Case Study – Psoriasis treatment using CryoStimulation

User - Laura Davies FDSC

**OBJECTIVE.** To evaluate the effect of the “Kaasen life” device by TruCryo for treating patients with psoriasis and improving their symptoms.

Psoriasis is a skin condition that causes red, flaky, crusty patches of skin covered with silvery scales.

These patches normally appear on your elbows, knees, scalp and lower back, but can appear anywhere on your body. Most people are only affected with small patches. In some cases, the patches can be itchy or sore.

Psoriasis affects around 2% of people in the UK. It can start at any age, but most often develops in adults under 35 years old, and affects men and women equally.

The severity of psoriasis varies greatly from person to person. For some it's just a minor irritation but, for others, it can majorly affect their quality of life.

Psoriasis is a long-lasting (chronic) disease that usually involves periods when you have no symptoms or mild symptoms, followed by periods when symptoms are more severe.

People with psoriasis have an increased production of skin cells.

Skin cells are normally made and replaced every 3 to 4 weeks, but in psoriasis this process only takes about 3 to 7 days. The resulting build-up of skin cells is what creates the patches associated with psoriasis.

Although the process isn't fully understood, it's thought to be related to a problem with the immune system. The immune system is your body's defense against disease and infection, but for people with psoriasis, it attacks healthy skin cells by mistake

Scientific studies indicate that using Cryo Stimulation to induce thermal shock, normalises epithelisation of skin plaques for sufferers of Psoriasis and Eczema, reducing build-up of skin and dulls receptors responsible for itching.

The KaasenLIfe, cryo Stimulation device causes thermal shock due to its ability to spray CO2 at -78°C, under 50 bar pressure, cooling the targeted treatment area down to 4°C rapidly.

**METHOD**. An open prospective study was conducted in patients, with varying range of seriousness and aggressiveness of psoriasis. We also took discussed general health, any mental illness or physical contra-indications

The client’s psoriasis was photographed at the start of each appointment, prior to commencement of treatment in order to establish a baseline measurement. The area to be treated was assessed for suitability (to ensure there were no open wounds or other trauma). The patient was then positioned comfortably, and the area was exposed for treatment. Some clients preferred to stand, while others lay down in a supine position. The exact posture of the client was not assessed for effectiveness as part of this trial.

The area was cleaned and dried, removing any creams or lotions if present. The abdomen was then sprayed with CO2 in bursts of 30 seconds. The high-pressure black nozzle was used, and the spray was moved steadily across the psoriasis area to ensure all areas were cooled to achieve thermal shock.

The distance sensors on the device display the optimum distance for application of the CO2 to ensure the spray is delivered efficiently and effectively and to prevent surface tissue damage.

The skin surface temperature of the area being treated was reduced to around 4OC in around 15 seconds, achieving thermal shock. The area was then sprayed continuously in order to maintain a skin surface temperature (as indicated by the dual temperature sensors) of between 0 and 4oC for the remainder of the 30 seconds. The extended period of cooling enabled the penetration of the cold temperature to the underlying adipose tissue.

The entire target area was sprayed, and the skin surface temperature was maintained at between 0 and 4°C as described above.

Following completion of the 30-second sprays, a 5-minute period was observed to allow the treated areas to return to its normal surface temperature of around 34°C.

No other medication or modality equipment was used as part of the trial.

The safety and comfort of each client was closely monitored throughout their treatment.

5 patients attended weekly appointments and completed a course of 5 treatments, once per week over 5 weeks.

**RESULTS.** Between December 2018 and January 2019, five patients were treated for Psoriasis. The patients all saw dramatic reduction in symptoms after just one session. All symptoms; itching, flaking, redness and weeping reduced and almost ceased completely towards the end of the trial.

The best results were seen after the first treatment. Symptoms reduced immediately and all patients were able to abstain from any other medications (topical and oral) during the trial.

**CONCLUSION**. Kaasen life cryo stimulation is a targeted, safe, non-pharmacological/non-invasive technique to treat patients who want to alleviate the symptoms of psoriasis and reduce the itching and offers an alternative to applying prescribed creams. Treating with Kaasenlife works well at treating irritable skin conditions, reducing itching and reducing skin build up. Results visible after just the 1st treatment.

There is no limit to which areas can be treated or size of the affected area.

**Analysis**

After the first treatment with Kaasenlife it was evident that all the patients receiving CryoStimulation with the “Kaasen Life” saw a significant reduction in symptoms associated to Psoriasis.

Whilst in treatment, all patients reported that they no longer needed any alternative methods of treatment to reduce the symptoms of Psoriasis.

On average patients noticed the optimum healing was immediate and felt the need for a repeat treatment four days post op.

Between day four and seven post op, some patients used an over the counter moisturiser to manage symptoms without the need to revert the prescription medications.

All patients felt they would like to continue treatment if it were available on a private feepaying basis.