Effects of Graston Technique on Soft Tissue Conditions: A Prospective Case Series

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ABSTRACT

Graston Instrument-assisted Soft Tissue Mobilization (GISTM) is a soft tissue diagnostic and therapeutic method using stainless steel instruments as an alternative to transverse friction massage. A multi-center prospective case series of 1004 patients treated with using GISTM for various soft tissue conditions is presented. Outcome assessment data were collected at the beginning of graston care and at each subsequent follow-up. Changes in pain, numbness, disability and functional status were collected at each visit. Data for these outcomes were compared at discharge. These data were compared statistically. Significant improvements in all outcomes evaluated were found. These results suggest that GISTM is an effective treatment for a variety of soft tissue conditions, however the lack of control of placebo effect or natural history limits the generalizability of these findings. Rationale and clinical cases are summarized in the planning stages.

RESULTS

Fifty-one clinical sites participated with 1004 patients included in the data set. Conditions treated included:

- Joint sprain
- IT band syndrome
- Fibromyalgia
- De Quervain’s syndrome
- Carpal tunnel syndrome
- Painful scar
- Tendonitis
- Pain
- Work
- Numbness
- Low back pain
- Sciatica
- Digital pain
- Plantar fasciitis
- Patellar tendinitis
- Elbow tendinitis
- Shoulder tendinitis
- Knee pain

One key protocol of the Graston Technique has only recently been introduced to the chiropractic profession. Graston (GISTM) is a soft tissue diagnostic and therapeutic method which uses stainless steel instruments as an alternative to transverse friction massage. A multi-center prospective case series of 1004 patients treated with using GISTM for various soft tissue conditions is presented. Outcome assessment data were collected at the beginning of graston care and at each subsequent follow-up. Changes in pain, numbness, disability and functional status were collected at each visit. Data for these outcomes were compared at discharge. These data were compared statistically. Significant improvements in all outcomes evaluated were found. These results suggest that GISTM is an effective treatment for a variety of soft tissue conditions, however the lack of control of placebo effect or natural history limits the generalizability of these findings. Rationale and clinical cases are summarized in the planning stages.

CONCLUSIONS

These results suggest that GISTM appears to be effective in reducing pain, numbness and work-related disability and improving a patient’s functional ability and thus, is an effective treatment for the variety of soft tissue conditions studied. Obviously, a case series such as this cannot distinguish between the effect of the treatment independent of a placebo effect or natural history. Randomized controlled trials are currently in the planning stages.

METHODS

A multi-center prospective case series with outcomes analyzed comparing initial discharge data for each condition.

- Pain
- Numbness
- Function
- Return to work

A mean percent composite function level was analyzed. Pain was rated by patients using a VAS with anchors of no pain to worst possible pain. Numbness was rated by patients on a VAS with anchors of 0% numbness to 100% numbness. Disability was assessed using the Oswestry Disability Questionnaire. Each domain was analyzed at the beginning and then at discharge, with a t-test for paired samples used to calculate the p-value. These results are statistically significant at the 0.05 level.

ACKNOWLEDGMENTS

The authors gratefully acknowledge funding from TherapyCare Resources, Inc. and the assistance of all the healthcare providers at each of the centers that provided data.