Reference

Riachi, N.[a,b]; Chalah, M.A.[c,d,e]; Ahdab, R.[e]; Arshad, F.[f]; Ayache, S.S.[c,d,e,g]

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Effects of the TENS device, Exopulse Mollii Suit, on pain related to fibromyalgia: An open-label study

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Products

Exopulse Mollii Suit

Major Findings

With Exopulse Mollii Suit:

→ Significant reduction in subjective Pain Rating

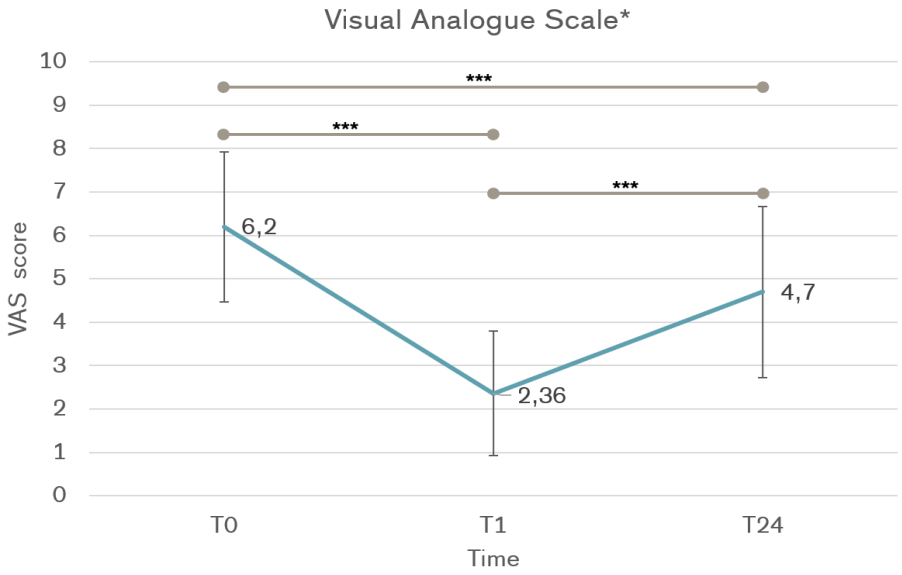


Figure 1: VAS score for pain before (T0), right after (T1), and 24h after (T24) stimulation. ***p<0.001

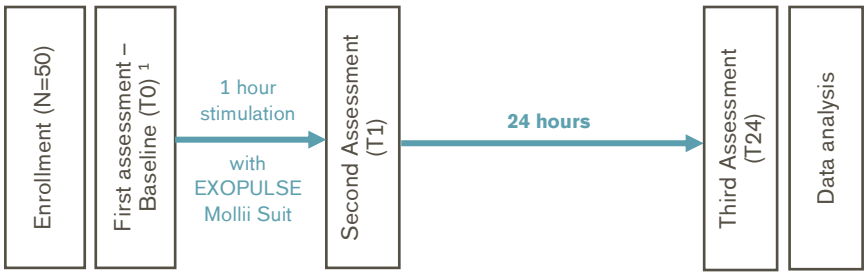
*The Visual Analogue Scale (VAS) is a psychometric response scale that measures subjective characteristics, e.g., pain or attitudes that cannot be directly measured. It rates pain from 0 (no pain) to 10 (worst pain) imaginable.

Population

Subjects:	N = 50 (all female)
Etiology:	Fibromyalgia (at least three months); history of pain (at least 6 months); no pharmacological therapies
Mean age:	53.33 ± 7.08 years

Study Design

Single intervention prospective study:



Pain was assessed via the Visual Analogue Scale (VAS*) before using the stimulation device (T0), directly after using it for 1hour (T1) and 24 h (T24) after using it.

Results

Body Functions			Activity				Participation	Environment	Others
Biomechanical (ROM)	Medical (Pain / Injuries)	Other	Upper extremity function	Lower extremity function	Safety	Activity, Mobility, ADLs	Preference, Satisfaction, QoL	Health Economics	Technical aspects

Category	Outcomes	Results for Baseline vs. Mollii Suit	Sig.*
Pain	Visual Analogue Scale	Subjective Pain rating reduced by 62% after one session (VAS_{T0}:6.20±1.73 to VAS_{T1}:2.36±1.44)	++
		Subjective Pain rating reduced by 25% 24h after one session (VAS_{T0}:6.20±1.73 to VAS_{T24}:4.70±1.97)	++

* no difference (0), positive trend (+), negative trend (–), significant (++/––), not applicable (n.a.)

Author's Conclusion

Applying Exopulse Mollii Suit over a single 60min session resulted in significant analgesic effects that were observed immediately after the session and lasted for at least 24h. Unlike conventional TENS devices (…), Exopulse Mollii Suit can simultaneously stimulate 40 muscular sites accounting for the diffuse nature of fibromyalgia pain. It additionally overcomes difficulties encountered in electrode placement and positioning (Riachi *et al.*, 2023).