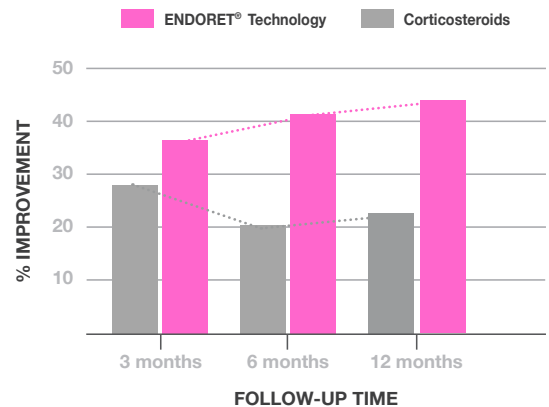
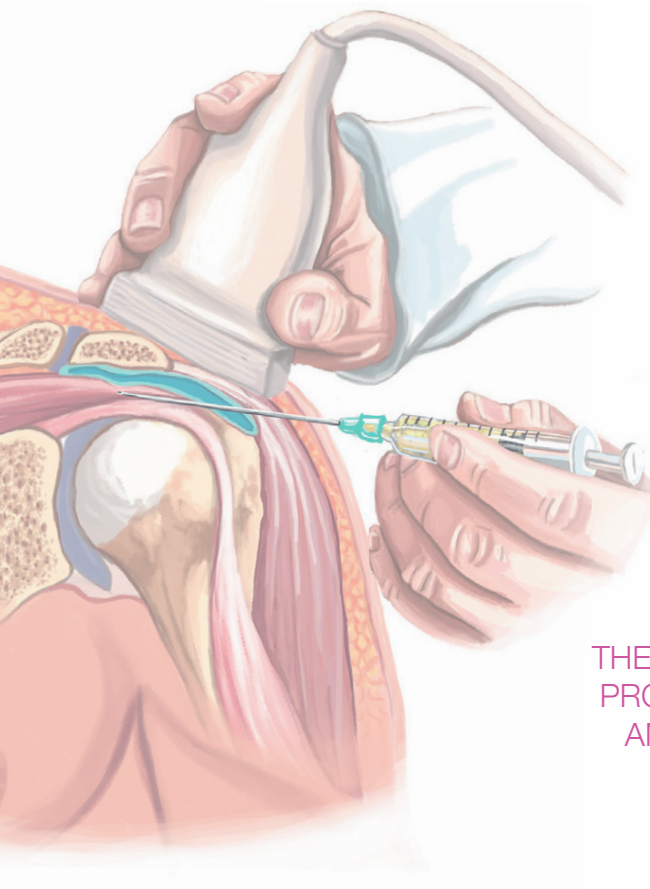


CHRONIC ROTATOR CUFF TENDINOPATHY

PLASMA RICH IN GROWTH FACTORS (PRGF) TREATMENT VS CORTICOSTEROIDS: A PROSPECTIVE DOUBLE-BLIND RANDOMIZED CONTROLLED TRIAL WITH 1 YEAR OF FOLLOW-UP

THE PERCENTAGE OF IMPROVEMENT WITH ENDORET® TECHNOLOGY IS DOUBLED COMPARED TO CORTICOSTEROIDS AT 6 AND 12 MONTHS

INTRATENDINOUS AND SUBACROMIAL INFILTRATION OF PRGF in patients with **CHRONIC ROTATOR CUFF TENDINOPATHY** showed **CLINICAL AND FUNCTIONAL IMPROVEMENT** compared to patients undergoing corticosteroid injections.



THE ABSENCE OF LEUKOCYTES IN THE PRGF CONTRIBUTED TO THE CLINICAL AND FUNCTIONAL IMPROVEMENT OF THE TENDINOPATHY

ABSTRACT

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Plasma rich in growth factors versus corticosteroid injections for management of chronic rotator cuff tendinopathy: a prospective double-blind randomized controlled trial with 1 year of follow-up.

BACKGROUND

Rotator cuff tendinopathy (RCT) is a painful and dysfunctional shoulder condition traditionally considered as a degenerative pathology. However, evidence is pointing to immunocompetent cells and activated stromal fibroblasts as the drivers of a nonresolved inflammatory condition in RCT. As potent anti-inflammatory agents, corticosteroid injections have been among the first-line and the most common therapeutic strategies. Recently, another adjuvant therapy to treat musculoskeletal inflammation-driven painful conditions, namely, platelet-rich plasma (PRP), has emerged as safe and effective. The aim of this study was to compare the clinical efficacy of intratendinous injections of plasma rich in growth factors (PRGF) with conventional intratendinous corticosteroid injections on patients with chronic RCT using patient-reported outcome measures.

METHODS

A total of 39 patients received PRGF treatment (3 infiltrations, 1 every other week), whereas 40 patients, as a control group, received corticosteroid (3 infiltrations, 1 every other week). Patients were evaluated before treatment and at 3, 6, and 12 months of follow-up using the University of California Los Angeles (UCLA) scale, Quick Disabilities of the Arm, Shoulder and Hand (Quick-DASH), and Constant test. The primary outcome of the study was a 15% superior improvement of the PRGF group compared with the corticosteroid group in the UCLA scale and QuickDASH test at 6 months of follow-up, considering this difference to be clinically relevant.

RESULTS

Both PRGF and corticosteroid groups showed significant clinical improvement in the 3 scores at all time points of the study compared with baseline. However, at 6 and 12 months of follow-up, the PRGF group had 22.1% and 21.2% superior improvement of the UCLA test, 14.3% and 13.5% for QuickDASH, and 16.4% and 20.2% for the Constant-Murley test, respectively, compared to the corticosteroid group.

CONCLUSIONS

Three PRGF intratendinous injections every other week in patients with chronic rotator cuff tendinopathy show significantly superior and sustained pain-relieving and functional improvements compared with corticosteroid intratendinous injections assessed by 3 patient-reported outcome scales at 6 and 12 months of follow-up.

LEVEL OF EVIDENCE

Level I; Randomized Controlled Clinical Trial; Treatment Study