

Effects of non-invasive neuromodulation on sleep quality and recovery in elite female football players

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Status	RECRUITING
Sponsor	University of Las Palmas de Gran Canaria
Enrollment	20 participants

Plain Language Summary

This study is looking at whether a gentle, painless electrical treatment can help elite female football players sleep better and recover faster from training and games. The treatment uses a device called NESA X SIGNAL, which sends tiny electrical impulses through electrodes placed on the hands and feet. These micro-currents are designed to calm the nervous system in a way that supports deeper sleep and better physical recovery.

Twelve professional female footballers will take part over eight weeks, with half receiving the treatment four times a week and the other half continuing their normal training routine without it. Researchers will measure sleep quality, heart rate patterns, speed, jump ability, stress hormone levels, and anxiety before and after the program.

You may be eligible if you are a female professional footballer aged 18 to 30, currently competing at a national or international level, and have not had a serious injury in the past six months. This is a small study looking to find out whether this type of non-invasive technology is safe and helpful for athlete recovery.

Key Eligibility Criteria

Inclusion (5)

- Professional female footballers aged 18–30
- Active during the study period
- Participation in national or international competitions in past 2 years
- No serious injury in previous 6 months
- Written informed consent

Exclusion (5)

- Current serious injury
- Participation in another clinical study in past 3 months
- Medical contraindications
- Contraindications to electrical stimulation
- Medications interfering with outcomes that cannot be stopped

Locations (1 total)

Spain