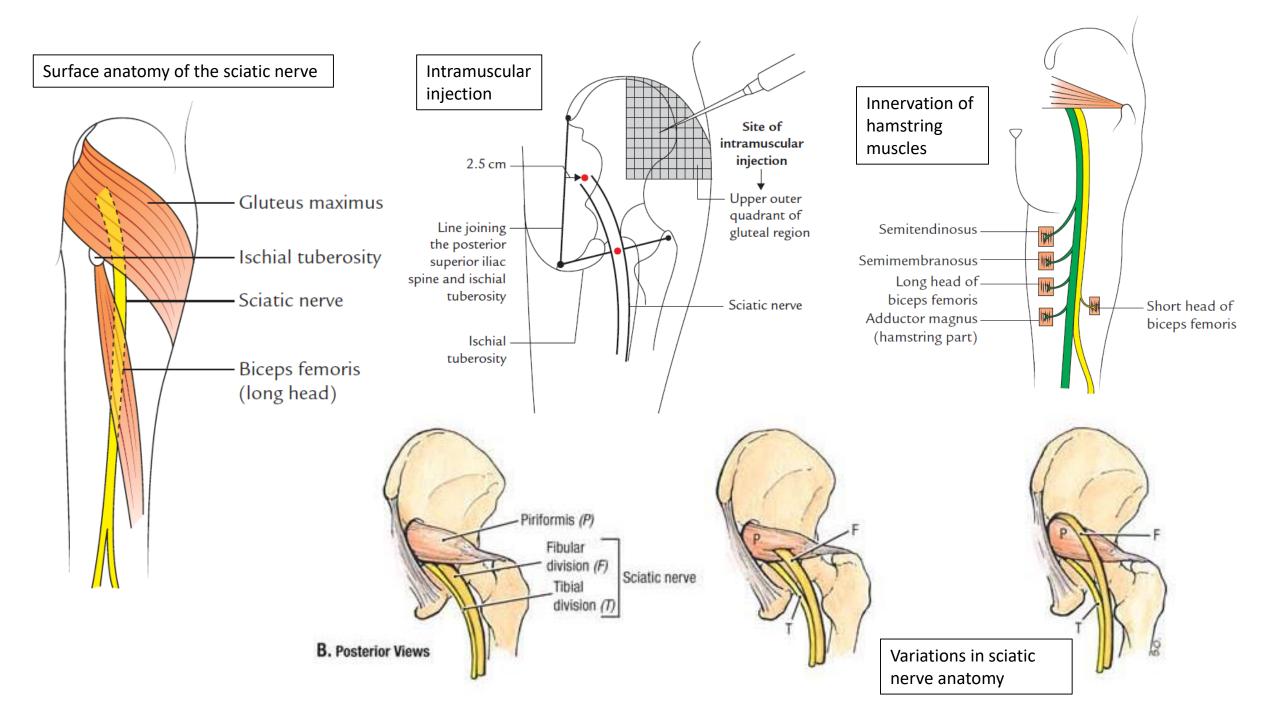




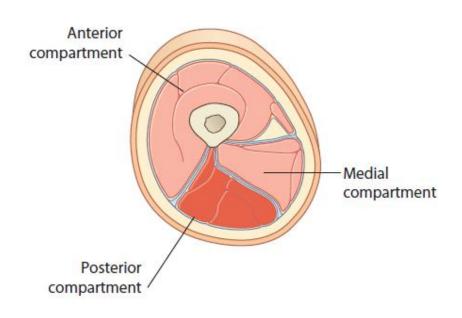


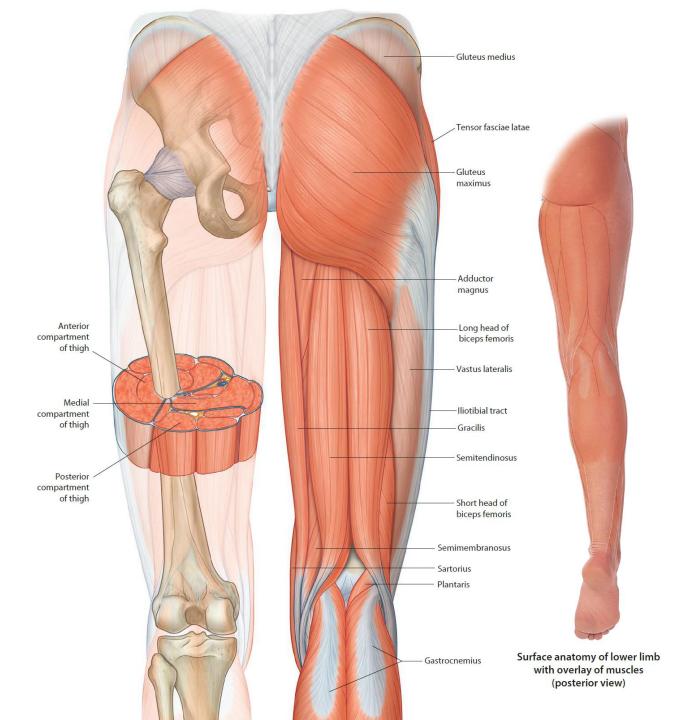


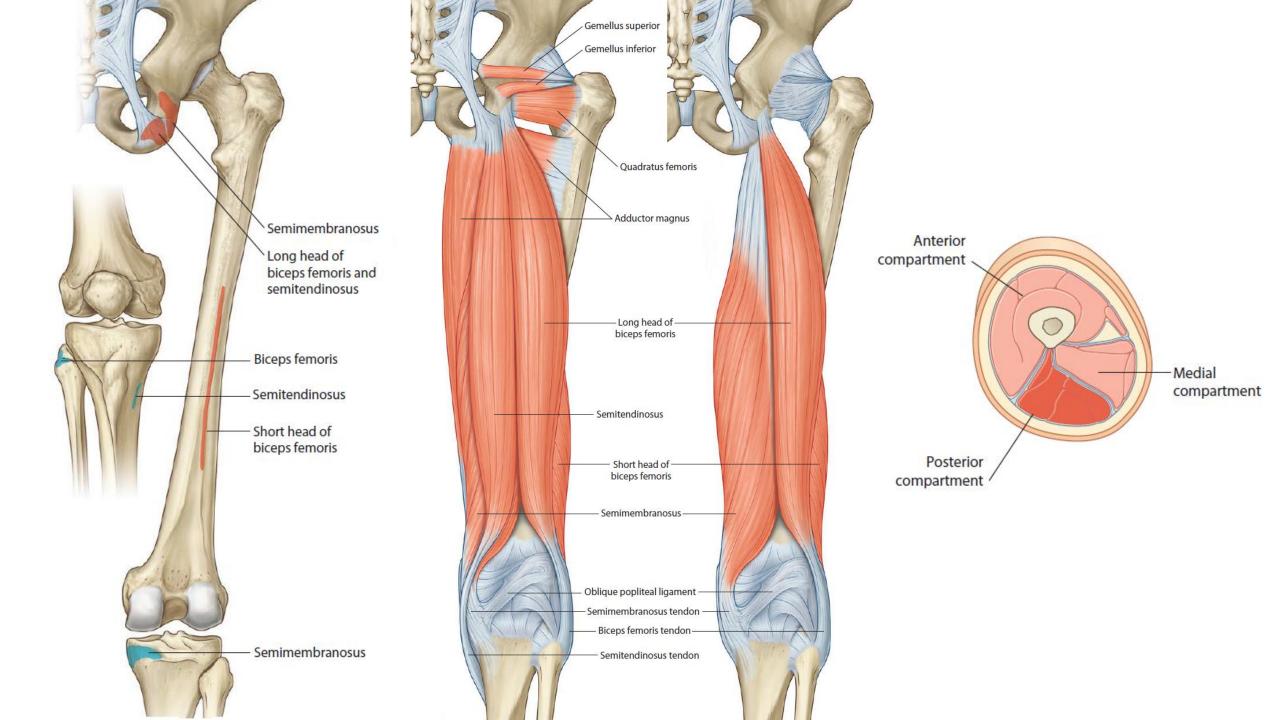


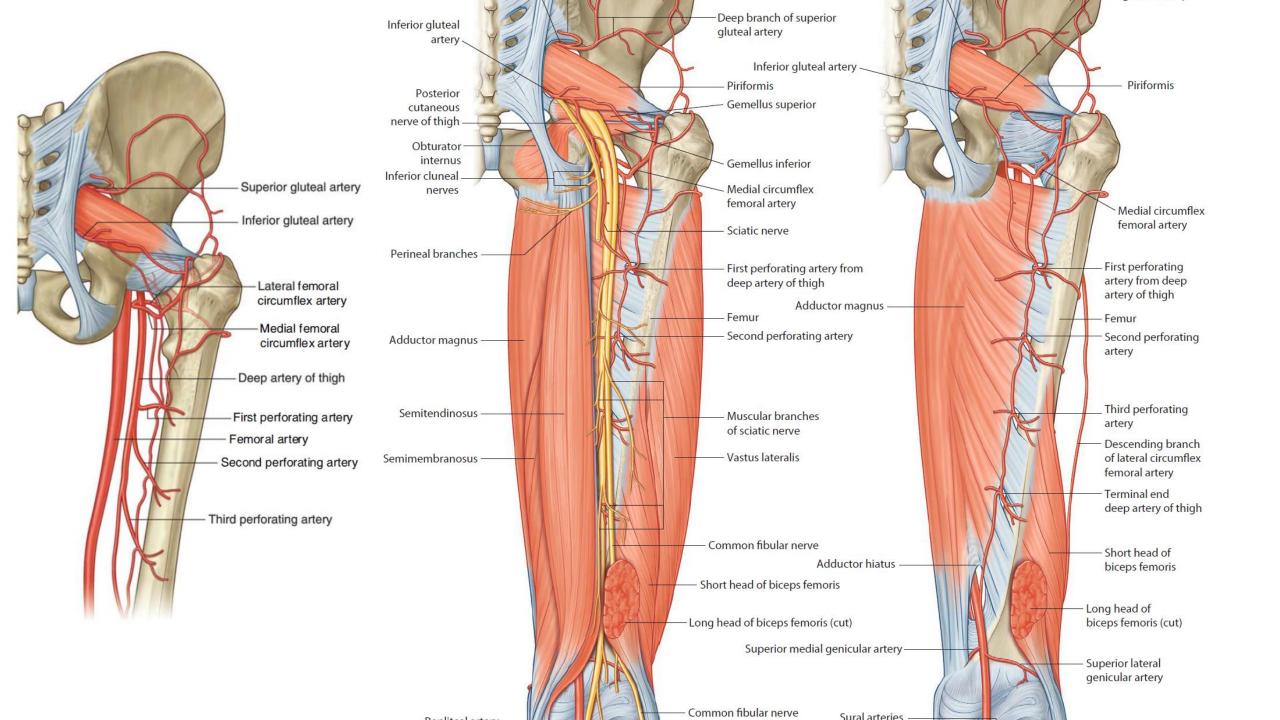


### Posterior Compartment of the Thigh



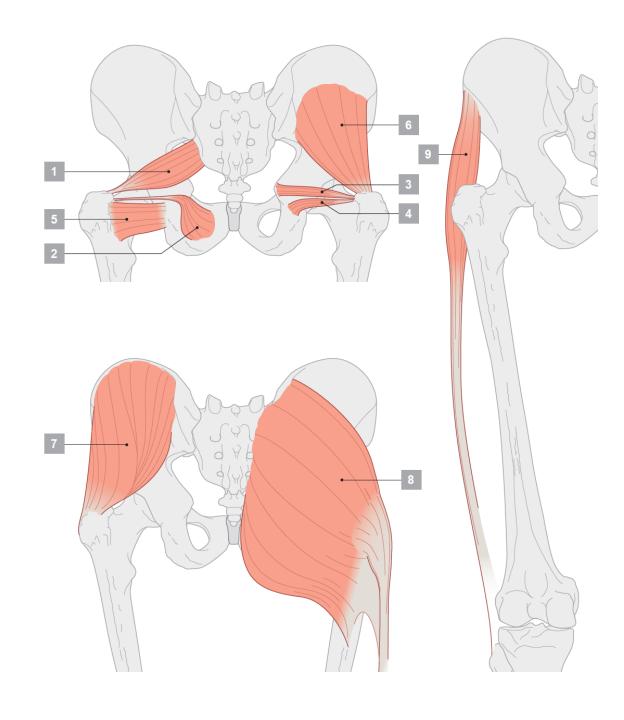






### Muscles of the gluteal region (spinal segments in bold are the major segments innervating the muscle)

Tensor fasciae latae	Gluteus maximus	Gluteus medius	Gluteus minimus	Quadratus femoris	Gemellus inferior	Gemellus superior	Obturator internus	Piriformis	Muscle
9	Φ.	7	<b>o</b>	ΩI	4	ω	Ν.		
Lateral aspect of crest of ilium between anterior superior iliac spine and tubercle of the crest	Fascia covering gluteus medius, external surface of illium behind posterior gluteal line, fascia of erector spinae, dorsal surface of lower sacrum, lateral margin of coccyx, external surface of sacrotuberous ligament	External surface of ilium between anterior and posterior gluteal lines	External surface of ilium between inferior and anterior gluteal lines	Lateral aspect of the ischium just anterior to the ischial tuberosity	Upper aspect of ischial tuberosity	External surface of ischial spine	Anterolateral wall of true pelvis; deep surface of obturator membrane and surrounding bone	Anterior surface of sacrum between anterior sacral foramina	Origin
lliotibial tract of fascia lata	Posterior aspect of iliotibial tract of fascia lata and gluteal tuberosity of proximal femur	Elongate facet on the lateral surface of the greater trochanter	Linear facet on the anterolateral aspect of the greater trochanter	Quadrate tubercle on the intertrochanteric crest of the proximal femur	Along length of inferior surface of the obturator internus tendon and into the medial side of greater trochanter of femur with obturator internus tendon	Along length of superior surface of the obturator internus tendon and into the medial side of greater trochanter of femur with obturator internus tendon	Medial side of greater trochanter of femur	Medial side of superior border of greater trochanter of femur	Insertion
Superior gluteal nerve ( <b>L4</b> , <b>L5</b> , S1)	Inferior gluteal nerve (L5, S1, S2)	Superior gluteal nerve ( <b>L4</b> , <b>L5</b> , S1)	Superior gluteal nerve ( <b>L4</b> , <b>L5</b> , S1)	Nerve to quadratus femoris (L5, S1)	Nerve to quadratus femoris (L5, S1)	Nerve to obturator internus (L5, <b>S1</b> )	Nerve to obturator internus (L5, <b>S1</b> )	Branches from L5, S1, S2	Innervation
Stabilizes the knee in extension	Powerful extensor of flexed femur at hip joint; lateral stabilizer of hip joint and knee joint; laterally rotates and abducts thigh	Abducts femur at hip joint; holds pelvis secure over stance leg and prevents pelvic drop on the opposite swing side during walking; medially rotates thigh	Abducts femur at hip joint; holds pelvis secure over stance leg and prevents pelvic drop on the opposite swing side during walking; medially rotates thigh	Laterally rotates femur at hip joint	Laterally rotates the extended femur at hip joint; abducts flexed femur at hip joint	Laterally rotates the extended femur at hip joint; abducts flexed femur at hip joint	Laterally rotates the extended femur at hip joint; abducts flexed femur at hip joint	Laterally rotates the extended femur at hip joint; abducts flexed femur at hip joint	Function



## Muscles of the posterior compartment of thigh (spinal segments in bold are the major segments innervating the muscle)

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Muscle		Origin	Insertion	Innervation	Function
Biceps femoris	0 7 <del>2</del> 0 F	Long head—inferomedial part of the upper area of the ischial tuberosity; short head—lateral lip of linea aspera	Head of fibula	Sciatic nerve [L5, <b>S1</b> , S2]	Flexes leg at knee joint; extends and laterally rotates thigh at hip joint and laterally rotates leg at knee joint
Semitendinosus	o –	Inferomedial part of the upper area of the ischial tuberosity	Medial surface of proximal tibia	Sciatic nerve [L5, <b>S1</b> , S2]	Flexes leg at knee joint and extends thigh at hip joint; medially rotates thigh at hip joint and leg at knee joint
Semimembranosus	ω	Superolateral impression on the ischial tuberosity	Groove and adjacent bone on medial and posterior surface of medial tibial condyle	Sciatic nerve [L5, <b>S1</b> , S2]	Flexes leg at knee joint and extends thigh at hip joint; medially rotates thigh at hip joint and leg at knee joint

