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Molecular mechanisms in tendon pathology: Protection by EPI®

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Based on the literature and our clinical experience, we know that percutaneous electrolysis intra-tissue (EPI®) has positive effects on recovery of tendinopathy in humans. The application of the EPI®, along with the performance of eccentric overload exercise improves the situation of tendinopathy, leading to observed anatomic and functional improvement in the tendon, appreciable by ultrasound using the scale and Victorian Institute of Sport Assessment patellar-tendon (VISA-P). The main objective of our study corroborates these results, using animal research to analyze the molecular mechanisms underlying the recovery tendinopathies and EPI® technology. Our hypothesis is based on the analysis of oxidative stress and inflammation that may appear on tendinopathies and could be the mechanism of recover. Not many studies are in the literature about electrolysis and tendon pathology and any of them is about EPI technique and tendon recovery. Here we also analyze the recovery EPI® technique of tendon pathology, seeking also the molecular mechanisms that cause the tendon recovery.