



Conservative Management of Partial Achilles Tendon Rupture

Ampeliotis P., Diamantaras D., Kouris A., Piskopakis N.
Athens Medical Center, Athens, Greece, Atromitos F.C., Athens, Greece

INTRODUCTION

Acute traumatic partial rupture of the Achilles tendon is an uncommon yet complex injury in professional football, with its management remaining a topic of debate, particularly in top-tier leagues [1,2]. The main concern in avoiding operative management, which is a common approach for this injury, is the associated higher complication rates [3].

This case report presents a detailed account of the conservative treatment and recovery of a 23-year-old male professional football player who suffered a partial Achilles tendon tear of his dominant leg (left) while competing in the Greek Superleague.

Initial diagnosis was made by clinical evaluation (increased tenderness in palpation, negative palpable gap, negative Thompson test) combined with MRI scan and U/S examination.

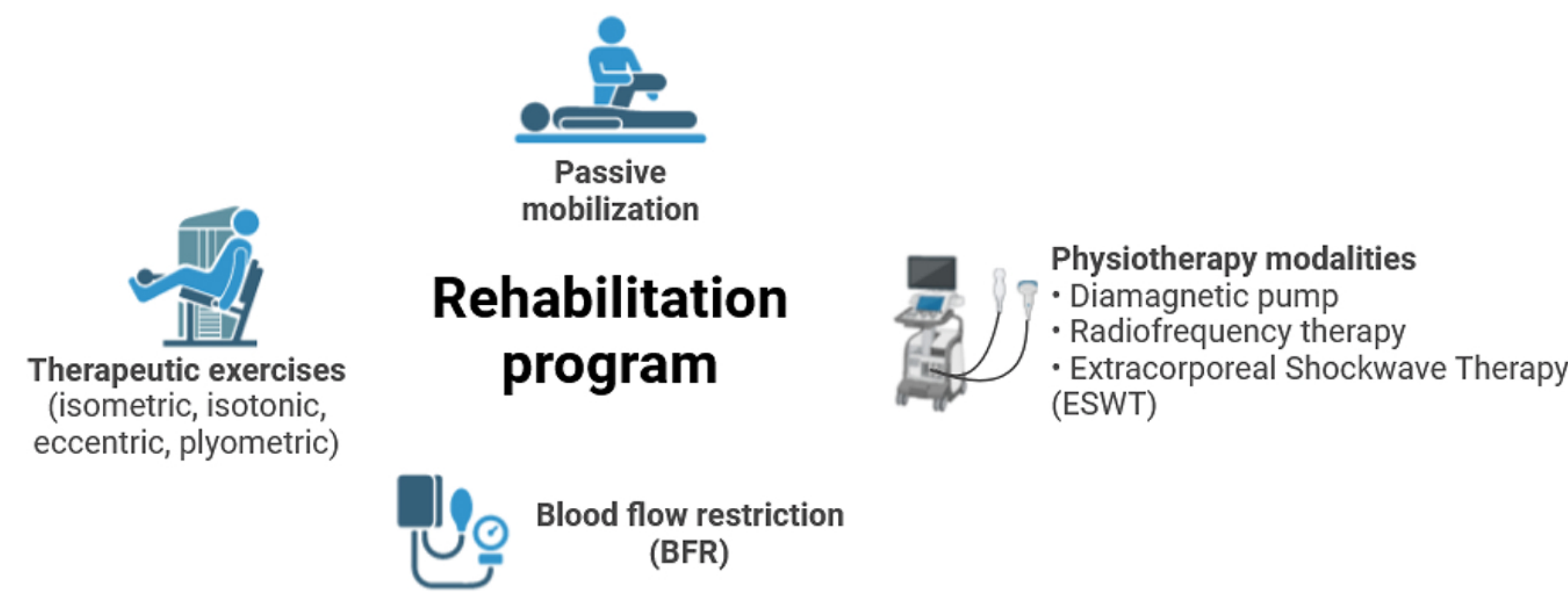
Athlete's characteristics:

- 23-year-old winger football player competing in Greece's first division
- BMI = 22.5 kg/m² | Body fat = 8.9%
- Participations in 2022-2023: 25 championship games and 3 cup games

METHODS

Progress was monitored through:

- MRI scans at each key recovery milestone
- Weekly ultrasound (US) assessments
- Clinical evaluations
- GPS data (STATSports Apex, Newry, Ireland)



Rehabilitation team

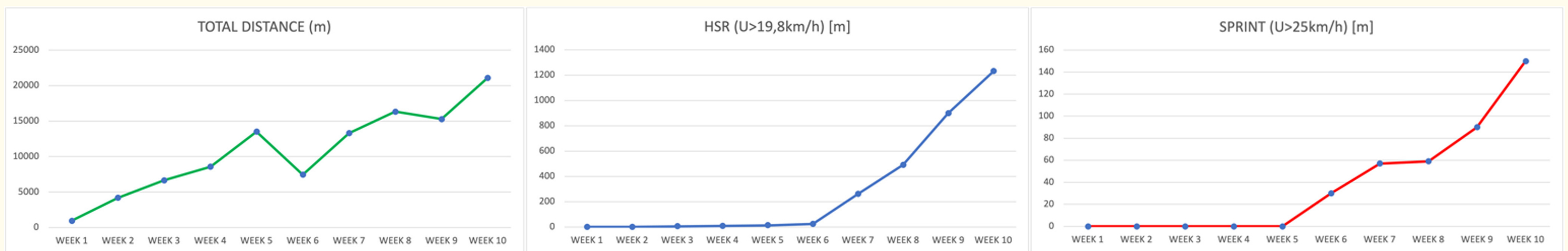
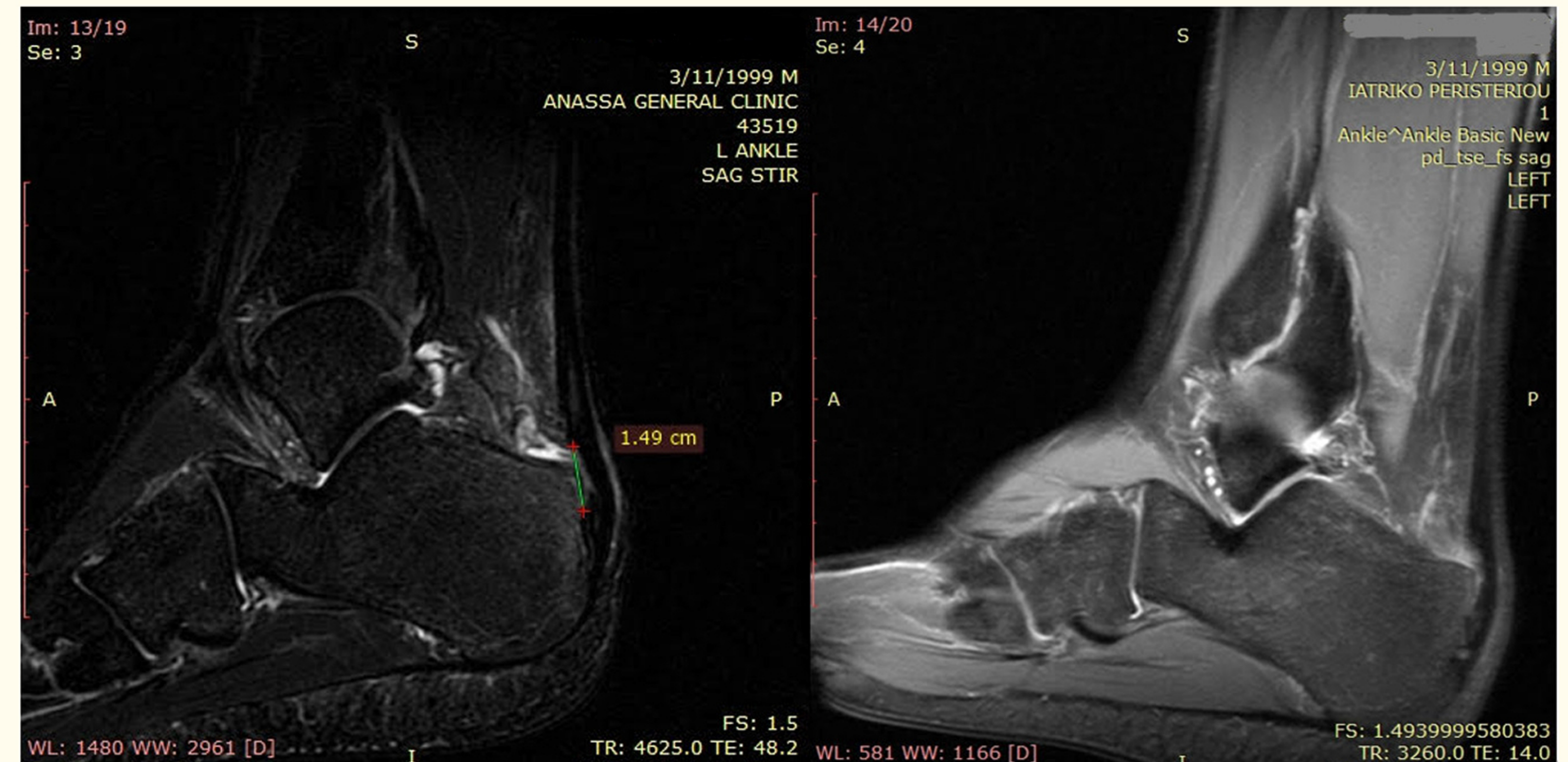
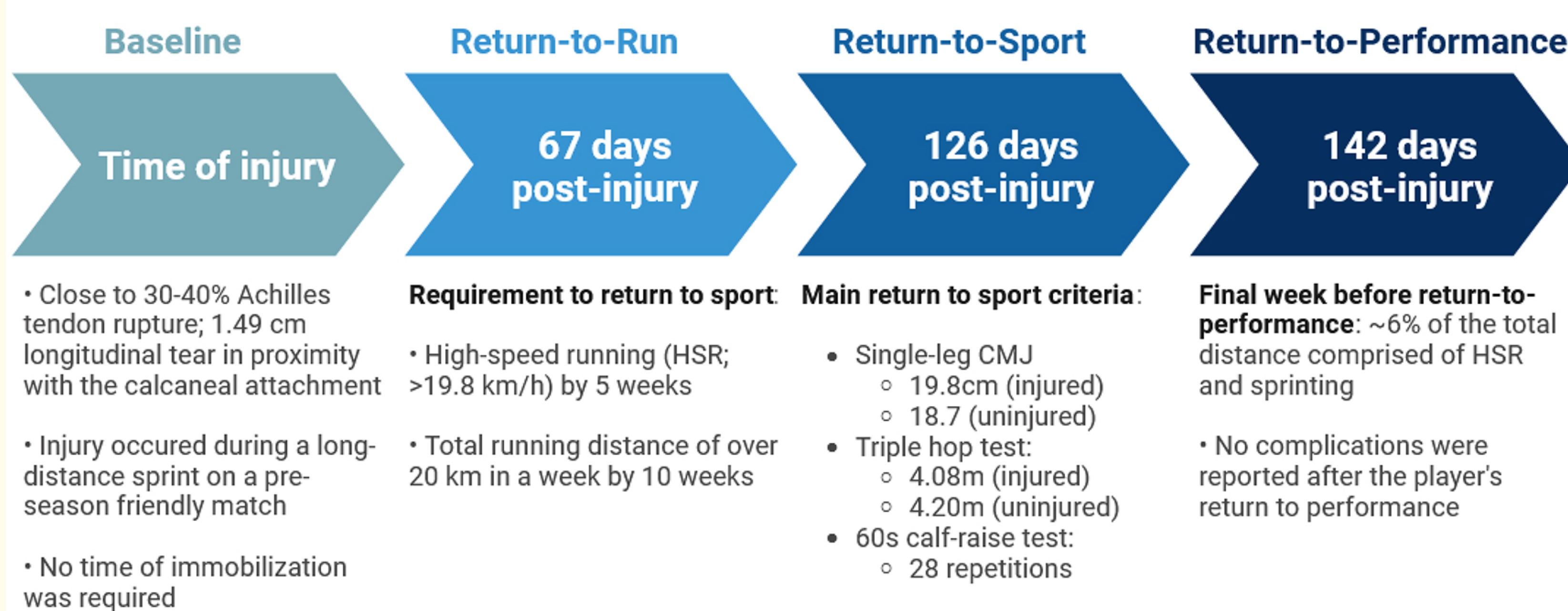


Return-to-Sport criteria:

- Single-leg countermovement jump
- Triple hop test
- Crossover triple hop test
- Calf-raise test

RESULTS

Key recovery milestones



Total distance, high-speed running, and sprint meters covered during in-field rehabilitation period; Weekly average GPS data in 2024 showed a +5.7% increase in total distance (2024: 21,092 m; 2023: 19,900 m), a -0.5% decrease in high-speed running (2024: 1,231 m; 2023: 1,237 m), and a -3.3% decrease in sprint distance (2024: 150 m; 2023: 155 m) compared to 2023.

CONCLUSION

- Conservative management may be a viable and effective option for young professional football players with partial Achilles tendon rupture.
- The integration of advanced imaging with performance data is crucial in navigating the rehabilitation process, enabling a successful return to the pre-injury high-performance level.
- A non-operative approach may be indicated in the management of such injuries among professional athletes.

REFERENCES

- [1] Gatz, M., et al. (2020). Partial Achilles Tendon Rupture-A Neglected Entity: A Narrative Literature Review on Diagnostics and Treatment Options. *J Clin Med*, 9(10), 3380.
- [2] Medeiros D. M. (2021). Conservative treatment of Achilles tendon partial tear in a futsal player: A case report. *Physiother Theory Pract*, 37(10), 1158-1165.
- [3] Seow, D., et al. (2023). Lower re-rupture rates but higher complication rates following surgical versus conservative treatment of acute achilles tendon ruptures: a systematic review of overlapping meta-analyses. *Knee Surg Sports Traumatol Arthrosc*, 31(8), 3528-3540.



Scan the QR code to watch a detailed YouTube video covering the injury mechanism, exercises for each phase of rehabilitation, and a game played post-rehabilitation.