

RADIO FREQUENCY DEEP TISSUE MASSAGE vs MANUAL DEEP TISSUE MASSAGE

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Summary

Here at Complete Laser Clinic we found that treating patients with tension headaches related to muscle tightness in the upper neck and back with radio frequency UniPolar deep tissue massage was superior to manual deep tissue massage by a massage therapist. We postulate that the radio frequency is responsible for increased tissue relaxation and quicker regeneration time of healthy muscle and connective tissue. We look forward to extending RF to the treatment of tension headaches, sprains, strains and other musculo skeletal injuries.



Figure 1 :
Alma Lasers AccentXL



Figure 2 :
A treatment with
AccentXL RF UniPolar

Background and Objectives

- Tension headaches, sore upper back is common in today's society. Usually related to contraction and spasm in the trapezoids & rhomboids which then effect tension on the frontal & occipital bands.
- This can cause severe debilitating pain, torticollis, photophobia & nausea.
- **The objective of this study is to show that radio frequency deep tissue penetration is as effective, or more so than manual deep tissue massage in the relaxation of muscles of the upper back & neck that are in spasm.**

Study Design/Materials & Methods

10 subjects were treated randomly with manual deep tissue massage or radio frequency deep tissue massage for 15 minutes in the area of the upper back and neck incorporating the following muscle groups:

latissimus dorsi
rhomboid major
rhomboid minor
levator scapulae
trapezius

- They were then given a 5 point questionnaire describing their experience and relief of symptoms this was repeated again in 14 & 28 days.
- At the end of 4 weeks persons were given the alternative treatment, deep tissue massage or radio frequency AccentXL, that they did not receive the first treatment and same questionnaire was given at 1, 14 & 28 days.
- The radio frequency machine used was Alma's AccentXL the UniPolar hand piece with the depth of penetration of 20 mm. 200 -300 watts were used with a total of 150 kJ deposited in each treatment subject for 15 minutes. The deep tissue massage was done by a trained massage therapist who used Neuromuscular Therapy technique for the same area for 15 minutes.
- The 5 point questionnaire was as follows with numerical score given for each answer of 1-4 with the most improved score equaling a total of 20 and the least improved score of 5:

Radio Frequency Deep Tissue Massage vs. Manual Deep Tissue Massage In the evaluation of tension headaches secondary to muscle spasms

Patient Name: _____

1. *Do you have relief of your headache?*
no relief mild relief moderate relief complete relief
2. *Do you feel relaxed in your neck & upper back?*
no relief mild relief moderate relief complete relief
3. *Was this a relaxing treatment?*
not relaxing mildly relaxing moderately relaxing completely relaxing
4. *Has this treatment improved your quality of life?*
no somewhat yes
5. *Would you recommend this treatment for the relief of tension headaches secondary to muscle spasms?*
no yes

Results

- 8 out of 10 of the subjects treated on their evaluation score questionnaire rated the radio frequency deep tissue massage superior to the manual deep tissue massage in the category of immediate relief in pain & symptoms. Again in the 14 & 28 days questionnaire they had increased satisfaction scores on the relief of pain and symptoms.
- 2 of the patients noticed no difference between radio frequency deep tissue massage & the manual deep tissue massage in the 1, 4 & 28 day scores on their questionnaires.
- No patient rated manual deep tissue massage superior to radio frequency deep tissue massage. All patients recommended both treatments as a form of relief from tension headaches.

Conclusion

- **Radio frequency deep tissue massage seems superior to manual deep tissue massage in treating patients with tension headaches related to upper back & neck muscle spasms.**