Comprehensive Physical Therapy Management of Peroneal Tendonitis with Associated Painful Os Peroneum Syndrome: A Case Report

Megan Burns SPT, L-ATC, Kirsten Buchanan PhD, PT, ATC
Department of Physical Therapy, University of New England, Portland, ME

Unique
- Treatment for peroneal tendonitis is well documented.
- Treatment of Painful Os Peroneum Syndrome (POPS) is not.
- Currently, there is no research that has investigated the best treatment for a combined diagnosis of POPS and peroneal tendonitis.

Purpose
Investigate a comprehensive plan of care (POC) for a 65-year-old woman with a combined diagnosis of peroneal tendonitis and POPS.

Foundation
- Os peroneum bone is located within the peroneus longus tendon and when it becomes irritated, it is defined as POPS.\(^1\)\(^2\)
- Thirty-five percent of the population experiences peroneal tendinitis as some point in time.\(^3\)
- There is little literature on POPS and peroneal tendonitis in an older population.

Description
- 65-year-old female who was a primary caretaker for an 80-year-old female.
- Primary complaints were pain over the lateral aspect of the foot and base of the 5\(^{th}\) metatarsal during ambulation over even and uneven surfaces.
- Primary goals were to decrease pain, increase function and progress to an independent home exercise program.
- At initial evaluation (IE) the patient demonstrated range of motion (ROM) and strength deficits as well as a Trendelenburg gait pattern.

Interventions
Comprehensive PT POC targeted proximal and distal musculature with the goal to normalize the patient’s gait and reduce repetitive stress placed on the lateral foot and ankle.

- Manual therapy such as soft tissue mobilization, dry needling with e-stim, joint mobilizations, and muscle energy techniques
- Strengthening of proximal and distal muscles, specifically the gluteus medius
- Single leg stance balance activities
- Gait training & orthotic management
- PT 2x/week for 17 weeks

Observations
- Pain on NPRS scale decreased from 6/10 to 0/10.
- ankle ROM increased in all directions.
- Ankle and hip strength on the right side improved from 3+/5 to 5/5.
- Normalized gait pattern

Conclusions
- A comprehensive PT POC improved this patient’s strength and motor patterns of proximal and distal muscles.
- Previous case reports addressed the radiologic diagnosis and surgical management of POPS, whereas this case focused on the conservative management of POPS and peroneal tendonitis in a 65-year-old female.
- Future studies may consider investigating a comprehensive POC with a larger cohort of older individuals with peroneal tendinitis and POPS.

References & Acknowledgements
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Lower Extremity Functional Scale (LEFS) scores

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<th></th>
<th>IE</th>
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<td>Score</td>
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Based on the provided information, the case report discusses a comprehensive physical therapy management approach for a 65-year-old female with a combined diagnosis of peroneal tendonitis and Painful Os Peroneum Syndrome (POPS). The case is used to illustrate a comprehensive plan of care (POC) that targets both proximal and distal musculature to normalize the patient’s gait and reduce repetitive stress on the lateral foot and ankle. The interventions included manual therapy such as soft tissue mobilization, dry needling with e-stim, joint mobilizations, and muscle energy techniques. The patient's pain on the Numerical Pain Rating Scale (NPRS) decreased from 6/10 to 0/10, ankle range of motion (ROM) increased in all directions, and ankle and hip strength improved from 3+/5 to 5/5. The patient's gait normalized, and single-leg stance balance activities were improved. The case report highlights the effectiveness of a comprehensive physical therapy approach in managing peroneal tendonitis and POPS in an older population.