PROLOTHERAPY COMBINED WITH PHYSICAL THERAPY IN A RECREATIONALLY ACTIVE MIDDLE-AGED MAN WITH CHONDROMALACIA PATELLA

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INTRODUCTION

Chondromalacia patella is defined as the softening, thinning, and degradation of cartilage underneath the patella. Prolotherapy is a complementary injection therapy for chronic musculoskeletal pain that has been hypothesized to stimulate healing of chronic soft-tissue injury.²

Recent evidence suggests that prolotherapy may be beneficial in patients with chondromalacia patella for decreasing pain and stiffness, and increasing strength, range of motion, and functional levels of activity.¹

The purpose of this case report is to describe the use of prolotherapy combined with physical therapy in a recreationally active, middle-aged man with chondromalacia patella.

PATIENT CASE

The patient was a 50-year-old male triathlete presenting with a chief complaint of persistent left anterior knee pain and stiffness after injuring his knee 9 months prior while on an elliptical machine.

His knee pain progressed to the point that he could not perform any weightbearing exercise without significant discomfort. Previous treatment included corticosteroid and hyaluronic acid injections, as well as physical therapy, with minimal benefit.

Physical examination findings revealed an antalgic gait characterized by decreased stance phase on the left. Although knee range of motion was within normal limits, patellofemoral joint crepitus and tenderness to palpation along the medial aspect of the patella were noted. Quadriceps and hamstring muscle weakness was also noted. Ligamentous and meniscal testing was normal. Magnetic resonance imaging findings revealed moderate chondromalacia at the lateral patellar facet (Figure 1).

OUTCOMES

The patient received a series of three prolotherapy injections to the knee, each 2 to 3 weeks apart. In addition, physical therapy was initiated, which consisted of manual therapy for soft tissue and joint mobilization, targeted therapeutic exercise to address strength deficits of the quadriceps and hamstring muscles, and a gradual return to weightbearing exercise and activity (Figure 2).

At 4 months following the prolotherapy injections and physical therapy, the patient reported no pain during daily activities. Additionally, he had a normal gait, no complaints of stiffness, and full strength of the quadriceps and hamstrings muscles. Additionally, he had returned to swimming with fins, stationary cycling, unlimited walking on all surfaces, and agility drills.

CONCLUSION

In patients with chondromalacia patella, especially those who have not responded to prior interventions, prolotherapy combined with physical therapy may serve as an effective treatment option.

Future research should be done to assess the efficacy of prolotherapy combined with physical therapy in patients with chondromalacia patella.

REFERENCES