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Abstract (600 word limits)

Background: Instrument-assisted soft tissue mobilization technique (IASTM), Ultrasound therapy (US), and Deep Friction Massage (DFM) offered to manage adductor muscles for facilitating the fast recovery and promoting tissue healing. Few studies are available about the effects of IASTM, how far the effectiveness of ultrasound on the functional recovery is still under debate. Deep friction massage is known to be used to promote muscle fiber arrangement. Methods: 46 participants divided randomly into four groups; (I) control group, no agent used (n=10), (II) instrument-assisted soft tissue mobilization technique (n=12). (III) Ultrasound therapy (n=12) (IV) Deep friction massage (n=12). 15 sessions delivered to all participants over five weeks, day after day. Analysis: Numerical Pain Scale, Inclinometer, dynamometer, and ultrasound imaging used to measure pain severity, pain-free abduction passive range of motion, maximum pain-free adductor contraction, and tissue healing respectively. Baseline measurements were done before any intervention, and measures after the 1st week, 3rd week, and at the end of the therapeutic intervention. Repeated measures MANOVA used to compare within and between groups. Result: IASTM and US show a significant effect on Pain, recovery $(ROM \{P < 0.031, P < 0.018\} - Strength \{P < 0.026, P < 0.041\})$, and proper healing (P < 0.049, P < 0.041)P <0.021). Initially, ultrasound was effective in reducing pain intensity and accelerating healing but, IASTM is more effective in gaining recovery. DFM only has tissue healing effect (P <0.039). Conclusion: IASTM is the most effective method regarding fast recovery and proper tissue healing in groin strain unless the pain is not a big issue

Recent Publications (minimum 5)

Ahmadi Tehrani A, Omranpoor MM, Vatanara A, Seyedabadi M, Ramezani V. Formation of nanosuspensions in bottom-up approach: theories and optimization. Daru. 2019 Jan 19.

Seyedabadi M, Rahimian R, Ghia JE. The role of alpha7 nicotinic acetylcholine receptors in inflammatory bowel disease: involvement of different cellular pathways. Expert Opin Ther Targets. 2018 Feb;22(2):161-176.

Fatemikia H, Seyedabadi M, Karimi Z, Tanha K, Assadi M, Tanha K. Comparison of 99mTc-DMSA renal scintigraphy with biochemical and histopathological findings in animal models of acute kidney injury. Mol Cell Biochem. 2017 Oct;434(1-2):163-169

Rahimian R, Zirak MR, Seyedabadi M, Keshavarz M, Rashidian A, Kazmi S, Jafarian AH, Karimi G, Mousavizadeh K. Protective effects of tropisetron on <u>cerulein-induced acute pancreatitis</u> in mice. Biomed Pharmacother. 2017 Sep;93:589-595

Seyedabadi M, Fakhfouri G, Ramezani V, Mehr SE, <u>Rahimian</u> R. The role of serotonin in memory: interactions with neurotransmitters and downstream signaling. Exp Brain Res. 2014 Mar;232(3):723-38.

Seyedabadi M, Ostad SN, Albert PR, Dehpour AR, Rahimian R, Ghazi-Khansari M, Ghahremani MH. Ser/Thr residues at $\alpha 3/\beta 5$ loop of G α s are important in morphine-induced adenylyl cyclase sensitization but not <u>mitogen-activated</u> protein kinase phosphorylation. FEBS J. 2012 Feb;279(4):650-60

Biography [100 words]

Dr. Hesham has completed his Ph.D. at Cairo University, Egypt and studied DPT at Arcadia University, United States. He is a consultant of musculoskeletal rehabilitation of orthopaedic surgeries department. He is an assistant professor at the college of applied medical science, Jouf Uni., KSA. He was awarded special recognition from APTA as his role in the development of shoulder rehabilitation

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References (With Hyperlink)

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