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New compression therapy appears to be comparable to four-layer bandage system

A NEW ADAPTIVE COMPRESSION THERAPY (ACT) FOR VENOUS LEG ULCERS (VLUs) appears to be comparably efficacious to four-layer bandage management while being better accepted and achieving higher patient-reported quality-of-life scores in challenging patients, according to findings published in *International Wound Journal* (June 2016; 13(3):317-325).

The researchers conducted a prospective, randomized, 12-week study to evaluate the efficacy and tolerability of the new compression method, which combines intermittent and sustained pneumatic compression, and a more conventional four-layer bandage system. A total of 90 patients were enrolled, with 38 randomized to the new compression method and 52 to the four-layer method. Primary outcomes were ulcer healing and safety, while secondary outcomes included comfort, compliance, ulcer pain, patient-perceived product performance, and quality of life. The two treatments had similar ulcer healing rates—31.6% for the ACT and 42.3% for the four-layer bandage ($p=0.30$). Both adverse events and patient-rated comfort were also similar between the two. Average daily usage for the ACT in sustained mode was 10.5 hours, and 1.8 hours in the intermittent mode. The predicted final ulcer pain was also similar between the two approaches ($p=0.68$). Performance was subjectively better for ACT, and significantly higher for exudates management ($p=0.04$), skin protection ($p<0.001$), removal ease ($p=0.0007$), bathing ($p<0.0001$), and sleep comfort ($p=0.0405$). ACT had an adjusted final quality-of-life score 0.1025 times higher than the four-layer system ($p=0.0375$).

—For more information visit <http://tinyurl.com/he894js>

Combination IPL and Nd:YAG laser better than Nd:YAG alone in treating photoaged hands

A COMBINATION TREATMENT OF INTENSE PULSED LIGHT (IPL) and neodymium-doped yttrium aluminum garnet (Nd:YAG) laser for the rejuvenation of photoaged dorsal skin of the hand produces superior outcomes to Nd:YAG laser treatment alone, researchers report online ahead of print in the *Journal of Cosmetic and Laser Therapy* (May 11, 2016).

To compare the efficacy of the two treatment approaches and to determine their impact on patient satisfaction, investigators enrolled 35 female patients with visible signs of photoaging on their hands in the study. Patient ages ranged from 31 to 79 years, with a mean age of 60.77 (± 9.48 years).

Each participant received three sessions of IPL and four sessions of Nd:YAG laser treatment to their right hand, with two-week intervals between each treatment session, and six treatments of Nd:YAG alone were performed on their left hands, again at two-week intervals between sessions.

No difference was observed between right and left hands before treatment in pigment distribution, fine wrinkles, coarse wrinkles, and global scores ($p>0.05$). Average pigment tone score was significantly higher in the right hands before treatment ($p<0.05$). Post-treatment, the researchers reported that there was a larger improvement in pigment distribution, fine wrinkles, allowness, pigment tone parameters, and global scores in the right hands (which were treated with the combination therapy), than was observed in the left hands (which were treated with Nd:YAG laser therapy alone ($p<0.001$)).

—For more information visit <http://tinyurl.com/zwz5d58>

Lower MAL cream concentrations just as effective in PDT of BCC, AKs

A STUDY OF DAILY ROUTINE PRACTICE IN PHOTODYNAMIC THERAPY (PDT) TREATMENT of basal cell carcinoma (BCC) and actinic keratoses (AKs) found that 0.4 mm of methyl aminolevulinate (MAL) for BCC and 0.1 to 0.2 mm for AK was all that was typically used. As well, the recommended 1.0 mm of MAL does not result in a higher accumulation of protoporphyrin IX (PpIX) after three hours of opaque occlusion, researchers report in *Photodermatology, Photoimmunology & Photomedicine* (Mar. 2016; 32(2):88-92).

The authors note that while the literature recommends a 1.0 mm layer of MAL to be used during PDT, the amount of MAL cream needed becomes quite significant if the patient has a large field of AKs to cover. To investigate this, they reported the amount of MAL used per cm^2 for both conventional and daylight PDT of AK and BCC in the Department of Dermatology at Bispebjerg Hospital, University of Copenhagen. Also, in 16 healthy volunteers, 0.1 mm, 0.2 mm, 0.5 mm, and 1.0 mm MAL cream were applied for three hours on tape-stripped areas on each forearm, and the areas were randomized to light-permeable or opaque occlusion, after which PpIX fluorescence was measured. In the hospital practice, they found that less than 0.4 mm MAL was routinely used during PDT of BCC, and 0.2 mm for AK whether conventional or daylight PDT. No difference in PpIX fluorescence was found between the different thicknesses of MAL cream application using the opaque occlusion.

—For more information visit <http://tinyurl.com/hkfh4yp>