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CONSERVATIVE TREATMENT OF MUSCULOSKELETAL CONDITIONS WITH PRP: STATE OF THE ART

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Tendinopathy presents a significant challenge in medicine, often arising from mechanical overload and proving resistant to conventional treatments. The emergence of Platelet-Rich Plasma (PRP) offers a beacon of hope where traditional therapies like NSAIDs, corticosteroid injections, eccentric rehabilitation, and shock waves have fallen short. PRP, derived from autologous blood through centrifugation to concentrate platelets, holds promise due to its rich abundance of growth factors and cytokines, which harbor potential anti-inflammatory and healing properties. Following an intratendinous PRP injection, management and recommendations vary greatly among physicians. In the absence of studies comparing different rehabilitation protocols, identifying the ideal post-injection rehabilitation remains challenging. Although some consensus exists in the literature regarding post-procedure protocols, the underlying rationale for these recommendations remains somewhat limited. In this context, we advocate for a protocol grounded in the various phases of connective tissue healing and principles of optimized active tendon rehabilitation. This involves exercises that facilitate a gradual increase in the mechanical load applied to the tendon, representing the most appropriate approach.

The knee joint, with its unique mechanical and biological characteristics, demands a multifaceted approach for the restoration of functionality following injuries and insults. While surgical interventions remain definitive for many knee pathologies, PRP serves as a valuable adjunct due to its biological stimuli, enhancing and expediting patient recovery. Rational protocols maximizing the therapeutic properties of PRP are essential for achieving these objectives, emphasizing the importance of understanding PRP applications in the context of musculoskeletal conditions. The use of intra-articular PRP injections in the treatment of knee osteoarthritis has grown significantly in recent years, supported by numerous randomised controlled trials and meta-analyses demonstrating its superiority over placebo and other intra-articular interventions. Recognised as a primary treatment modality in accordance with

international guidelines from organisations such as ESSKA (www.esska.org) and AAOS (www.aaos.org), PRP injections face standardisation challenges due to the heterogeneity of protocols. To remedy this, GRIIP (www.griip.org), an international multidisciplinary consortium, has formulated twenty-five recommendations to guide clinical practice and future research protocols.

The aim of this conference is to provide an overview of the potential of PRP therapy to treat tendinopathy and osteoarthritis of the knee, while addressing the challenges of application and standardisation.

Keywords: injection, knee osteoarthritis, platelet rich plasma, tendinopathy

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