

FREE RADICAL REDUCTION THROUGH THE USE OF ELECTRO STIMULATION OF ACUPUNCTURE NEEDLES ON THE SHEALY RING OF CRYSTAL

Susan Russell & Norm Shealy, M.D., Ph.D.

The purpose of this study was to correlate statistically the electro-stimulation of key acupuncture points with a reduction in free radicals and an improved emotional state. It built upon previous work conducted by C. Normal Shealy, but differed in several key areas. This experiment employed a different electro-stimulation than was used in Shealy's experiments, and only a subset of the original points was stimulated with the electro-stimulation. Pre- and post-intervention free radical values were obtained by using an OxiData urinalysis test to measure the presence of malondialdehyde, a precursor to the free radical lipid peroxidase. OxiData was administered to all subjects before and after the experiment. The subjects' stress levels were also measured using two tools. The first was a mechanical measurement of the conductivity of key acupuncture points using an MSA-21, a recognized tool for acupuncture practices. The second was a battery of self-assessment tests whose results were then interpreted by the principal investigator. More than eighty subjects were used in this test. Respondents covered a wide diversity in ages and backgrounds, although seventy-two percent of them were female. The intervention group received three acupuncture treatments (one per day over three consecutive days) along specific acupuncture points known as the Shealy Ring of Crystal. These were a combination of needling and electro-stimulation. Both the intervention group and control group received lectures and teaching materials about free radicals and acupuncture. Both were also tested at the same time for the presence of free radicals and a measurement of stress levels. Pre-treatment values were compared with post-treatment values. Statistical data were mixed. OxiData results indicated a trend ($p = 0.11$), but did not show a close statistical significance. The MSA-21 Bio-Meridian stress test was used to assess the variance of energetic values linked to emotional values. Three out of more than 20 test combinations indicated a statistical significance, correlating reductions of stress to the intervention treatment. However, these reductions were not detected in the self-assessment evaluations.

Background. The presence of free radical activity in the body has been linked to nearly all dis-ease states. Additionally, free radicals are considered an accelerating agent

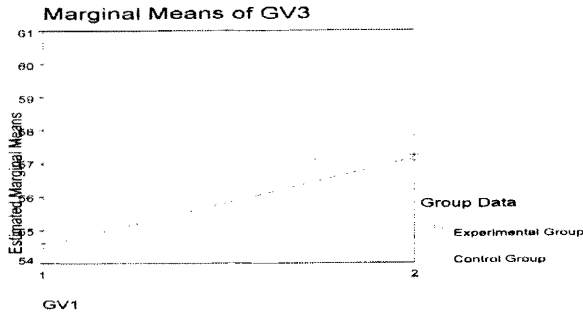
in the aging process itself. While there are a wide variety of approaches and nutritional supports available to mitigate free radical tissue injury, there appear to be individuals who still produce significantly high levels of free radicals regardless of nutritional supports and or antioxidant support. Until recently, nutritional and antioxidant supplements were the only options for the successful reduction of free radical activity. Emotional states have also been associated with either the increase in the production of free radical activity or as a result of the presence of high levels of free radicals. Shealy has developed a direct approach to the reduction of free radical activity through electro-stimulation of a series of acupuncture points known as the Shealy Ring of Crystal. The stimulation of the Ring of Crystal has been shown to result in a significant reduction in free radical activity.

Design. The objective of this study was to explore the research results of the reduction in free radicals through an intervention process that employed electro-stimulation of specific acupuncture points. The experiment sought to detect a change (reduction) in the presence of free radicals as a direct result of the intervention, as well as observe any effect(s) that the intervention might have had on the subjects' emotional states. The study took place over three consecutive days. The first step of the experiment would be to obtain a statistically significant test population and divide the subjects in roughly equal numbers between a control and an intervention group. Pre-experiment screening of medical histories would verify the subjects' suitability for the study. On Day One of the study, all of the subjects would be tested using the STAI (to assess their pre-study emotional state and level of stress), OxiData urinalysis test (to evaluate their pre-study levels of the free radical precursor lipid peroxidase), and the MSA-21 (to determine the pre-study energetic value of each participant's Ring of Crystal points).

Once a day for a three consecutive days, the intervention group would receive counseling and acupuncture with electro-stimulation treatments on specific acupuncture points. At the same time, the control group would only receive the counseling. On Day Three of the study at the conclusion of the interventions, all of the subjects would be retested using the STAI, OxiData urinalysis test and the MSA-21 to determine post-study values. At the conclusion of the experiment period, the data acquired through testing would be analyzed for any statistical significance.

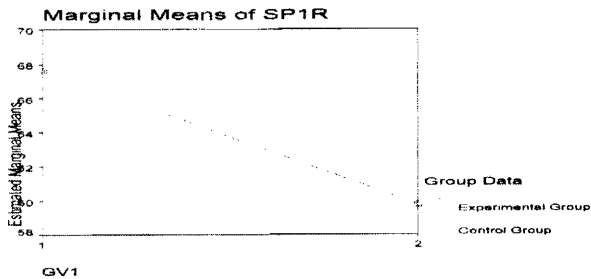
Although not part of the experiment per se, at the conclusion of the experiment period the subjects would also be given a "Thank You" packet containing educational material to help them better understand and possibly begin practicing some of the Chinese healing concepts and techniques, tests, and assessments used.

The components that make up the Free Radical Release through the use of electro-stimulation of the Shealy ring of crystal are divided into five parts: 1) The assessment



The y-axis located on the left of this chart indicates on the MSA-21 emotional balance/imbalance assessment scores. The left side shows pre-intervention scores while the right shows post-intervention scores. The green line represents the control group and the red line represents the experimental group; they help to more fully understand these results, which show that at pre-test measurement, the experimental group was substantially lower in Trait anxiety than was the control group, and this Trait anxiety did move in both the intervention and control groups at post-testing. In sum, this pattern achieved a statistical significance of $p < 0.05$. The intervention also showed a statistical significance on emotional states as measured by the MSA-21 on the acupuncture point known SP4R, MSA-21 emotional reference point Sp1R, as there was significant interaction of intervention by time ($F(1,83) = 3.44, p = 0.05$). This finding indicates that the control and experimental groups showed significantly divergent patterns of means on the State portion of the MSA-21, as was hypothesized in this study.

Figure 1. Intervention and Emotional States Results for **Both** Groups (GV3).



The y-axis located on the left of this chart indicates on the OxiData urinalysis test. The left side shows pre-intervention scores while the right shows post-intervention scores. The green line represents the control group and the red line represents the experimental group. They also help to more fully understand these results, which show that at pre-test measurement, the experimental group and control groups were similar, while the posttest scores did move significantly downward among the experimental group and shifted to a lesser degree in the control group. In sum, this pattern achieved a statistical significance of $p < 0.05$.

Figure 2. OxiData Urinalysis Test.

of free radical activity through the use of the OxiData urinalysis. The OxiData urinalysis test was the assessment tool to determine the presence of lipid peroxidase, a precursor to free radical activity. 2) The assessment of stress and anxiety levels as a self report by the subjects in responding to the State Trait Anxiety Inventory and the Shealy Personal Stress Assessment. 3) An assessment with the Shealy Symptoms Index of personal lifestyle and well-being as experienced by the subject. 4) An assessment by the principle investigator of overall well-being as defined by the parameters of a traditional Chinese assessment, which includes the use of tongue and pulse assessment. 5) A bio-meridian electro-dermal screen on acupuncture points used during the intervention process. The MSA-21 was used to measure pre- and post-energetic meridian channel balances with specific emotional correlates tied to two specific acupuncture points that were part of the circuit known as the Shealy Ring of Crystal.

Conclusions and Discussion. It is possible that the expectations of the participants may have played a role in the ambiguous results. How much influence did the expectation of the participant impact their results? It is also possible that the PI was unable to properly focus on the study's activities because of distraction. This research did indicate a trend (a reduction) in free radicals, thereby suggesting that the Shealy Ring of Crystal influences the body's ability to reduce free radical activity. Higher results, however, appear to be achieved by stimulating all the points as opposed to selecting a few points and by using different electrical pulse parameters. The LISS and She-Li TENS have both been found to neurochemically activate acupuncture points. It is possible that the KWD-808-I may not be able to achieve these same signal characteristics. More studies are needed to evaluate the differences to understand why the controls moved out of the abnormal range into a balance state at a higher rate than the intervention group.

How much impact did the principle investigator's management of multiple tasks on the day of the testing impact the results? "No movements of Qi are identical." Superstring Physicist Brian Greene notes, "new kinds of laws come into play when the level of complexity of a system changes [increases]." Was the difference in style, Qi and approach of each acupuncturist an impact on the final results? The very act of observing an object can influence it in subtle ways. Did something along the lines of the Heisenberg Uncertainty Principle affect the outcome by the mere act of participating?

Further research might clarify the discrepancy between the control and intervention groups by taking a look at the effects of morphogenetic fields. Morphogenetic fields are described as fields that carry only information (no energy); there is no loss of intensity with distance and, once created, are available to travel throughout time and space.

CORRESPONDENCE: Susan Russell • susan@turningpointhc.com

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