Effects of Fascial Stretch Therapy (FST) on Pain Index and Activities of Daily Living (ADL) in Patients with Chronic Non-specific Low Back Pain (LBP)

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Numerous fascia-focused therapies are used to treat pain, most relying on direct manipulation and/or tool-mediated techniques. FST, on the other hand, uses distally applied techniques to yield both local and global desired tissue outcomes and subjective pain improvement, including those related to LBP.

We hypothesize that subjects receiving FST will have reduced nonspecific LBP and enhanced activities of daily living (ADL) scores.



METHODS

- ✓ 11 subjects met study criteria (7F, 4M; Age 22-32 y/o).
 underwent 1 (N=11), 2 (N=7), or 3 (N=5) successive FST[™] treatments.
- Treatments: 30 min of 3-strap stabilization body stretch (8 per side).
- Pain and ADL scores (Bathing: BAT; Car egress/ingress: CEI; Toilet use: TOI; Forward bending: FOB; Dressing: DRE) measured pre- and 1- and 3-day post-FST.
- Used a linear mixed effects model to ascertain the relative % change in scores over time using the pretreatment time point as the reference group. All p-values were 2-sided and p<0.05 was considered statistically significant.</p>



RESULTS

Statistically significant improvements in pain and ADL scores (*) were found at the time points shown in the table:

SCORE	1 Tx; 1 Day Post	1 Tx; 3 Day Post	2 Tx; 1 Day Post	2 Tx; 3 Day Post	3 Tx; 1 Day Post	3 Tx; 3 Day Post
PAIN	×	×		×	×	
BAT				×		
CEI	×	×	×	×	×	×
ΤΟΙ						
FOB	×	×	×	×	×	×
DRE	×		×		×	×

SCORE IMPROVEMENTS FOR PAIN AND ADL SCORES

NOTED IN THE TABLE RANGED BETWEEN 31% AND 57% COMPARED TO PRETREATMENT TIME POINT.

CONCLUSION

This pilot study shows that both single as well as multiple, successive 30 minute FST treatments improve pain and ADL scores, with the highest improvements seen in pain and FOB. Treatment was limited to only one 30-minute session on any given day.

LIMITATIONS OF STUDY

Low sample size of pilot study

Lack of a no-treatment group

These factors limits our ability to make definitive conclusions. Future studies will include a no-treatment group as well as determine optimal treatment frequency. Additionally, measurements of additional variables aimed at mechanistic understanding of treatment effects will also be made.