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PHYSIOTHERAPY IN MEDIAL TIBIAL STRESS SYNDROME: A SINGLE CASE STUDY.

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Background: Medial Tibial Stress Syndrome (MTSS), commonly known as shin splints, is a common overuse injury seen in athletes and runners. It is characterized by pain along the tibia due to repetitive stress and inadequate recovery. Physiotherapy interventions play a key role in reducing pain, improving muscle strength, and restoring functional performance, enabling a safe return to activity and sports participation.

Purpose: To evaluate the effectiveness of a structured physiotherapy rehabilitation program in the management of MTSS in a recreational runner.

Methods & Materials: A 25-year-old female recreational runner presented with bilateral MTSS, with pain localized along the distal third of the tibia, aggravated during running. A 6-week structured physiotherapy program was implemented. The acute phase included pain management using cryotherapy, ultrasound therapy, and kinesiology taping. The strengthening and mobility phase involved progressive exercises targeting the tibialis posterior, soleus, and intrinsic foot muscles, along with ankle mobility and calf stretching. The functional phase included gait retraining, proprioceptive training, and a gradual return-to-running protocol. Outcome measures included the Visual Analog Scale (VAS), Single-Leg Hop Test, and Y-Balance Test.

Results: The findings of this study after 6 weeks of intervention, pain significantly reduced (VAS: 6/10 to 1/10), and functional performance improved, with a 20% increase in Single-Leg Hop Test distance and better dynamic balance.

Conclusion: A structured and progressive physiotherapy program effectively reduced pain and improved functional performance in a recreational runner with MTSS. Early intervention, combined with individualized exercise progression, facilitated a safe and successful return to running while minimizing the risk of recurrence.

Keywords: Medial Tibial Stress Syndrome, Visual Analog Scale, Single-leg hop test, Y-balance test, Recreational runners.