

CASE SERIES

EFFECTIVENESS OF DRY NEEDLING, STRETCHING, AND STRENGTHENING TO REDUCE PAIN AND IMPROVE FUNCTION IN SUBJECTS WITH CHRONIC LATERAL HIP AND THIGH PAIN: A RETROSPECTIVE CASE SERIES

Dr. Ron Pavkovich, PT, DPT, Cert. DN, Cert. SMT, Dip. Osteopractic, CIDN

ABSTRACT

Background and Purpose: Chronic lateral hip and thigh pain is regularly treated by the physical therapist. Many issues can cause pain in this region, and trigger points may contribute to pain. Dry Needling (DN) is an intervention used by physical therapists where a monofilament needle is inserted into soft tissue to reduce pain thereby facilitating return to prior level of function. The purpose of this case series is to report the outcomes of DN and conventional physical therapy as a treatment intervention for subjects with chronic lateral hip and thigh pain.

Case Descriptions: Four subjects with chronic lateral hip and thigh pain attended between four and eight sixty-minute sessions of dry needling and stretching/ strengthening activities over a four to eight week intervention course. Outcomes were tested at baseline and upon completion of therapy. A long-term follow up averaging 12.25 months (range 3 to 20 months) was also performed. The outcome measures included the Visual Analog Scale (VAS) and the Lower Extremity Functional Scale (LEFS).

Outcomes: The LEFS and VAS indicated clinically meaningful improvements in disability and pain in the short term and upon long term follow up for each subject. The LEFS^{mean} for the four subjects improved from 50.75 at baseline to 66.75 at the completion of treatment. At long-term follow-up, the LEFS^{mean} was 65.50. Each subject met the minimal clinically important difference (MCID) and minimal detectable change (MDC) for the LEFS and the VAS. The VAS was broken down into best (VAS^B), current (VAS^C), and worst (VAS^W) rated pain levels and averaged between the four subjects. The VAS^B improved from 20 mm at the initial assessment to 0 mm upon completion of the intervention duration. The VAS^C improved from 25.75 mm to 11.75 mm, and the VAS^W improved from 85 mm to 32.5 mm. At the long-term follow up (average 12.25 months), the VAS^B, VAS^C, and VAS^W scores were 0 mm, 14.58 mm, and 43.75 mm respectively.

Discussion: Clinically meaningful improvements in pain and disability were noted. Subjects reported improved sleep and functional mobility, which were commensurate with their different age ranges and initial reported limitations in mobility. The results of this case series show promising outcomes for the use of dry needling in the treatment of chronic lateral hip and thigh pain. Further controlled clinical trials are recommended to determine the effectiveness of adding dry needling as compared to other interventions for chronic lateral hip and thigh pain.

Level of Evidence: Level 4.

Keywords: Dry Needling, hip pain, iliotibial band, trochanteric bursitis

CORRESPONDING AUTHOR

Ron Pavkovich
Advantage Physical Therapy
Lexington, KY, USA
Phone: (859) 263-8080; Fax (859) 263-8775
E-mail: ron@advantageptlex.com

¹ Advantage Physical Therapy, Lexington, Kentucky, USA