Feasibility Study of Gua Sha Plus Acupuncture for Chronic Low Back Pain

Background

Chronic low back pain (CLBP) affects millions of adults worldwide, causing discomfort, disability, and reduced quality of life. It is one of the leading causes of missed work days and increased healthcare costs. Traditional treatments, including medications and physical therapy, often provide only partial relief, and long-term reliance on opioids carries significant health risks. Nonpharmacologic therapies, such as acupuncture, are increasingly recognized as safe and effective alternatives for pain management.

In clinical practice, many acupuncturists combine acupuncture with manual soft-tissue techniques like **gua sha**, a traditional East-Asian scraping method believed to enhance circulation, relieve muscle tension, and reduce pain. Despite widespread use, the safety, acceptability, and potential added benefit of combining gua sha with acupuncture in a standardized, research-based protocol have not been systematically evaluated.

This study addresses a critical gap by testing the feasibility of delivering a combined gua sha and acupuncture protocol in a structured, replicable way in community clinic settings. The results will inform the design of a larger trial to evaluate clinical effectiveness.

Study Goals

The primary aim of this study is to assess whether a standardized program of **gua sha plus acupuncture** can be delivered safely and effectively to adults with CLBP. Specifically, the study will evaluate:

1. **Feasibility and Acceptability:** Can participants be recruited, retained, and adhere to the treatment schedule? Are participants satisfied with the experience?
2. **Safety:** Are adverse events minimal and manageable? Can gua sha and acupuncture be delivered without serious complications?
3. **Fidelity and Protocol Consistency:** Are the practitioners able to deliver the intervention consistently according to a detailed, manualized protocol?
4. **Preliminary Clinical Outcomes:** Do participants show improvements in pain intensity, pain interference with daily activities, and overall function?

By answering these questions, the study will provide critical data to guide future, larger-scale trials and help establish evidence-based practices for integrating gua sha with acupuncture in clinical care.

Study Design

This is a **randomized, assessor-blinded feasibility trial**. Forty adults with chronic low back pain will be enrolled and randomly assigned to one of two groups:

- **Gua Sha + Acupuncture (GS+Acu) Group:** Participants receive 20 minutes of gua sha followed by 40 minutes of acupuncture per visit.
- **Acupuncture-Only (Acu) Group:** Participants receive 40 minutes of acupuncture, preceded by a 20-minute quiet rest period to match the time and attention of the GS+Acu group.

Each participant will attend **eight visits over four weeks** (two visits per week). All interventions are delivered by licensed acupuncturists trained in standardized protocols to ensure consistent and safe application of both acupuncture and gua sha techniques.

Outcome assessments will occur at **baseline, end of treatment, 8 weeks, and 12 weeks**, measuring:

- Pain intensity using a numeric rating scale (NRS)
- Pain interference in daily activities (PROMIS Pain Interference)
- Functional outcomes (Roland–Morris Disability Questionnaire)
- Global improvement as reported by participants (Patient Global Impression of Change)
- Analgesic use, including changes in medication intake

Safety and Monitoring

Participant safety is a top priority. All sessions are conducted in clean, controlled environments with proper sanitation and infection control measures. Adverse events, such as temporary soreness, minor bruising (from gua sha), or minor bleeding, are carefully documented and reviewed. Serious adverse events are extremely rare and will trigger immediate review by the **Independent Safety Officer**, who provides oversight throughout the study.

Additionally, all data are securely collected and managed using a HIPAA-compliant electronic system, ensuring privacy and accuracy. Regular monitoring ensures protocol fidelity, high-quality data collection, and adherence to safety procedures.

Participant Experience

Participants in this study receive individualized care in a supportive and structured setting. Licensed practitioners follow detailed manuals that specify acupuncture points, gua sha zones, stroke counts, and pressure levels to maximize consistency and safety. Participants are educated about what to expect during and after each session, including potential temporary redness or mild bruising from gua sha.

The study emphasizes **flexibility and convenience**:

- Evening and weekend appointments are available.
- Participants receive reminders for appointments and follow-up assessments.
- Transportation or other minor support is provided when needed.

Expected Outcomes and Impact

This feasibility study aims to establish whether combining gua sha with acupuncture is practical, safe, and acceptable for adults with CLBP. Key outcomes include:

- High recruitment and retention rates
- High adherence to the treatment schedule
- Minimal adverse events
- Clear preliminary signals that may indicate added benefit of gua sha on pain and function

If successful, the results will inform the design of a **larger, multisite clinical trial** to rigorously test the effectiveness of this combined intervention. Ultimately, this research could help:

- Improve nonpharmacologic pain management options
- Reduce reliance on opioids for chronic pain
- Provide evidence-based guidance for acupuncturists integrating gua sha into practice
- Influence clinical guidelines and payer coverage decisions

About the Research Team

This study is led by **Dr. Haven Tran**, Principal Investigator at **Acupuncture Care Alliance (ACA)**, a nonprofit organization dedicated to advancing evidence-based acupuncture and integrative care. The research team includes licensed acupuncturists, experienced clinical trialists, and a biostatistician from an academic partner institution. An Independent Safety Officer provides additional oversight to ensure the highest standards of participant safety and scientific rigor.

Community clinics and academic partners support this study by providing treatment spaces, recruitment access, and research infrastructure. Materials and interventions are designed to be **replicable, scalable, and inclusive**, with multilingual resources to support diverse populations.

Conclusion

This study represents an important step in integrating traditional healing practices like gua sha with acupuncture into evidence-based care for chronic low back pain. By systematically evaluating feasibility, safety, and preliminary outcomes, the research aims to pave the way for larger trials that can ultimately inform clinical guidelines, enhance patient care, and reduce reliance on medications for pain management.

Participants contribute not only to advancing science but also to shaping future nonpharmacologic pain therapies that are practical, effective, and accessible.