Nothing to disclose; **S. Rowell**: Nothing to disclose; **R.** Urankar: Nothing to disclose.

PS172.

Does Topical Wound Oxygen (TWO2) Offer an Improved Outcome Over Conventional Compression Dressings (CCD) in the Management of Refractory Non-healing Venous Ulcers (RVU)? Three-Year Technical and Clinical Outcome and Midterm Results With Quality-Adjusted Time Spent Without Symptoms of Disease and Toxicity of Treatment (Q-TWiST)

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Objectives: TWO2 proposes an option in the management of RVU. Primary endpoint is ulcer healing at 12 weeks and secondary endpoint is Q-TWiST.

Methods: 46 ulcers were managed using TWO2 therapy and 37 ulcers with CCD. Demographics and risk factors were similar in both groups. All ulcers were CEAP C6, s.

Results: The mean reduction in ulcer surface area at 12 weeks was 96% in the TWO2 therapy group, compared to 61% in the CCD group. At 12 weeks, 80% of TWO2 managed ulcers were completely healed, compared to 35% of CCD ulcers (p < 0.0001). Median time to full healing was 45 days in TWO2 patients and 182days in CCD patients (p < 0.0001). 32/46 of TWO2 ulcers showed reverse gradient of healing. 9/19 MRSA positive ulcers managed with TWO2 were rendered MRSA negative after 5 weeks, compared to none of the 17 MRSA positive CCD ulcers. The pain score threshold in TWO2 managed patients improved from 8 to 3 by 13 days. Q-TWiST was significantly longer at 24.25 months for TWO2 and 10.5 months for CCD with p <0.0001. After 36 months follow-up, 8 of the 13 healed CCD ulcers showed recurrence compared to none of the 37 TWO2 healed ulcers. No local or systemic complications were encountered in either treatment group.

Conclusions: TWO2 is prudent, effective and valuable in managing RVU up to 36 months and slashes time needed for RVU healing. TWO2 is successful in pain alleviation, MRSA elimination. TWO2 radically degrades recurrence rates and thus enhances the quality of life and has superior Q-TWiST over CCD.

Author Disclosures: S. Sultan: Nothing to disclose; W. Tawfick: Nothing to disclose.

PS174.

A Systematic Review on the Effectiveness of Knee Versus Thigh Length Graduated Compression Stockings in Thromboprophylaxis for Surgical Patients

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Objectives: To systematically analyze prospective randomized controlled trials on effectiveness of knee (KL) vs thigh length (TL) graduated compression stockings in thromboprophylaxis for surgical patients.

Methods: A systematic review of medical literature was undertaken. Prospective randomized controlled trials on postoperative patients of various surgical disciplines were selected according to specific criteria. Data was extracted and analyzed by using statistical package RevMan 5.0. Summated outcome was calculated in form of odds ratio (OR) with 95% confidence interval.

Results: Nine trials on 1476 patients were retrieved from electronic databases using standardized medical subject headings. Only three trials on 498 patients qualified for meta-analysis according to inclusion criteria. Both in fixed [OR, 1.55; 95% CI, 0.78 - 3.07; z = 1.25; p = 0.21] and random [OR, 1.33; 95% CI, 0.44 - 4.06; z = 0.51; p =0.61] effects models, KL stockings were as effective as TL stockings for thromboprophylaxis in surgical patients. However, there was significant heterogeneity [Chi2 = 4.04, df = 2, I2 = 50 %] among trials.

Conclusions: KL graduated compression stockings may be as effective as TL stockings for the prevention of DVT in surgical patients. For thromboprophylaxis, in surgical patients KL stockings may routinely be used due to parallel efficacy, higher patient compliance and lower cost. However, a major randomized trial is required in order to strengthen the existing evidence.



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PS176.

Clinical Outcome Analyses of Radio-Frequency Ablation (RFA) in the Treatment of Incompetent Greater Saphenous Vein (GSV): Differences Between Closure-Plus and ClosureFast Catheters

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Objectives: The new ClosureFast (CF) catheter has much higher treatment speed as compared to previous ClosurePlus (CP) model. We compared several clinical outcomes after use of both catheters in a large series.

Methods: From February 2005 to April 2009 there were 656 consecutive office RFA procedures performed first with CP and later with CF catheters. Postoperative duplex scans (3-7days) documented technical success (complete obliteration, partial obliteration or full patency