Superior Gemellus Muscle

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Muscle	Origin	Insertion	Innervation		Action	
Superior	Ischial spine	Medial surface	Nerve	to	Hip:	ER,
gemellus		of greater	Obturator		Extension,	
		trochanter	internus		Abduction	
		via obturator	L5 - S1			
		internus tendon				

2 Origin

Ischial spine¹

3 Insertion

Jointly with obturator internus tendon (medial surface, greater trochanter)¹

4 Innervation

Nerve to obturator internus (L5, S1)²

5 Action

Hip External rotation and extension of the hip joint (also active in abduction, depending on the joint's position)¹

6 Overview

"The gemellus superior and inferior (from the Latin root geminus, meaning twins) are two, small, nearly identically sized muscles with proximal attachments on either side of the lesser sciatic notch (see Fig. 12.43). Each muscle blends in with the central tendon of the obturator internus

for a common attachment to the femur. Immediately below the gemellus inferior is the quadratus femoris muscle. This flat muscle arises from the external side of the ischial tuberosity and inserts on the posterior side of the proximal femur. In cases of abnormal bony morphology, this muscle may become impinged between the lesser trochanter and ischium, typically during motions that involve the extremes of external rotation.212 If chronic and repetitive, this clinically termed "ischiofemoral impingement" may cause groin and buttock pain along with abnormal MR signaling from the qua dratus femoris muscle"³

- 1. Gilroy AM, MacPherson BR, Wikenheiser JC, Voll MM, Wesker K, Schünke M, eds. *Atlas of Anatomy*. 4th ed. Thieme; 2020.
- 2. Aung HH, Sakamoto H, Akita K, Sato T. Anatomical study of the obturator internus, gemelli and quadratus femoris muscles with special reference to their innervation. *The Anatomical Record.* 2001;263(1):41-52. doi:10.1002/ar.1075
- 3. Neumann DA, Kelly ER, Kiefer CL, Martens K, Grosz CM. *Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation*. 3rd ed. Elsevier; 2017.