

C-D-5

Epidermal Cooling in Improving the Patient Tolerability of Q-switched Laser for the Treatment of Nevus of Ota

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Introduction: Q-switched lasers have been shown to be effective in the clearing of nevus of Ota. However, repeat treatment is necessary and the discomfort associated with such treatment can be troublesome. A simultaneous use of skin surface cooling and laser surgery may further reduce such unwanted adverse effect and improve patients' tolerability. To assess whether epidermal cooling would reduce the pain and swelling that commonly occurs after laser treatment for Nevus of Ota.

Methods: 31 patients with nevus of Ota will be recruited from the Dermatology out-patient clinic.

Treatment and Assessment: Before treatment, the research nurse will use an ink pen to divide the lesion into two halves. Half of the lesion is treated with Q-switched Alex laser system with a cool sapphire plate in contact as a mean of epidermal cooling. The other half is treated with the same laser but with the cooling device switched off. Patients were assessed using a questionnaire to assess for symptoms associated with laser surgery immediate after treatment and 1 week later.

Results: There was no difference in term of fluence used but in term of immediate pain, the side treated with the cooling plate was associated with significantly lesser degree of pain than the non-cooled side (p) and 81% of the patients preferred the cooled side than the non-cooled side.

Conclusion: Pre and post skin cooling is effective in improving the patient tolerability among nevus of Ota patients' treated with q-switched laser.

C-E-1

Heritability of Bone Mineral Density (BMD) in Southern Chinese

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Introduction: Hip and spine BMD were studied in 183 postmenopausal women and their premenopausal daughters to determine the heritability of bone mass in southern Chinese.

Method: Based on maternal history, the daughters were divided into group A (maternal history of osteoporotic fracture or maternal t-score femoral neck BMD ≤ -2.5) and group B (maternal t-score femoral neck BMD ≥ -1.5). Data on other potentially heritable factors known to influence BMD were also collected. Lumbar spine and hip BMD were measured using the Hologic QDR 2000 plus dual energy X-ray absorptiometer.

Results: Group A daughters (n=77) were significantly older and shorter than group B (n=106) but the body weight between the two groups were not different. Lifestyle characteristics (dietary calcium, smoking, drinking and exercise habit) were similar between the two daughter groups. After adjusting for age and height, lumbar spine L1-4, femoral neck and total hip BMD was 2.6 % (p<0.02), 7.7 % (p=0.001) and 6.1 % (p<0.001) lower in Group A than in group B respectively. Height and weight were significantly correlated amongst the mother and daughter pairs. Using multiple linear regression analysis, body weight and maternal BMD are significant predictors of BMD of the daughters at all regions. Among the daughters, heritability estimates for the lumbar spine, femoral neck and total hip BMDs ranged from 45 to 62%.

Conclusion: Familial resemblance of BMD was strong in premenopausal southern Chinese daughters. Estimates of heritability suggest that maternal BMD is an important independent predictor of BMD among daughters. Our findings reinforce the importance of prevention and early intervention among women with positive family history of osteoporosis.