

CASE REPORT

TIBIOFEMORAL JOINT MOBILIZATION IN THE SUCCESSFUL MANAGEMENT OF PATELLOFEMORAL PAIN SYNDROME: A CASE REPORT

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ABSTRACT

Background and Purpose: Patellofemoral pain syndrome (PFPS) is a common source of anterior knee pain. Controversy exists over the exact clinical findings which define PFPS, thus, diagnosis and management can be challenging for clinicians. There is paucity in the literature concerning joint mobilization as treatment for PFPS, particularly at the tibiofemoral joint, as standard management is currently focused on therapeutic exercise, orthotics, bracing and taping. Therefore, the purpose of this case report is to describe the effects of tibiofemoral joint mobilization in the successful treatment of an individual with chronic PFPS as it relates to pain, function and central processing of pain.

Study Design: Case Report

Case Description: The subject was a 28-year-old female with a two year history of left anterior, inferior patellar knee pain consistent with chronic PFPS. She demonstrated diminished pressure pain threshold (PPT) and allodynia at the anterior knee, suggesting a component of central sensitization to her pain. She met several common diagnostic criteria for PFPS, however, only tibiofemoral anterior-posterior joint mobilization increased her pain. Subsequent treatment sessions (Visits 1-6) consisted of solely joint mobilization supplemented by instruction in a home exercise program (therapeutic exercise and balance training). As outcomes improved, treatment sessions (Visits 7-8) consisted of solely therapeutic exercise and balance training with focus on return to independent pain free functional activity.

Outcomes: Improvements consistent with the minimally clinically important difference were noted on the Kujala Anterior Knee Pain Scale, Numeric Pain Rating Scale, Global Rating of Change (GROC). Scores on the Fear Avoidance-Belief Questionnaire (6/24 to 2/24 PA, 31/42 to 5/42 W), PPT (119 to 386 kPa) and Step Down Test (11 to 40 steps) also demonstrated improvement. At a two month follow up, the subject reported continued improvement in functional activity, 0/10 pain and GROC = +5.

Discussion: This case describes the successful use of tibiofemoral joint mobilization in a subject with chronic PFPS and supports the use of joint mobilization as management in PFPS, particularly in cases where a centrally mediated component of pain may be present.

Level of Evidence: Therapy, Level 5

Keywords: Central sensitization, manual therapy, patellofemoral pain syndrome, pressure pain threshold

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