

Enhancing Runner Recovery: Focused Shockwave Therapy for Bone Stress Injury Management

Elimantas Adamo*

Department of Sports Medicine, University of Wollongong, Innovation Campus, Building 233 (ITAMS Building), Wollongong, NSW 2522, Australia

Introduction

Bone Stress Injury (BSI) is a typical physical issue in sprinters and other truly dynamic populaces. The injury results from extreme interest on bone, with a range going from a pressure response to stretch crack. At the point when sub-maximal burdens put on a bone surpass its solidarity, microfractures structure. With the movement of stacking, a perceptible break line might create. BSI is a mentally wrecking injury for a competitor since it requires a long investment to recuperate, which incorporates extended time away from the game. The conclusion of a BSI depends on the clinical history and actual test discoveries, with radiographic imaging to affirm the presence and seriousness of the injury. Presently, the highest quality level for clinical assessment of BSI is X-ray [1]. Runners often face the challenge of bone stress injuries, which can significantly impede their training progress and overall performance. These injuries result from the repetitive impact and strain that running places on bones, leading to microdamage that accumulates over time. Conventional treatment approaches like rest, ice, and physical therapy can be effective, but there is a growing interest in innovative methods that can expedite recovery and ensure a quicker return to running. One such promising approach is the use of focused shockwave therapy for the management of bone stress injuries. This paper explores the potential of this non-invasive treatment method to enhance the recovery process for runners dealing with bone stress injuries [2,3].

Description

Focused shockwave therapy involves the application of high-energy sound waves to the injured area. These sound waves stimulate healing processes by promoting blood vessel formation, increasing circulation, and stimulating tissue regeneration. In the context of bone stress injuries, this therapy aims to accelerate the healing of microfractures and improve the overall strength of bones. The procedure begins with a thorough diagnosis to identify the precise location and extent of the injury. Once the injury is localized, the shockwave therapy is administered using specialized equipment [4]. The focused shockwaves are targeted directly at the injured bone, delivering energy to the affected area without damaging surrounding tissues. The treatment is typically performed on an outpatient basis and requires minimal to no anesthesia. Recent studies have shown promising outcomes of focused shockwave therapy for bone stress injuries in runners. Patients undergoing this treatment have reported reduced pain, accelerated healing times, and a quicker return to their running routines. Additionally, the non-invasive nature of the therapy contributes to its appeal, as it eliminates the need for surgical interventions and their associated risks [5].

*Address for Correspondence: Elimantas Adamo, Department of Sports Medicine, University of Wollongong, Innovation Campus, Building 233 (ITAMS Building), Wollongong, NSW 2522, Australia, E-mail: eadamo@gmail.com

Copyright: © 2023 Adamo E. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 05 July, 2023, Manuscript No. jsmds-23-111276; Editor Assigned: 07 July, 2023, PreQC No. P-111276; Reviewed: 19 July, 2023, QC No. Q-111276; Revised: 24 July, 2023, Manuscript No. R-111276; Published: 31 July, 2023, DOI: 10.37421/2161-0673.2023.13.318

Conclusion

In conclusion, the management of bone stress injuries in runners presents a continual challenge, with traditional treatments often requiring prolonged recovery periods. Focused shockwave therapy emerges as a potential game-changer in enhancing runner recovery from these injuries. By stimulating natural healing processes, this non-invasive treatment option holds the promise of reducing downtime and improving overall outcomes for runners. However, while the initial results are promising, further research is needed to fully establish the efficacy of focused shockwave therapy and to identify the most suitable candidates for this treatment approach. As the running community seeks ways to minimize injury impact and maximize training, focused shockwave therapy stands as an exciting avenue for achieving these goals and ultimately advancing the field of sports medicine.

Acknowledgement

None.

Conflict of Interest

There are no conflicts of interest by author.

References

1. Nattiv, Aurelia, Gannon Kennedy, Michelle T. Barrack and Ashraf Abdelkerim, et al. "Correlation of MRI grading of bone stress injuries with clinical risk factors and return to play: A 5-year prospective study in collegiate track and field athletes." *Am J Sports Med* 41 (2013): 1930-1941.
2. Fredericson, Michael, A. Gabrielle Bergman, Kenneth L. Hoffman and Michael S. Dillingham. "Tibial stress reaction in runners: Correlation of clinical symptoms and scintigraphy with a new magnetic resonance imaging grading system." *Am J Sports Med* 23 (1995): 472-481.
3. Arendt, Elizabeth, Julie Agel, Christie Heikes and Harry Griffiths. "Stress injuries to bone in college athletes: A retrospective review of experience at a single institution." *Am J Sports Med* 31 (2003): 959-968.
4. Hoening, Tim, Adam S. Tenforde, André Strahl and Tim Rolvien, et al. "Does magnetic resonance imaging grading correlate with return to sports after bone stress injuries? A systematic review and meta-analysis." *Am J Sports Med* 50 (2022): 834-844.
5. Fredericson, Michael, Andrea Kussman, Madhusmita Misra and Michelle T. Barrack, et al. "The male athlete triad—a consensus statement from the female and male athlete triad coalition part II: Diagnosis, treatment and return-to-play." *Clin J Sport Med* 31 (2021): 349-366.

How to cite this article: Adamo, Elimantas. "Enhancing Runner Recovery: Focused Shockwave Therapy for Bone Stress Injury Management." *J Sports Med Doping Stud* 13 (2023): 318.