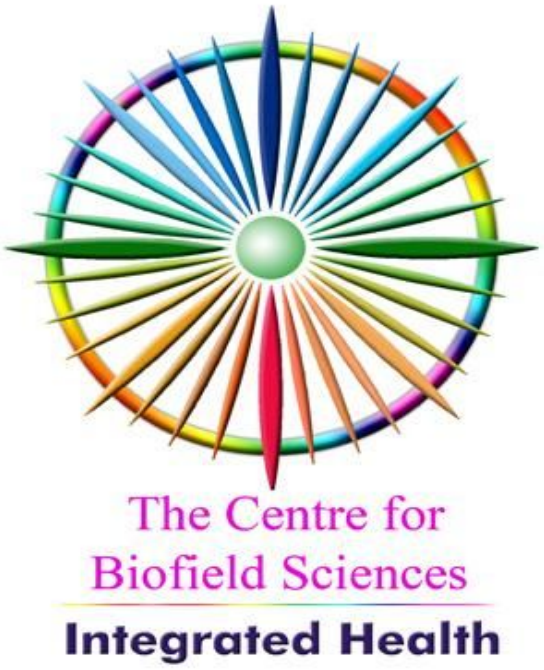

Experimental Study of LifeWave, Inc. X-39 patches

Summary and report

Table of contents

Topics	**Page no.**
Abstract	3
LifeWave, Inc. X-39 patch	4
Specific aim	6
Devices used	6
Methodology	16
Observations and Results	19
Discussion	26
Conclusion	27
References	27

Abstract

LifeWave, Inc. has developed a new patch called X-39 which is proposed to be a phototherapy product that stimulates the skin with specific wavelengths of light for the purpose of elevating the peptide GHK-Cu. The peptide GHK-Cu may effectively stimulate the natural healing process in the body. LifeWave, Inc. has developed X-39 patch with numerous intended benefits like improvement in overall energy, rapid relief from pain and improvement in overall functional vitality of the body. A pilot study was conducted with forty experimental and five control voluntary subjects who were studied before and after wearing the LifeWave, Inc. X-39 patch for a period of six weeks, using cutting edge non-invasive screening technologies like biofield imaging, electro photonic imaging and electro-interstitial screening. This set of devices allowed us to extract a broad spectrum of data ranging from physical, energetic and emotional aspects of the body non-invasively and efficiently. Statistical analysis of data revealed a highly significant increase ($p<0.0001$) in overall energy of subjects biofield and significant improvement ($p<0.05$) in the symmetrical distribution of energy between the organs. Also, a significant improvement ($p<0.05$) in green pixels after using the patches for 6 weeks showed positive changes in the biofield of the subjects. Further research is required with a larger population and a double-blinded placebo control group.

Keywords: LifeWave, Inc. X-39 Patches, Biofield, Interstitial fluid, Energy

LifeWave, Inc. X-39 patch

The X-39 patch is a phototherapy product that stimulates the skin with specific wavelengths of light for elevating the peptide GHK-Cu. Copper tripeptide-1(GHK-Cu) is a small protein composed of the three amino acids (protein building blocks) glycine, histidine, and lysine combined in a specific geometric configuration with the physiologically beneficial mineral (copper) (DeHaven, C., 2014). This tripeptide was first isolated from human plasma albumin in 1973 by Dr Loren Pickart. Pickart noticed differences in the levels of fibrinogen based on age. He additionally noticed that these differences stopped when the older liver cells were incubated in blood from younger people. In 1977, David Schlesinger of the Harvard University Chemistry Department confirmed that the growth modulating peptide isolated by Pickart was a glycyl-L-histidyl-L-lysine peptide. It is interesting to note that this peptide has also been found in saliva, urine, and collagen. It is also important to mention that none of the research around GHK has ever found it to cause any side effects. (DeHaven, C., 2014). The copper tripeptide-1 belongs to a group of emergency response molecules which are released during injury and come to the body's aid (DeHaven, C., 2014) It is naturally released by the body when there is any type of injury to tissue. Research has identified that this peptide is used to signal the beginning of the natural repair process. This benefit has specifically been documented through research for post-laser or surgical wounds, ischemic, burns, skin or hair transplants, and diabetic ulcers. Diabetic wounds healed three times faster in the presence of Copper tripeptide-1. Time to re-epithelialization is shortened (DeHaven, C., 2014). The copper tripeptide-1 has been suggested to have a potential therapeutic role in age-related neurodegeneration and cognitive decline. It improves axon survival and maintenance of nerves. (DeHaven, C., 2014). The tripeptide has also been demonstrated to improve tissue remodelling. It

increases keratinocyte proliferation and normal collagen synthesis, improves skin thickness, skin elasticity and firmness, improves wrinkles, photodamage and uneven pigmentation, improves skin clarity, and tightens protective barrier proteins (DeHaven, C., 2014). This has an impact on both scars and other effects of damage to the skin, and natural ageing processes. The effects of tissue remodelling also seem to have an impact on cancerous cells. The fact that GHK was able to suppress 70% of genes involved in the development of an aggressive metastatic form of colon cancer indicates that GHK is capable of the regulation of various biochemical pathways on a gene level and it seems to be resetting the gene activity back to health, which leads to the improvement of tissue repair. (Pickart, L., 2012). GHK-Cu also has a demonstrated impact on other organs in the body after they have been damaged. A collaborative study conducted by scientists from Boston University, University of Groningen, University of British Columbia, and University of Pennsylvania established that the GHK peptide reverses the gene expression signature of COPD, which is manifested by emphysema, inflammation, lung tissue destruction, and significant reduction of lung capacity (Pickart, L., 2015). It is also important to note that the level of GHK is about 200 ng/mL(10−7M) at age 20 but declines to 80 ng/mL by age 60 (Pickart, L., 2015). This likely explains the increasing impact on ageing. It would also suggest that increased levels over time of GHK-Cu would have a positive effect on both life expectancy and ageing.

Specific aim

The aim of the pilot study is to examine a number of claims for the product. Here are common experiences people have with the X-39 patch:

- Improvement in energy
- Very deep sleep
- Rapid pain relief
- Rapid recovery from exercise
- Improved sports performance
- Improved cognitive function
- Improved libido
- Accelerated wound healing
- Healing of old injuries
- Tightening of the skin

Devices used

Multiscan Pro

Technologies and functions (theoretical basis):

Galvanic skin response and sudomotor function

The Galvanic skin response device measures the electrical conductance of the skin, from the sweat glands. The sudomotor sweat glands are controlled by the sympathetic nervous system. The GSR evaluates the sweat gland response (sweat rate) to electrical stimulation. The response is related to the sympathetic system and sudomotor level activity. Sudomotor test gives skin blood flow and C fiber density.GSR is a measurement of 11 pathways of the body using 6 electrodes from anode to cathode and cathode to anode. Send current through electrode, through interstitial fluid of body pathway, then exits and makes stimulation of cholinergic fiber of the sweat gland and release of norepinephrine, the sweat gland releases