Home-based instrument assisted soft tissue mobilization for pain in patients with plantar fasciitis: a prospective, pre-post intervention study

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OBJECTIVE: To provide initial evidence about the efficacy and safety of the Sidekick Tool, a recently developed Instrument-Assisted Soft Tissue Mobilization (IASTM) tool, as a home-based treatment approach for managing pain and function in individuals with plantar fasciitis (PF). **DESIGN:** Single-group, prospective, pre-post intervention. **METHODS:** 18 subjects participated (16 female), aged 25-63 years old. Participants were dispatched the Sidekick Tool via postal mail and were concurrently provided with a five-day home-based treatment protocol via electronic mail. Video conferencing interviews were conducted before and after the treatment phase to assess outcomes. Pre- and post-questionnaires were used to assess pain levels via numerical pain rating scale scores (0-to-10). Likert scale-based questions were employed to collect data on patients' experiences in managing pain related to PF, the characteristics of their PF-related pain, and their engagement in sport-related activities. Qualitative interviews were subjected to content analysis for in-depth exploration. **RESULTS:** After five days of treatment, the home-based IASTM was associated with a statistically and clinically significant reduction in pain intensity in the morning (mean change: -2.8, 95% confidence interval [CI]: -4.3 to -1.4, $P<0.001$). Additionally, a marginally significant reduction in pain intensity at night was observed (mean change: -1.9, 95% CI: -3.8 to 0.05, $P= 0.056$). The home-based IASTM was associated with statistically significant improvements in daily pain perception ($P<0.001$), daily activities ($P<0.001$), pain management ability ($P=0.001$), and sports-related activities ($P=0.001$). No

adverse events were reported. **CONCLUSION:** This preliminary investigation suggests that the Sidekick Tool could be associated with clinically significant short-term pain reduction effects and has the potential to be used as a home-based intervention for alleviating pain in individuals with plantar fasciitis.

Keywords: Plantar fasciitis, IASTM, pain relief, home treatment, physiotherapy

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Introduction

Plantar fasciitis (PF) is a condition that impacts millions of people per year, whether active or sedentary, and can be a long-lasting condition.[1] Those suffering from PF are often looking for pain reduction methods so they can continue participating in their activities and daily life. The treatment approach for PF suggests education and self-management strategies as first-line treatments.[2] This includes providing information about the condition, advice on footwear and activity modification, and the promotion of stretching and strengthening exercises. Second-line treatment options include the use of orthotic devices and extracorporeal shockwave therapy (ESWT). Lastly, invasive treatments like corticosteroid injections or surgery might be considered when treatment is unsuccessful.[2] First-line treatment of self-management strategies should be further explored to increase the adherence to non-invasive treatments, decrease pain duration and reduce load and expenditures in healthcare systems. There have been multiple studies showing pain reduction and function scores improving after consequent physiotherapy treatments that have included instrument-assisted soft tissue mobilization (IASTM).[3-7]

IASTM is a skilled intervention that includes the use of specialized tools to manipulate the skin, myofascia, muscles, and tendons by various direct compressive stroke techniques.[8] The use of IASTM for various indications and its effectiveness on different outcomes have been explored in multiple musculoskeletal conditions. A 2016 systematic review[9] analyzed seven randomized trials of IASTM on varying musculoskeletal conditions. Despite heterogeneity among study results, there is evidence indicating that IASTM is associated with improved patient-reported pain in elbow epicondylopathy, carpal tunnel syndrome, thoracic back pain, patellar tendinopathy, and achilles tendinopathy.[9,10] However, in all seven studies, IASTM was delivered through physiotherapy treatment sessions, not as a home-based, self-administered treatment.

Recognizing the need for further investigation into self-management options and reducing the burden and cost on healthcare, this pilot study aims to provide initial evidence on the efficacy of IASTM, particularly when applied through a self-administered, home-based treatment plan. The hypothesis posits that utilizing the Sidekick Tool for a duration of five days will lead to reduced pain and improved functionality among individuals suffering from PF. By exploring these outcomes, this study aims to contribute to the body of knowledge and stimulate further research into non-invasive, home-treatment options for PF.

Methods

Study Design

This was a prospective, pre-post intervention study. Participant recruitment was initiated and finalized in June 2023. We followed the Strengthening the Reporting of Observational studies in Epidemiology (STROBE) guidelines to report this study.[11]

Participants

We included patients aged 18 years or older. We included participants who had a diagnosis of plantar fasciitis by a physician, physical therapist or podiatrist. In addition, participants must have demonstrated the following characteristics: (i) pain located near the plantar heel aspect of the foot, (ii) pain lasting a minimum of two weeks, and/or (iii) a history of previous treatments, such as bracing, injections, physical exercise programs, or rolling techniques. Participants were not excluded based on unilateral or bilateral symptoms. Exclusion criteria included self-diagnosis, pain in other areas of the foot, or other foot injuries. Subjects were not instructed explicitly in regards to discontinuing concurrent treatments, such as pharmacological or exercise-based interventions, however, starting new drug treatments was not recommended.

Patient Recruitment

Recruitment was conducted through targeted social media ads (Facebook) aimed at individuals experiencing PF pain located in the United States. A monetary incentive was included in the advertisement to provide the participant with $50 USD on completion of the study. Initial screening was done through an online questionnaire, which determined eligibility for the study (Appendix A). All patients provided an electronic informed consent.

Procedures

Eligible participants were required to book a video call interview using a online scheduling platform. During the initial video call, eligibility criteria were re-assessed, and the study protocol was reviewed with the participants. Within seven days following the initial call, a Sidekick Swerve Tool was mailed to each participant (Appendix B). Along with the tool, an email was sent containing the study protocol and a tracker for monitoring participant's progress (Appendix C).

A mid-way follow-up via email was sent to all participants on Day 3 to determine any potential issues or concerns to be addressed. On the fifth day of the study, participants received a post-test questionnaire to gather relevant information and feedback (Appendix D). To gain a more comprehensive understanding of the participants' experiences, a final video call was scheduled within two days of completing the study to reduce recall bias. This call was recorded, after obtaining verbal informed consent, using the video conference service and involved a subjective interview that included single post-test questions to further explore specific aspects of the participants' experiences. Furthermore, qualitative responses regarding the participants' use of the Sidekick Tool and their pain levels were collected during this final interview. Participants were then administered the $50 participation incentive through a digital payment system. At this time, the participants were informed they were able to keep possession of the Sidekick Tool.

A summary of the timeline of the study is as follows: baseline measures were collected, within 1-3 days a video call was booked, within five days the participant received the Sidekick Tool, 5-6 days after the baseline measures were collected, the intervention began, which indicated Day 1 of the study for the participants. On Day 3 of the intervention there was a mid-way follow-up, on Day 5, the intervention ended and a concluding video call was booked within 1-2 days. The entire follow up period spans ±12 days.

Intervention

A muscle scraping protocol was emailed to each participant at the beginning of the intervention. It included instructions to use the Sidekick Tool twice daily, morning and night, for two minutes each session. Specific instructions explained and demonstrated where to complete muscle scraping and how to do it. Participants were not given further information regarding technique, pressure, or video demonstrations. The full protocol can be read in Appendix C.

Outcomes

The primary outcome was the mean change in pain intensity in the morning after five days of treatment, measured on a 0-to-10 numeric pain rating scale (NPRS), with 0 meaning “no pain at all” and 10 representing “the worst pain you’ve ever experienced”. Secondary outcomes included pain intensity at night, measured via NPRS, and questions that captured each patient’s experience dealing with PF pain and the quality of their PF pain. The latter questions were operationalized as 5-point Likert Scale items, giving participants five response categories: strongly disagree, disagree, unsure, agree and strongly agree. Outcome data were collected at baseline and on Day 5 of the intervention.

Secondary qualitative outcomes looked at subjective experiences of PF pain and experience using the Sidekick Tool as a home-based treatment. Any treatment-emergent adverse effects were recorded.

Statistical Analysis

We summarized variables with a normal distribution as mean (standard deviation, SD). Categorical variables were presented as numbers (percentages). Treatment effects expressed via mean changes from baseline (95% confidence interval, 95% CI). Negative values indicated improvements in pain intensity (i.e. reduced pain levels following the treatment).

Within-group changes from baseline were tested with paired Student's t-tests. Two-sided P-values < 0.05 were considered statistically significant. All analyses were performed in R (version 4.1.2, Vienna, Austria).

We conducted a thematic analysis to assess qualitative outcomes. A coding structure was initially established and subsequently refined through separate coding efforts. We then systematically arranged these codes into thematic groupings, enabling the data to be categorized to advance conceptual analysis.

Results

Figure 1 summarizes the study selection process. The advertisement reached 3,323 individuals, garnered 4,158 impressions, and received 191 clicks. A total of 114 responses were received, with 27 (24%) participants meeting all eligible criteria. Nine participants did not attend the first video call and were removed from the study. The remaining 18 participants successfully completed the entire study protocol and were included in the analysis.

Table 1 presents the baseline characteristics of the study participants. The mean (SD) age was 46.6 (8.5) years, 16 participants were female (99%), and 11 reported experiencing PF pain exceeding six months (61%).

Primary Outcome: PF pain in the morning

Figure 2 shows the changes in pain intensity observed over five days of treatment. The home-based IASTM technique was associated with a statistically and clinically significant reduction in pain intensity in the morning (mean change: -2.8, 95% CI: -4.3 to -1.4, $P < 0.001$).

Secondary Outcome: PF pain at night

The home-based IASTM technique was also associated with a marginally significant reduction in pain intensity at night (mean change: -1.9, 95% CIL -3.8 to 0.05, $P = 0.056$) (Figure 2).

Secondary Outcomes: Experience and quality of PF pain

Figure 3 summarizes the patient's experience and quality of pain before and after treatment with the home-based IASTM technique. The home-based IASTM technique was associated with statistically significant improvements in all domains examined.

There were also notable enhancements in sports-related activities, as evidenced by significantly reduced scores post-treatment compared to pre-treatment: mean (SD) scores were 2.9 (1.08) before treatment *versus* 1.8 (0.71) after treatment ($P < 0.001$).

Safety Outcomes

There were no reported treatment-emergent adverse events or complications associated with the home-based IASTM technique.

Secondary Outcomes: Subjective Experiences with Sidekick and PF pain

The interview transcripts were analyzed using content analysis and inductive coding, which revealed common themes. Within the main themes, sub-themes were developed, demonstrated in Table 2. One prominent theme was the design and quality of the product, including its ergonomics, durability, stainless steel quality, comfort in holding it, even weightedness, and ease of use. Participants also highlighted its portability and easy carrying.

Contrasting comments emerged regarding the uncertainty of use, as some participants mentioned that they had not seen anything like it before and needed instructions on how much pressure to apply. Additionally, some had different expectations and initially found the product heavy, intimidating and uncomfortable to use. However, all participants solved these issues independently.

A third prominent theme revolved around the effectiveness of the product. When comparing Sidekick to other products, participants frequently reported a positive experience, noting that it was more user-friendly, effective, and provided relief when other products had not. Overall, qualitative assessments revealed that all participants experienced pain relief, ranging from immediate to cumulative, and many commented that consistent use would yield even greater relief over time. Consequently, due to its effectiveness, numerous participants expressed their intention to incorporate Sidekick into their regular routines. Moreover, participants expressed that they would have been interested in the product if they had known about it earlier, and many indicated their willingness to share their positive experiences with Sidekick with friends.

Discussion

Principle Findings

This study provides initial evidence regarding the short-term efficacy and safety of the Sidekick Tool as a home treatment option of applying IASTM for individuals diagnosed with PF. Overall, the results suggested that the use of the Sidekick Tool was associated with a statistically significant reduction in morning pain intensity and may also exhibit efficacy in ameliorating night pain associated with plantar fasciitis following a five-day treatment regimen.

The Likert scale questionnaire findings additionally indicated a general reduction in reported pain levels and an enhanced perception of pain management among the participants.

Comparison with Previous Studies

This is the first study, to our knowledge, that has utilized IASTM in a home-based treatment plan following a protocol and showing a significant improvement in PF pain levels. Research has been performed into the mechanisms of IASTM although the evidence is inconclusive. Studies attribute results to vascular changes; increasing blood flow[12-14] and neurophysiological changes; pain modulation through central and peripheral nervous system mechanisms,[12-16] and connective tissue remodelling triggered by IASTM-induced micro-trauma to re-stimulate the inflammatory healing cascade to trigger fibroblasts to reorganize the collagen in tendons and ligaments.[12,17-22]

Previous studies have explored pain modulation techniques such as the Graston Technique[23] and the additional benefits of incorporating specific stretching techniques administered by trained physiotherapists. Jones et al.[6] reported pain reduction in their study in both the control and intervention groups, regardless of whether the provided treatment included therapist-administered IASTM, as an adjunct to conventional physiotherapy. Similarly, another study observed improvements in function and pain after multiple applications of Graston by a

physiotherapist, while the control group receiving conventional physiotherapy also experienced improvement.[4] Kiran et al[5] compared conventional physiotherapy alone and conventional physiotherapy with IASTM, finding a significant decrease in pain with the addition of IASTM. However, in all of the aforementioned studies, the presence of confounding factors makes it challenging to determine whether pain reduction was solely attributable to IASTM, the natural healing timeline, conventional physiotherapy benefits, or placebo effect of application by a trained health professional. In the attempt to reduce health-care burden and costs, teaching patients a home-treatment option that includes IASTM should be further explored.

Considering the range of adjunct therapies recommended for PF treatment, this study sought to isolate the effectiveness of IASTM with the Sidekick Tool. The results generally support this hypothesis; however, as an overall treatment plan, it is recommended to incorporate other modalities, such as stretching, movement, and strengthening exercises, for optimal outcomes. To the best of our knowledge, there has not been previous work analyzing the subjective perspectives for individuals experiencing PF. It is a debilitating condition and many participants have been desperate for a treatment strategy that relieves even a minuscule amount of their pain.

Limitations

Our investigation has some limitations that should be acknowledged. First, our results should be interpreted as preliminary rather than confirmatory. Second, the lack of control and blinding of participants could introduce Hawthorne's effects and measurement bias. Third, our findings refer to the short-term outcomes, and the durability of the treatment effects is still unclear. Fourth, previous evidence identified sex-differences in the plantar fascia, suggesting that females with plantar fasciitis have more pain intensity and poorer functional outcomes than males.[24] Thus, the generalizability of our results is uncertain because the majority of participants included in the study were women. Fifth, although participants served as their own control, it remains plausible that unmonitored pharmacological or non-pharmacological interventions, not

accounted for in our protocol, could have impacted the outcomes. Hence, properly controlled studies with larger and more diverse participant samples are warranted to validate and extend our initial positive findings.

Conclusion

Among participants with PF, the use of the Sidekick Tool was associated with statistically and clinically significant short-term pain reduction effects, particularly in reducing morning pain. Our results suggest the Sidekick Tool could be a feasible home-based intervention for individuals with PF. Adequately powered randomized trials are warranted to comprehensively evaluate the effectiveness and safety of the Sidekick Tool for PF.

Acknowledgement

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Table 1. Clinical and sociodemographic characteristics of the study participants (n = 18)

Variable	N (%)
Female	16 (89)
Age (years)	
25-34	1 (5.5)
35-44	7 (39)
45-59	9 (50
≥60	1 (5.5)
Duration of pain (months)	
<1	1 (5.5)
1-3	4 (22)
3-6	2 (11)
>6	11 (61)
Previous treatments	
Lacrosse ball	14 (27)
Orthotics	13 (25)
Calf stretcher	7 (13)
Plantar fasciitis brace	7 (13)
Toe spreaders	4 (8)
Injections	2 (4)
Other muscle scrapers	2 (4)
Other	2 (4)

Table 2. Qualitative analysis of patient's experiences

Participant ID	Domain	Patient Feedback
4	Design and quality	"I knew it was going to work, but I liked the edge because it didn't look like it was going to scrape my foot off. It looked gentle, yet effective."
7	Design and quality	"It's easy to like throw in your bag and go if you wanted to use it after your workout."
13	Design and quality	"This is really well made, very durable. Even just the edge as well, they've done a bit more in-depth research into making that edge a bit more smooth but useful."
12	Easiness of use	"[Sidekick was] a little bit uncomfortable because it's like a metal object, but you … kind of find the right amount of pressure that you're like 'okay, this helps'."
14	Easiness of use	"I read everything and I watched what I had to make sure I knew what I was doing before I started because I had no idea how to use it."
4	Effectiveness	"I've tried other scrapers before, but it always felt like they were hurting instead of working."
5	Effectiveness	"After you take a shower, or you could do [scraping] in the morning. It's such a small commitment."
7	Effectiveness	"If I'd have seen a tool used on me like that before, I probably would purchase something like it."
9	Effectiveness	"Plantar fasciitis has given me a lot of pain and it's a daily struggle … so even just from day one, it looks like a really simple tool, but it was really effective."
14	Effectiveness	"I appreciate the fact that [Sidekick] was able to get into those little grooves that my other failed attempts at resolving this pain had not done. I really did feel a looseness in [my foot] that I didn't have originally. The first day was maybe 10% of an improvement, and then it increased as I went on."
15	Effectiveness	"I'd never heard of it, but everybody should be scraping their muscles really. You want to tell people that you care about, cause everybody's got some kind of pain

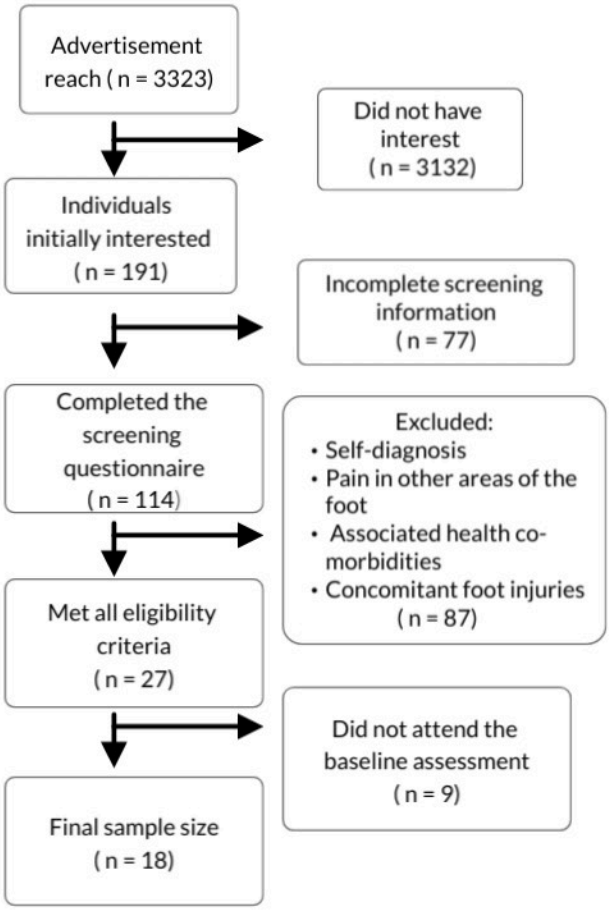


Figure 1. Flowchart outlining participant selection.

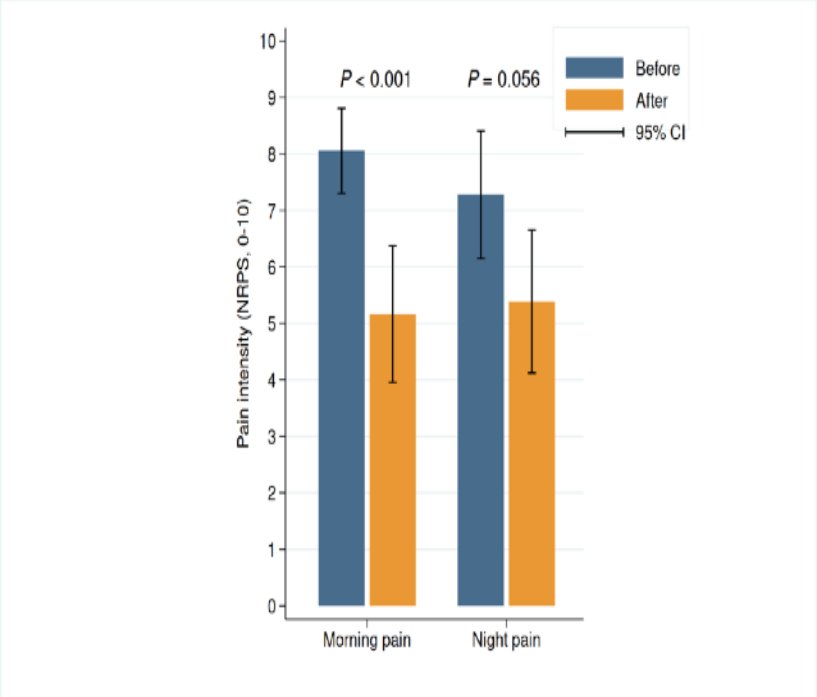


Figure 2. Pain intensity before and after treatment. NRPS denotes numeric rating pain scale. Bars represent means and lines 95% confidence interval (95% CI).

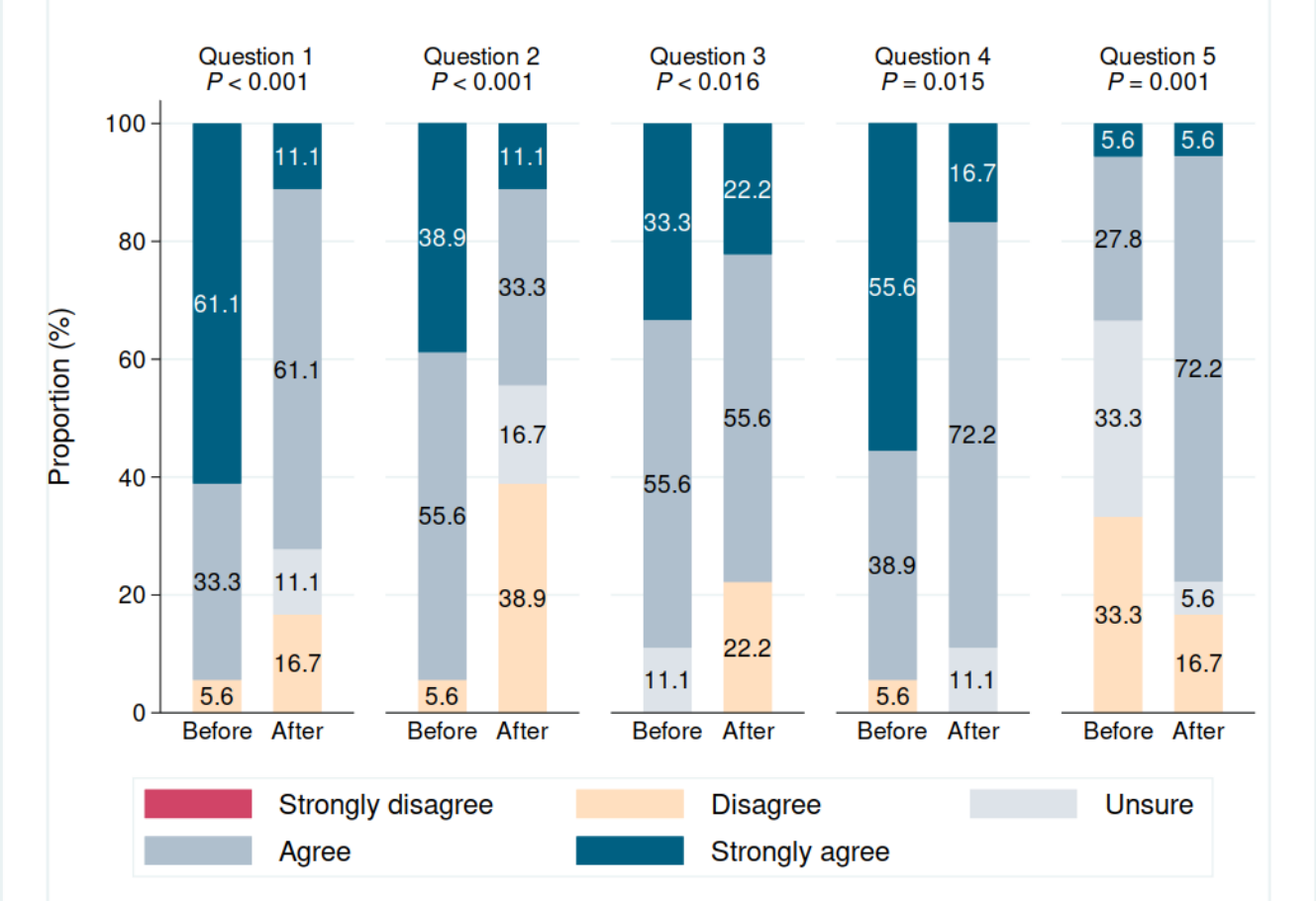


Figure 3. Scores pertaining to questions related to pain, function, and daily life activities (n = 18 for all analyses). The questions were structured as follows: How much do you agree with the following statement?
Question 1: I have plantar fascia pain every day when I wake up.
Question 2: My plantar fasciitis pain stops me from doing my main activity.
Question 3: I have tension in my plantar fascia constantly.
Question 4: I have plantar fasciitis pain every day.
Question 5: I am able to manage my plantar fasciitis pain.

Appendix A

Eligibility online questionnaire.

SIDEKICK®

Hi! Thanks for your interest in our research study.

We are recruiting participants with Plantar Fasciitis to test the effectiveness of our product. If you are selected, we will:

1. Send you our product for you to try it on yourself for our study
2. Conduct two 20-30 min recorded video calls with our Study Leader
3. Send you $50 for your time and commitment to the study

Still interested? Just fill in the form!

Start press Enter ↵

Takes X minutes

1 → By taking part in the study, you consent to:
1. Let us use your survey answers as evidence in our research study
2. Acknowledge that we will keep your personal information confidential
3. You have the ability to withdraw consent at any time in the future*

Description (optional)

A I accept

B I don't accept

2 → Where on your foot is your primary source of pain?*

Description (optional)

A Directly under the heel

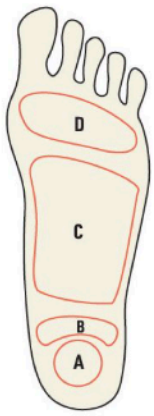
B Slightly in front of the heel

C Middle of Foot / Arch

D On the balls of the feet

E Other

Add choice



3 → When did the foot pain start?*

Description (optional)

A Less than 4 weeks ago

B 1 - 3 months ago

C 3 - 6 months ago

D Longer than 6 months ago

Add choice

4 → Has a health professional diagnosed this pain as Plantar Fasciitis?*

Description (optional)

Y Yes

N No

5 → Have you previously been diagnosed with any foot injuries other than plantar fasciitis? *

Description (optional)

Y Yes

N No

6 → What caused your plantar fasciitis?*

You can explain this to us by describing if there was a incident causing the pain, if it happened over time, if you have had it in the past, or any other details you deem important.

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

OK ✓ press Enter ↵

7 → How much pain does your plantar fasciitis cause when you first get out of bed in the morning?*

0 meaning no pain at all, and 10 being the worst pain you have ever experienced

0	1	2	3	4	5	6	7	8	9	10

No pain — Excruciating pain

8 → How much pain does your plantar fasciitis cause at the end of the day?*

0 meaning no pain at all, and 10 being the worst pain you have ever experienced

0	1	2	3	4	5	6	7	8	9	10

No pain — Excruciating pain

9 → How much do you agree with the following statement:
I have plantar fascia pain everyday when I wake up.*

Think about the past 2 weeks of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

10 → How much do you agree with the following statement:
My plantar fasciitis pain stops me from doing my main activity.*

Think about the past 2 weeks of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

11 → How much do you agree with the following statement:
I have tension in my plantar fascia constantly.*

Think about the past 2 weeks of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

12 → How much do you agree with the following statement:
I have plantar fasciitis pain every day.*

Think about the past 2 weeks of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

13 → How much do you agree with the following statement:
I am able to manage my plantar fasciitis pain.*

Think about the past 2 weeks of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

14 → What is your age?*

Description (optional)

- A 18 - 24 years old
- B 25 - 34 years old
- C 35 - 44 years old
- D 45 - 59 years old
- E 60+ years old

Add choice

15 → What is your occupation?*

Description (optional)

Type your answer here...

16 → What is your main activity or sport?*

Description (optional)

Type your answer here...

17 → With your plantar fasciitis, to what extent are you able to participate in What is your main activity or sport? × ?*

Description (optional)

- A 100% participation
- B 75-99% participation
- C 50-74% participation
- D 25-49% participation
- E 0-24% participation

Add choice

18 → Which of the following treatments have you tried to relieve your plantar fasciitis pain?*

Description (optional)

Choose as many as you like

A Plantar Fasciitis Brace

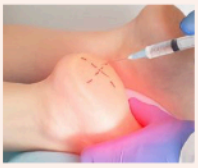
B Calf Stretcher

C Orthotics

D Lacrosse/Roller Ball

E Toe Spreaders

F Muscle Scraping



G Injection

H None

Thank you!
We will evaluate your answers to determine your eligibility.

If you are eligible for the study, you will be directed to a page to book your first video call with our Study Leader. After that, we'll send you your product and show you how to use it to potentially alleviate your plantar heel pain.

Description (optional)

Sounds great! press **Enter** ↵

Appendix B

Swerve Sidekick Tool including towel, Oasis emollient, case and tool.

Appendix C

Scraping protocol and tracker emailed to participants.

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Standardized Protocol

Here is how you will use your **Sidekick** tool.

Note: For all locations, use a moderate but comfortable pressure. Think about it like when you are checking for ripeness of a peach using moderate pressure.

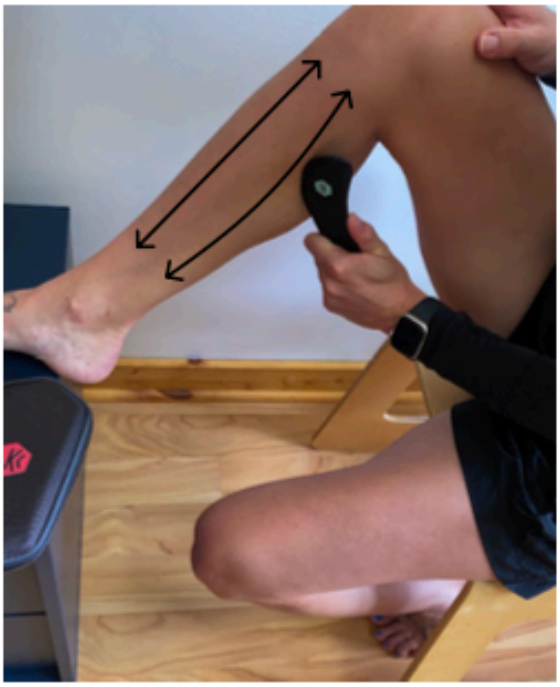
Frequency: Twice a day (AM & PM)

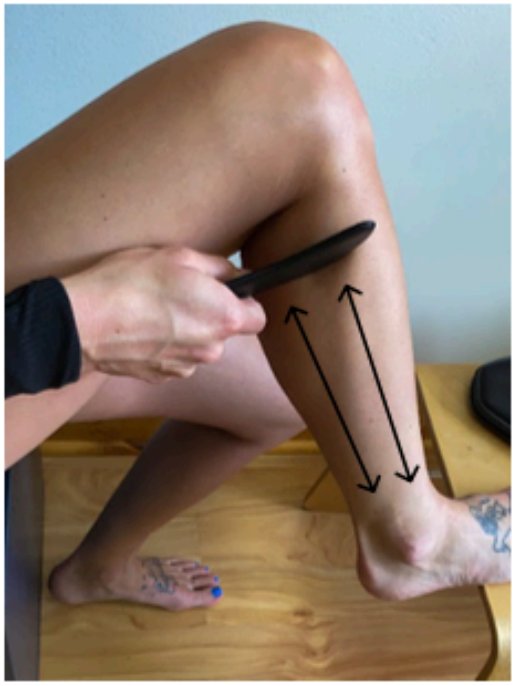
Duration: 2 minutes

1. Set a timer ready for 30 seconds.
2. Rub the **Oasis gel** on the bottom of your foot and around your calf muscles.
3. You will use the **Sidekick** tool on the bottom of your foot first.
4. Start the timer.
5. Use moderate pressure as you scrape continuously between your heel and ball of foot
    a. Make sure to move from the inner part of your foot to the outer part of your foot.
    b. Continue this for 30s.

6. When the timer is up, reset it for another 45s.

7. You will now use the **Sidekick** tool on your calf muscles.





8. Start the timer.

9. Use the firm pressure as you scrape up and down your calf.

    a. Start on the inner part of your calf and work your way around to the outer side.

    b. Continue this for 45s.

10. You will now repeat steps 3 through 9, completing the same protocol on the bottom of your foot and calf for a second time.

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Tracking Your Sidekick Use

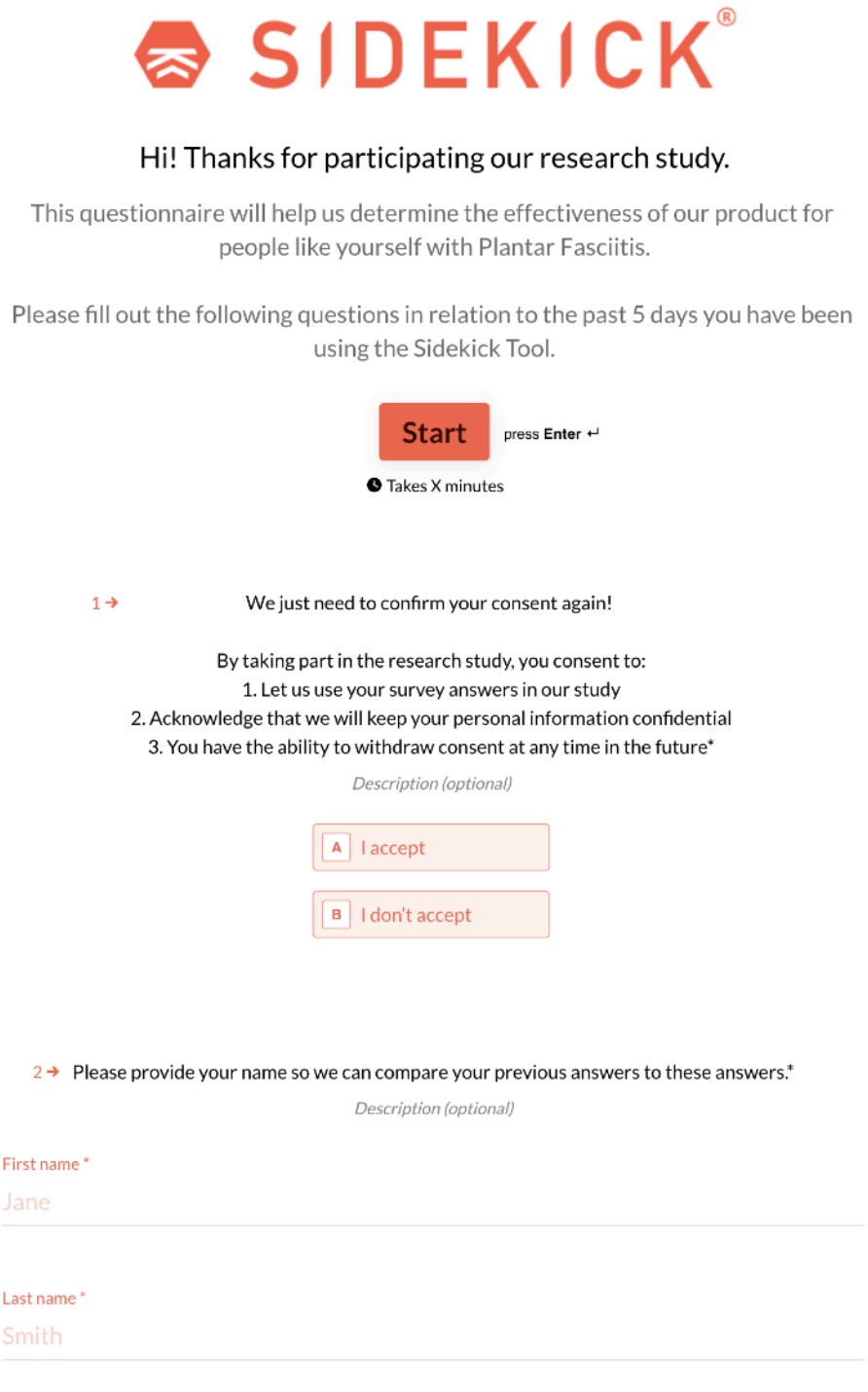
Name

First Name | Last Name

Day 1	Day 2	Day 3	Day 4	Day 5
Morning ○	Morning ○	Morning ○	Morning ○	Morning ○
Evening ○	Evening ○	Evening ○	Evening ○	Evening ○

Appendix D

Online post-test questionnaire.



3 → How much pain does your plantar fasciitis cause when you first get out of bed in the morning?*

0 meaning no pain at all, and 10 being the worst pain you have ever experienced

0	1	2	3	4	5	6	7	8	9	10

No pain — Excruciating pain

4 → How much pain does your plantar fasciitis cause at the end of the day?*

0 meaning no pain at all, and 10 being the worst pain you have ever experienced

0	1	2	3	4	5	6	7	8	9	10

No pain — Excruciating pain

5 → How much do you agree with the following statement:
I have plantar fascia pain everyday when I wake up.*

Think about the past 5 days of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

6 → How much do you agree with the following statement:
My plantar fasciitis pain stops me from doing my main activity.*

Think about the past 5 days of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

7 → How much do you agree with the following statement:
I have tension in my plantar fascia constantly.*

Think about the past 5 days of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

8 → How much do you agree with the following statement:
I have plantar fasciitis pain every day.*

Think about the past 5 days of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

9 → How much do you agree with the following statement:
I am able to manage my plantar fasciitis pain.*

Think about the past 5 days of your pain.

- A Strong disagree
- B Disagree
- C Unsure
- D Agree
- E Strongly Agree

Add choice

10 → Which statement is the most accurate for you?*

Description (optional)

- A By using Sidekick, my pain has significantly improved in the 5 days
- B My pain is better but I would like to try Sidekick for longer
- C After using Sidekick, my pain has not changed

Add choice

11 → Which statement is the most accurate for you?*

Your main activity is the activity that has been most impacted by your plantar fasciitis. For example, working on your feet, your favorite sport, running, etc.

- A My plantar fascia pain does not hold me back in my main activity, now that I use Sidekick
- B I have less plantar fascia pain during my main activity, but sometimes it holds me back
- C I have the same amount of plantar fascia pain, however I still participate in my main activity

Add choice

12 → Which statement is most accurate for you?
After using Sidekick for 5 days, I can participate in my sporting activities...*

Description (optional)

- A 100% full participation
- B 75-99% participation
- C 50-74% participation
- D 25-49% participation
- E 0-24% participation

Add choice

13 → Will you continue to use your Sidekick tool to manage your plantar fasciitis?*

Description (optional)

- Y Yes
- N No

14 → Can you explain your answer to the previous question?*

If you said YES, please tell us how it has helped you. If you said NO, please tell us why the product wasn't helping.

Type your answer here...

Shift ⇧ + Enter ↵ to make a line break

OK ✓ press Enter ↵

15 → Please rank the following treatments according to how much they have helped your plantar fasciitis.

For each treatment you have tried, click the circle that corresponds to the ranking you would give that treatment. If you have not used one of the options, select 'never used'.

Add column

	1	2	3	4	5	6	7	8	Never used
Muscle scraping	○	○	○	○	○	○	○	○	○
Calf stretcher	○	○	○	○	○	○	○	○	○
Plantar fasciitis brace	○	○	○	○	○	○	○	○	○
Injections	○	○	○	○	○	○	○	○	○
Orthotics	○	○	○	○	○	○	○	○	○
Lacrosse/roller ball	○	○	○	○	○	○	○	○	○
Toe spreaders	○	○	○	○	○	○	○	○	○
Other	○	○	○	○	○	○	○	○	○

Add row

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Thanks for completing the questionnaire and participating in our research study.

On completion of your final video call, our team will transfer $50 to you for your participation.

P.S. The Sidekick tool is yours to keep!

Submit press Enter ↵