

1

The efficacy of a microwave device for treating hyperhidrosis in Chinese

SY Shek, CK Yeung, JCY Chan, HH Chan

Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong

Objective: Hyperhidrosis affects the quality of lives. A non-invasive, microwave device selectively heats the targeted region where the sweat gland resides. The objective of the study was to assess the efficacy and patient satisfaction after treatment.

Methods: Ten Chinese subjects with skin type III-IV with axillary hyperhidrosis were enrolled. Subjects were required to have a Hyperhidrosis Disease Severity Scale (HDSS) score of 3 or 4 at baseline. Two treatments were offered at 3 months apart. Efficacy was assessed using HDSS and Dermatology Life Quality Index (DLQI) at baseline and every month until the sixth visit at 3 months post-second treatment. Responders are those achieving HDSS score of 1 to 2.

Results: All subjects received the first treatment and three subjects received the second treatment. Nine subjects had 1-month follow-up, all of which reported an HDSS score of 1 (33%) and 2 (67%). In terms of the DLQI, the score has significantly improved at 1 month ($P = 0.008$) at 1-month post-treatment. All subjects experienced transient swelling and one subject reported mild numbness.

Conclusion: The initial results demonstrate that the microwave device is promising for treating axillary hyperhidrosis.

2

Non-invasive cryolipolysis for fat reduction in flanks in Chinese with a modified applicator

SY Shek, CK Yeung, JCY Chan, HH Chan

Department of Medicine, The University of Hong Kong, Queen Mary Hospital, Hong Kong

Objective: To determine the patient satisfaction and clinical efficacy of a modified applicator with a cryolipolysis device (Zeltiq®) for fat reduction in the flanks in Chinese.

Methods: A total of 15 healthy adult subjects with clearly visible fat in the flanks that wish to have them reduced were recruited. All received a single free treatment. Parameters were pre-set at cooling intensity factor of 41.6 (-73 mW/cm^2) for 60 minutes per site. The efficacy is determined by comparing measurements and comparing photographs taken at baseline, and 8 weeks and 12 weeks post-treatment. Blinded independent reviewers assessed the standardised photographs taken by the Canfield System®. The fat thickness was recorded by a handheld caliper and subject satisfaction assessed by questionnaires were collected. In addition, a questionnaire based on the fit of the new applicator had to be filled in by the operator at the treatment visit. Any incidence of device or procedure-related adverse effects was recorded.

Results: Of the 15 subjects, 10 were satisfied at the 12-week post-treatment visit. In terms of fat thickness by caliper measurement, there was statistically significant difference ($P < 0.05$) between baseline and follow-up visits. The weights of the subjects were stable and there were no significant change in fat thickness at the control sites. Operator feedback showed that the new applicator has a better fit for Chinese patients and attaches easier than the original applicator. No adverse effects were recorded at 12-week post-treatment visit.

Conclusion: The new applicator for the treatment of fat bulge at the flanks is efficacious in Chinese. The modification of the applicator has a better fit ergonomically and has high operator satisfaction.