



The Prestigious Flinders Medical University, Adelaide, Australia

Results of a large scale clinical trial of the HTE effortless aerobic exerciser - the Sun Ancon Chi Machine - for Secondary Lymphoedema and Venous Oedema of the legs

Secondary lymphoedema is a condition whereby the legs swell as a result of damage to the Lymph system from previous surgery. When patients undergo surgery that involves the removal of tissues, Lymph nodes can be damaged or removed inadvertently. This can occur especially in operations dealing with the removal of cancers.

When any lymph nodes are removed, the ability of the lymphatic system to drain excess fluids that accumulate in the tissues can be hindered. When this happens the excess fluids accumulate in the tissues and limbs, leading to a swelling of these areas.

Another condition that also involves the swelling of the legs is venous oedema, which occurs due to venous insufficiency. Venous insufficiency can be caused by disease, the prevalence of varicose veins, or previous deep vein thrombosis. It can occur because of high blood pressure or if the heart is not working properly.

When venous insufficiency takes place, excess fluids cannot be efficiently removed through the veins, leading to a leakage into the tissues. This then leads to a swelling in the areas.

Secondary Lymphoedema of the legs effects 30% of people after surgery/radiotherapy. Venous Oedema affects 5% of the adult population.

Both result in swelling, discomfort and can interfere with quality of life. Conventional treatment is expensive and ongoing, with little patient control. There is no good cure for either condition.

On 15th June 2000, a contract between HTE Australia and Flinders University, Adelaide was officially signed that began a research project into the benefits of the Sun Ancon Chi Machine, especially for those suffering from secondary lymphoedema and venous oedema.

This study was conducted at the Flinders Medical University in Adelaide, Australia, which is part of Australia's Department of Health, Faculty of Health Sciences School of Medicine.

Professor Neil Piller headed the clinical trials with the support of his professional team. Professor Piller is one of the worlds leading lymphologists, regularly working with other leading lymphologists around the world. He has presented and published over 300 works and is strongly committed to education and awareness programs.

Professor Neil Piller was also assisted by a team of highly professional people during the clinical trial including:

Ms Amanda Moseley (Research Officer) - Mr Adrian Esterman (Biostatistician and Clinical Epidemiologist) Associate Professor Colin Carati (Anatomist) - Mr Brian Bridger (Bio-medical Engineer) Dr Jack Walsh (Vascular Surgeon) - Dr Stephen Birrell (Surgeon)
Professor Neil Piller with Amanda Moseley, showing a clinical trial participant with secondary lymphoedema how to use the Chi Machine.

The Goal of the Study was to find and test the effectiveness of a treatment that would be:

Convenient, affordable effective able to empower sufferers.

The Design of the Study:

- * Patients were recruited through advertising & out-patient clinics
 - * Included 20 normal participants
- * Machine taken home and used for 3 weeks using the following regime:
 - Days 1-2: 5 mins morning & night
 - Days 3-7: 8 mins morning & night
 - Days 8-21: 12 mins morning & night
- * Weekly objective measurements were taken
 - * 1 month follow up post treatment

What measurements were taken and how:

- * Questionnaires: assessed how the legs felt & impact on quality of life.
 - * Tonometry: assessed tissue hardness
 - * Perometry: assessed leg circumference and fluid volume.
- * Bioimpedence: assessed body composition and fluid within the legs.
 - * Lymphoscintigraphy: assessed lymphatic system function.
 - * Blood pressure, pulse, blood test, blood flow

RESEARCH FINDINGS

From the findings of the research, we have come up with ten major points. The following is a list and description of these ten points, describing the benefits people can expect to receive from using the Sun Ancon Chi Machine:

For people without any medical problems:

1. A slight reduction in fluids to the limbs The group with normal healthy legs experienced a reduction of 45mls in fluids over the three-week period.
2. A reduction in weight The group with normal healthy legs lost an average of 0.6kg over three weeks. This is a significant amount over such a small period.
3. A reduction in percentage body fat For people with secondary lymphoedema due to lymph damage and those with venous oedema through venous insufficiency:
4. A significant reduction in limb volume and circumference Extra-cellular fluid for the group with secondary lymphoedema fell over the three-week period. At the one month follow up the fluids had risen but were not back to their original levels.
5. A significant loss of oedema fluid from the limbs The group with venous oedema experienced a reduction of 440mls in leg fluid over the three-week period. Although fluid levels had increased at the one-month follow up, they were not back to their original levels.
6. A significant loss of weight Average weight loss for the group with venous oedema was 1.45kgs over the three-week period. This remained stable at the one month follow up. Of those with secondary lymphoedema, average weight loss was 0.5kgs and this remained stable at the one month follow up.
7. A reduction in percentage body fat
8. An improvement in lymphatic drainage Lymphoscintigraphy showed a marked improvement in lymphatic function.

9. A significant improvement in subjective symptoms Most participants reported a reduction in pain, tightness, heaviness, skin dryness, limb size difference, cramps, pins and needles, burning feeling and temperature difference.

10. A satisfaction with the treatment and an improvement in the quality of life, 88% of participants were satisfied with the treatment regime.

There were also improvements with the feeling of control participants had over their condition, range of movement, positive impact on daily life, and an increase in the ability to exercise.

RESEARCH SIGNIFICANCE

After analyzing the complete data it is the conclusion of Professor Pillar and Flinders Medical University that:

Used on a frequent basis, the Chi Machine has great potential in Health Maintenance and Disease Management in those who suffer from Secondary Lymphoedema and Venous Oedema of the legs.

Considering the high cost of traditional treatments for secondary lymphoedema and venous oedema, the Sun Ancon Chi Machine is a cheap, effective and convenient alternative. For people without any medical conditions, the Sun Ancon Chi Machine offers a way to lose weight and body fat without the need to pay for expensive gym memberships or undertake strenuous exercise regimes.

CONCLUSION

The extensive research undertaken by Flinders University illustrates the commitment Hsin Ten Australia has to the customer. This groundbreaking research has separated Hsin Ten Australia and the Sun Ancon Chi Machine from the competition who offer cheap imitation machines. It proves that the Sun Ancon Chi Machine is an outstanding product and is the only one that is backed by the highest in quality scientific research.

1. The Sun Ancon Chi Machine is the only Chi Machine to be supported by high quality research.
2. Never before has a University endorsed a product like this.
3. The benefits were experienced by everyone, not just for people with secondary lymphoedema and venous oedema.
4. Flinders University has independently produced 3 booklets detailing the research findings and outlining the conditions of Secondary Lymphoedema and Venous Oedema. Also available is a new booklet of patient follow up testimonials.
5. The Sun Ancon Chi Machine is now recognized as a medical device by the Australian Therapeutic Goods Administration based on the strength of the research results (as well as in Japan, Canada, the UK, Spain, Italy, France and Germany).
6. No Imitation Chi Machine can claim to have the same benefits as the Sun Ancon Chi Machine as outlined in the research findings.