RECOVERY FROM PLANTAR HEEL PAIN USING THE FASCIAL DISTORTION MODEL A PILOT STUDY

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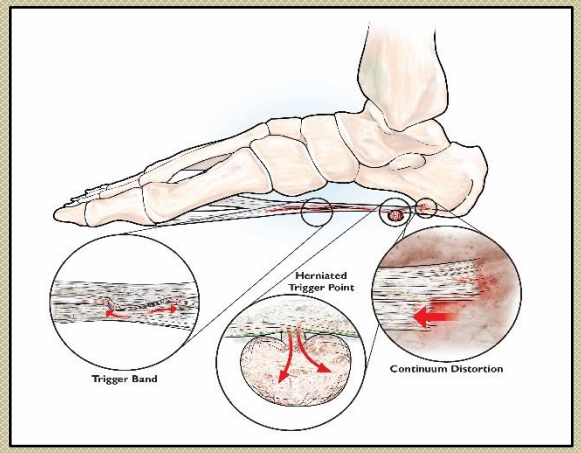
Introduction

To assess feasibility of the Fascial Distortion Model (FDM) for treatment of plantar heel pain (PHP). The FDM is a hands-on, direct technique that is non-invasive and has been shown in preliminary studies to be effective in treating musculoskeletal (MSK) injuries.



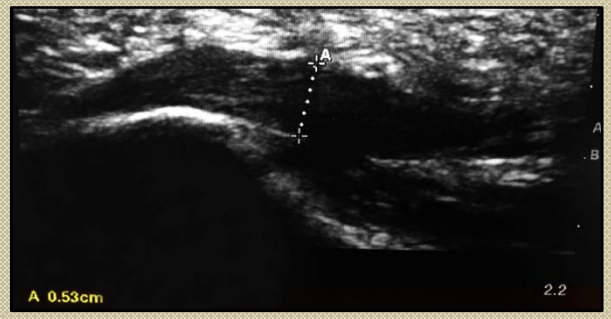
Methods

- Analyzed 28 active duty service members (SM) at Ft. Gordon diagnosed with PHP in the last 6 months without treatment in prior 30 days. Total of 50 feet.
- Participants had three encounters, the first two for treatment and screening, and the last to screen and do a final assessment.
- Participants screened with medical history, MSK exam, ultrasound to assess thickness of fascia, foot health questionnaire, and level of pain using the visual analogue scale (VAS).

Clinical Question

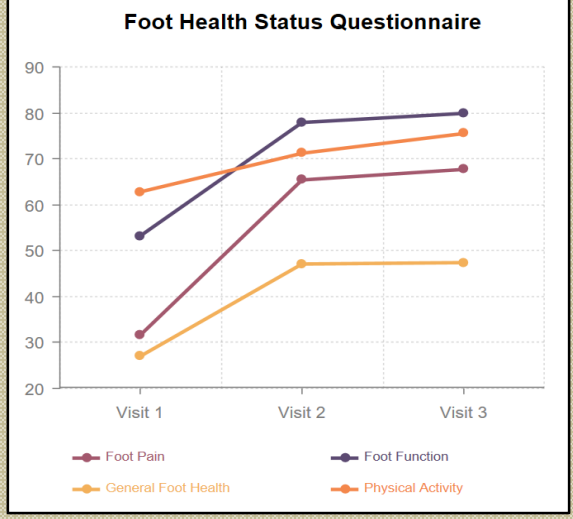
Is FDM a feasible and efficacious treatment that reduces recovery time and profile days in the active duty population?

Ultrasound: Plantar Fascia Before and After



Discussion

- There are a large number of SMs whose readiness is affected by PHP and the FDM offers a quick, affordable, and non-invasive treatment option to improve readiness.
- FDM is limited by training of the provider in offering this treatment.



Results

VAS1: 71.42(20.11), 27-100
VAS2: 24.71(20.62), 0-76
VAS3: 18.02(21.52), 0-69

*VAS, within subjects repeated measures ANOVA, F-test = 61.83, p = <.001

US thickness L side, Time 1: .40(.10), .27-.64
US thickness L side, Time 2: .36(.08), .25-.53 (p = .001)
US thickness R side, Time 1: .41(.15), .28-.84
US thickness R side, Time 2: .35(.11), .23-.68 (p=.003)

Per protocol and intention treat analyses were convergent; both demonstrated a statistically significant difference at Time 2 relative to Time 1, bilaterally.

Conclusion

FDM is an appropriate therapy for plantar heal pain vs. standard of care. This therapy is affordable, non-invasive, and requires little to no recovery time. Given the burden of PHP on the active duty population and the Army's goal of readiness, the FDM shows promise as an alternate therapy for PHP to reduce time away from work.