

Hip Case (GTPS) Case Scenario

Patient History:

A 42-year-old female presented to your physical therapy clinic with left lateral hip pain. She describes the pain as aching and sharp, predominantly located on the lateral aspect of her left hip. The pain worsens with weight-bearing activities such as walking, climbing stairs, and prolonged standing. The onset of symptoms occurred approximately 3 to 4 months ago without a specific precipitating event. The patient reports previous episodes of hip pain, which were managed conservatively but have recently intensified. She denies any history of trauma or recent changes in physical activity. The pain has become progressively debilitating, impacting her ability to run and participate in CrossFit. Her pain levels range from 0-6/10. Her aggravating factors are walking more than 10 minutes (2/10), standing more than 20 minutes (1-2/10), ascending a single flight of stairs (3/10), and running more than 0.5 miles (6/10). Most of the pain resolves after resting for 20 to 30 minutes, which usually involves sitting. However, she does report that after sitting for prolonged periods, she has hip pain when she first stands. She reports occasional night pain that is related to lying on her left side, but this resolves when she moves. Her goal is to return to running to participate in a 10k in 1 month.

Systems Review:

Overall, her systems review is unremarkable. She is in good general health and denies history of surgery. She is taking 400 mg Motrin as needed (at most 2 times a day) but otherwise does not take medications or supplements. She is neurovascularly intact and has normal vitals.

Tests and Measures:

The patient demonstrated increased lumbar lordosis with symmetrical leg length, normal muscle tone, and no edema or scar discoloration. Functional tasks reproduced mild symptoms: a full squat increased pain to 1-2/10 that resolved upon standing, gait revealed a mild left greater than right Trendelenburg, step-up provoked pain at 2-3/10, and single-leg stance on the left reproduced pain with a positive Trendelenburg. Lumbar flexion was pain-free, while extension and quadrant testing were limited at end range but not painful. Hip testing showed flexion strength 5/5 bilaterally and pain-free, with mild discomfort crossing the left leg over the right. Range of motion included 30° of internal rotation bilaterally with pulling on the left, 45° of external rotation bilaterally without pain, 125° of hip flexion, 45° of abduction bilaterally, and adduction of 20° right and 15° left. Strength testing revealed external rotation at 4/5 on the left with mild pain and 4+/5 on the right without pain, while abduction strength was 3+/5 on the left with mild pain and 4+/5 on the right.

1. Based on the scenario, which special test would best rule in this patient's likely condition?
 - a. Hip scour.
 - b. FABER test.
 - c. FAIR.
 - d. Derotation test.

The correct answer is **d. Derotation test**. The derotation test is considered the most specific clinical test for **greater trochanteric pain syndrome (GTPS)**, as it reproduces lateral hip pain linked to gluteal tendinopathy. Hip scour and FABER are nonspecific for intra-articular hip pathology, and the FAIR test is designed for piriformis syndrome. A GTPS diagnosis relies primarily on clinical presentation (lateral hip pain, tenderness over the greater trochanter, pain with side-lying, stair climbing, and single-leg stance), with provocative tests such as the derotation test supporting clinical suspicion.

2. Based on the patient case, which is the appropriate recommendation considering imaging before treating the patient?
 - a. Plain films to evaluate boney abnormalities.
 - b. MRI to rule out labral pathology.
 - c. Diagnostic ultrasound to evaluate tendon pathology.
 - d. No imaging is required prior to treating this patient.

The correct answer is **d. No imaging is required prior to treating this patient**. Patient does not have red flags or suspicion of labral pathology. Diagnostic ultrasound, while appropriate for imaging tendon pathology, is not necessary prior to treatment. GTPS is a clinical diagnosis, and most cases respond well to conservative treatment without advanced imaging. Imaging is generally reserved for refractory cases or if alternative diagnoses (eg, intra-articular pathology, fracture, systemic disease) are suspected. Although diagnostic ultrasound or MRI can identify gluteal tendon pathology, these are not required before beginning treatment in the absence of red flags.

3. Based on the patient case, which interventions are indicated?
 - a. Eccentric hip abductor strengthening, load progression, and functional retraining.
 - b. Corticosteroid injection as first-line treatment.
 - c. Prolonged rest and avoidance of activity.
 - d. Manual therapy only, without exercise.

The correct answer is **a. Eccentric hip abductor strengthening, load progression, and functional retraining**. Recent systematic reviews and network meta-analyses confirm that exercise therapy is the most effective first-line intervention for GTPS, with strong evidence supporting progressive hip abductor strengthening and load management. Corticosteroid injections may provide short-term pain relief, but do not demonstrate long-term superiority to

exercise. Prolonged rest is discouraged as it can contribute to deconditioning, and manual therapy alone does not address underlying tendon dysfunction.

4. Based on the patient scenario, which of the following statements best align with the patient's prognosis?
 - a. Prognosis is poor due to chronicity of symptoms.
 - b. Prognosis is favorable with progressive strengthening and activity modification.
 - c. Prognosis is uncertain until imaging confirms diagnosis.
 - d. Prognosis is guarded because lateral hip pain is often associated with intra-articular pathology.

The correct answer is **b. Prognosis is favorable with progressive strengthening and activity modification.** Most patients with GTPS improve with conservative management, particularly structured exercise. While corticosteroid injections or shockwave therapy may provide temporary benefit, the long-term prognosis is best with progressive strengthening, patient education, and functional retraining. Chronicity of symptoms does not preclude recovery, and the absence of red flags or intra-articular pathology in this case supports a positive prognosis.

5. If the patient does not respond to 12 weeks of structured exercise and activity modification, what does current evidence suggest as the next most supported intervention?
 - a. Platelet-rich plasma (PRP) injection.
 - b. Corticosteroid injection.
 - c. Shockwave therapy.
 - d. Surgical tendon repair.

The correct answer is **c. Shockwave therapy.** For patients with persistent GTPS symptoms despite exercise therapy, extracorporeal shockwave therapy (ESWT) has shown moderate evidence of benefit, particularly for reducing pain at 4 to 12 months. Corticosteroid injections may provide short-term relief but have been associated with worse long-term outcomes than conservative or wait-and-see approaches. PRP remains investigational with inconsistent evidence, and surgery is reserved for refractory cases with imaging-confirmed tendon tears.

References

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