

Laser, Needle and Electroacupuncture

- Comparison of Response -

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Response of Biological Active Points to Low Energy Laser Compared to Electro-acupuncture and Needle Acupuncture

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Abstract

This study compares the response of Biological Active Points (BAP's) to Low Energy Laser Therapy (LELT), as compared to needle acupuncture and electroacupuncture. Patients were categorized according to the Skin Electro Conductivity (SEC) Ryodoraku test, as modified by A. T. Neborskii. Results were analyzed with the standard SEC diagrams with regard to sex, age, season and menstrual cycle. SEC in BAP's was measured 15 - 20 minutes after the treatment, and then one week afterwards. Method of assessment was the same in all three groups. BAP's respond more readily to LELT. The effect of laser acupuncture is more profound and lasts longer than of either electroacupuncture or classical needle acupuncture. Therefore laser stimulation of BAP's could prove more suitable for outpatients who prefer a longer time between individual treatments.

Introduction

Health Practitioners use different modalities of acupuncture, such as needle acupuncture, electroacupuncture, and laser acupuncture. All of these methods show good responses. This study attempts to compare the response of Biological Active Points to Low Energy Laser, compared with electroacupuncture and needle acupuncture.

Review and Theory

Classical acupuncture has existed for centuries. However, with the introduction of new technologies for health care, needles have been often replaced by electroacupuncture and laser acupuncture.

Both of these methods are non-invasive and less painful. They are more acceptable for children and other sensitive patients. All methods of acupuncture follow the same classical acupuncture principles.

We did not find in the existing research literature any response to these three modalities of acupuncture.

Subjects and methods

In this study 126 subjects were divided into three modality groups (the age of subjects ranged 20 - 60 years) - for classical acupuncture, electroacupuncture, and laser acupuncture.

These modalities were introduced in three independent clinics (Petone - Lower Hutt, Courtenay Place - Wellington, and Upper Hutt, New Zealand).

In all three clinics, patients were categorized according to the Skin Electro Conductivity (SEC) test by Ryodoraku, as further modified by A. T. Neborskii. Their results were analyzed with the SEC standard diagrams, also with regard to sex, age, season, and menstrual cycle (in women).

Patients were then divided according to our diagnosis of excess and insufficiency syndromes of acupuncture.

The first group was treated by classical acupuncture.

The second group was treated by electroacupuncture device "Diaton".

The third group was treated by "Maestro" laser device, GaAlAs diode (830 nm, maximum output power 40 mW).

Skin electro conductivity in BAP's was measured 15 - 20 minutes after the treatment, and then 1 week afterwards. Assessment was the same in all three groups.

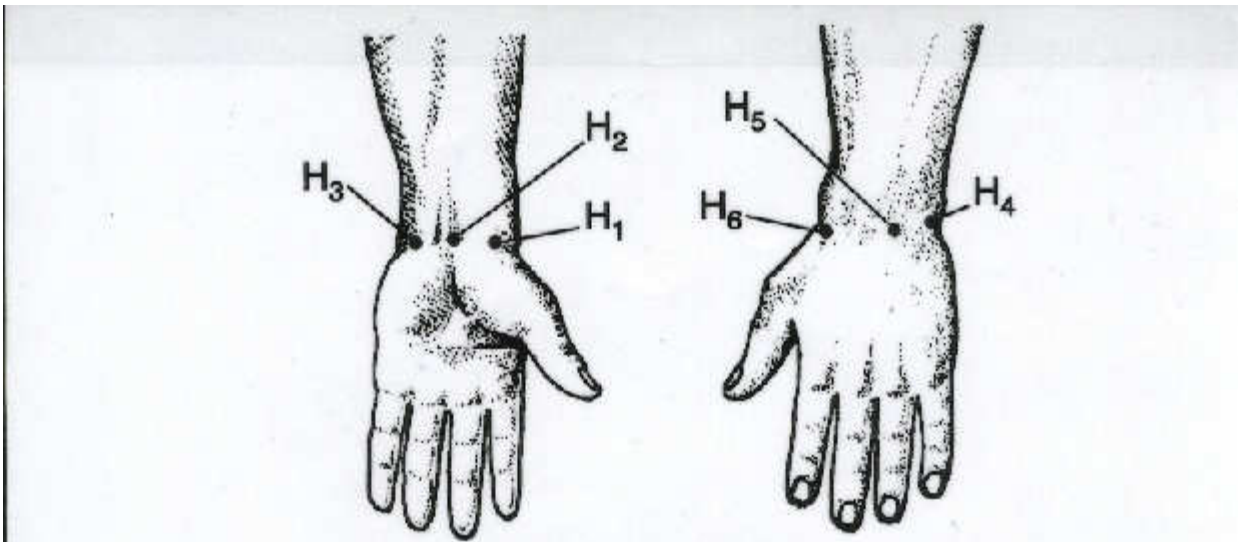


Fig. 1. Location of the diagnostic points on hands.

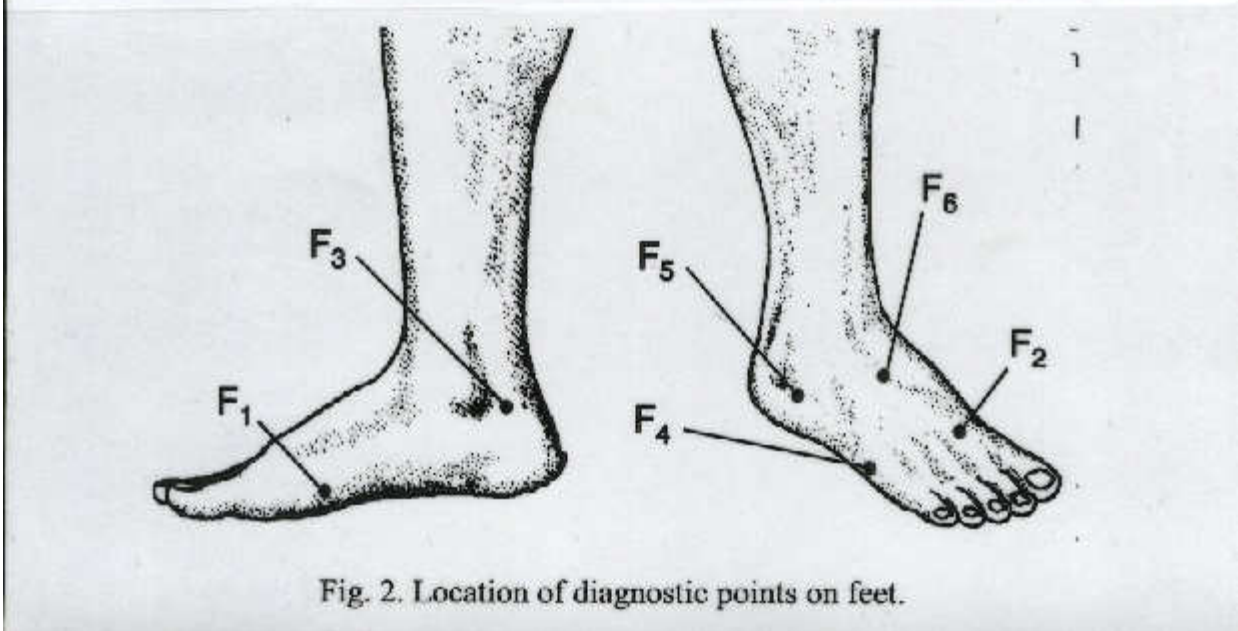


Fig. 2. Location of diagnostic points on feet.

Figure: Location of diagnostic points

Results

Insufficiency Syndromes - response of BAP's

Type of acupuncture	SEC before treatment	SEC 15 - 20 min. after treatment	SEC 1 week after treatment
Classical acupuncture	0 - 25 microampermeters	20 - 25 microampermeters	15 - 20 microampermeters
Electroacupuncture	0 - 25 microampermeters	25 - 30 microampermeters	20 - 25 microampermeters

Laser acupuncture	0 - 25 microamperimeters	35 - 40 microamperimeters	35 - 40 microamperimeters
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Excess Syndromes - response of BAB's

Type of acupuncture	SEC before treatment	SEC 15 - 20 min. after treatment	SEC 1 week after treatment
Classical acupuncture	70 -100 microamperimeters	65 - 80 microamperimeters	70 - 85 microamperimeters
Electroacupuncture	70 -100 microamperimeters	60 - 80 microamperimeters	65 - 85 microamperimeters
Laser acupuncture	70 -100 microamperimeters	50 - 70 microamperimeters	50 - 70 microamperimeters

All three modalities of acupuncture showed improvement in SEC of BAB's.

BAB's responded more readily to laser acupuncture.

BAB's retained the effect of laser without change up to a week.

Electroacupuncture also produced a profound effect on BAB's. However, SEC improved on only half of the SEC to laser acupuncture. The effect of electroacupuncture declined slightly up to 5 microampermetres by the end of the week.

Classical needle acupuncture improved SEC of BAB's but produced only a third of the positive laser effect.

The effect of classical acupuncture gradually declined over the following week of the trial, this being clearly evident.

Our analysis showed that SEC of BAB's improved under all three acupuncture modalities. The responses have been obvious in both excess and insufficiency syndromes.

Conclusions

1. Biologically Active Points respond more readily to Low Energy Laser Therapy.
2. The effect of laser acupuncture is more profound and lasts longer than those of electroacupuncture and classical needle acupuncture.
3. Therefore laser stimulation of acupuncture points could be more suitable for out patients who prefer longer time periods between individual sessions of acupuncture.

References

1. Pekka J. Pontinen, "Low Level Laser Therapy as a Medical Treatment Modality", Art Urpo Ltd., Tampere, 1992.
2. A. T. Neborskij, H. Kondratavičius, "AGNIS - Manual", Vilnius, 1995.
3. F. G. Portnov, "Reflexotherapy of the Electra Acupuncture", Riga, 1988, (in Russian).

4. V. N. Surchuk, "Manual for the Electra Acupuncture Diagnosis and Correction of Energy-Information of the Patients with Different Category", Almaty, 1992, (in Russian).
5. David G. Baxter, "Therapeutic Lasers", London, 1994.
6. V. E. Illarionov, "Principles of Laser Therapy", Moskva, 1992, (in Russian).
7. "Maestro User's Manual", MediCom, Praha, 2000.

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