Trigger Point Injections for Sciatic Pain from the Buttocks: Deep Gluteal Pain Syndrome

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Introduction

Deep gluteal syndrome (DGS):
Pain caused by non-discogenic entrapment of the sciatic nerve in the subgluteal space, which contains multiple potential areas of entrapment.

- Differentials diagnoses may include: piriformis, gemelli-obturator internus, ischiofemoral impingement, and proximal hamstring syndrome.
- DGS is a rare and often overlooked cause of sciatic pain due to its wide range of differentials and the tendency to focus on spine or hip origins for radicular pain.

Case Presentation

A **63-year-old female** presented to the pain management clinic with **right buttock pain radiating down posterior leg** with **associated numbness** for 2 months after a fall. Pain was described as tight, tearing, and sharp. Pain worsened with prolonged sitting.

- Physical exam revealed exquisite tenderness over ischial tuberosity and taut muscle bands at the gluteal region without neurologic deficits. Hip and lumbosacral maneuvers were negative.
- MRI lumbar spine revealed mild disc bulges. XR hip showed osteoarthritis.

Diagnosis was made for DGS based on physical exam findings, area of pain, and ruling out an alternative source.

She received **trigger point injections of 1% lidocaine mixed with kenalog** in the **right gluteus maximus, gluteus medius, and piriformis focusing on areas that reproduced her pain.** Patient had excellent pain relief for 4 months and returned for repeat injection with similar efficacy.

Discussion

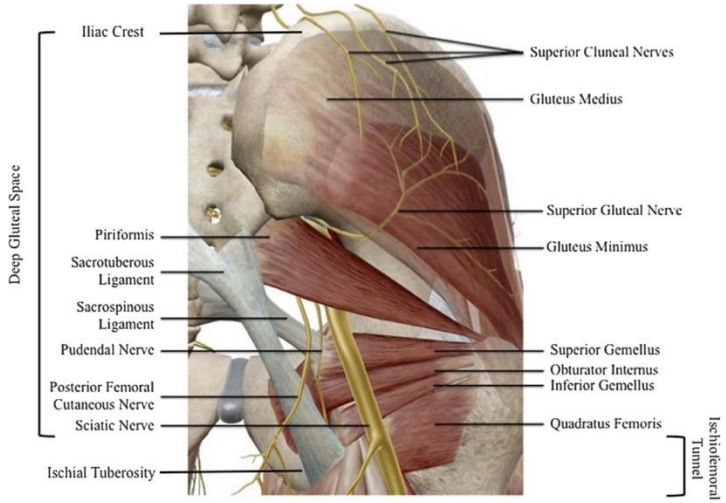

Figure 1: Anatomy of deep gluteal space.
Source: Current Sports Medicine Reports20(6):279-285, June 2021.

DGS often presents with vague symptoms that overlap with various hip, pelvic, and lumbosacral pathologies.
Typically, it manifests as **unilateral buttock and retro-trochanteric pain, with possible numbness that can radiate down the posterior leg, often exacerbated by hip flexion, rotation, and prolonged sitting or activity.**
Detailed physical exam with palpation of gluteal landmarks and assessment of gait abnormalities is essential.
Currently, there is a lack of strong evidence in literature regarding treatment options beyond physiotherapy.
We recommend trigger point injections as an effective diagnostic and therapeutic option for managing DGS.

References

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