

Combination of shock wave therapy and PRP for elbow Tendinosis

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Tendinosis, often confused with tendinitis, refers to chronic (long-term) degeneration of the tendon's collagen from overuse, rather than acute inflammation. Commonly affecting the elbow, it often presents as Tennis Elbow (lateral epicondylitis) or Golfer's Elbow (medial epicondylitis).

While there is a significant amount of evidence supporting the effectiveness of both treatments individually, the data on the combined use of PRP and ESWT for elbow tendinosis are still being explored. The rationale behind combining them is that they might work synergistically to promote healing.

The shock wave therapy can help to initiate the healing process and prepare the damaged tissue for the PRP injection, which then brings a concentrated dose of growth factors to stimulate tissue repair. The shock wave therapy could potentially increase the permeability of the tissue, making it more receptive to the PRP treatment.

This combined approach could potentially provide more comprehensive treatment, especially for patients with chronic, non-resolving elbow tendinosis.

We performed study comparing PRP and ESWT treatments for elbow tendinosis.

In Group 1 (PRP injection only), the mean visual analog scale (VAS) score improved from 7.3 to 2.5($P=0.000$), and the Mayo performance score improved from 26.3 to 82.8($P=0.000$).

In Group 2 (PRP injection followed by ESWT), the mean VAS score improved from 7.1 to 2.6($P=0.000$), and the Mayo performance score improved from 23.3 to 79.5($P=0.000$). Significant improvements in pain and clinical scores were observed in both groups. However, there were no significant differences in VAS, Mayo performance scores between the 2 groups after treatment.

~~Statistically~~Even though, there was no significant difference ~~statistically, -between the two groups after each treatment,~~but the results suggest that there is a potentially greater benefit when combining platelet-rich plasma (PRP) therapy with focused extracorporeal shock wave therapy (ESWT), as compared to PRP therapy alone, in the treatment of elbow tendinosis.

More research with larger sample sizes, longer follow-up periods, and control for confounding factors is needed to further validate these results. Additionally, individual patient factors and the severity and duration of the tendinosis could influence the effectiveness of these treatments, which

should be considered when interpreting these results.