F073 – Late-breaking Research Forum
Procedural Dermatology
Saturday, March 4 – 1:00 PM – 3:00 PM
Room W304C

1:00 PM - 1:10 PM

5333 - Randomized, placebo-controlled, double-blind study of oral tranexamic acid in the treatment of moderate to severe melasma/Eunice Del Rosario, MD, MS

Objective 1: To determine the efficacy of oral tranexamic acid in in North American women with moderate to severe melasma

Objective 2: To determine the safety of oral tranexamic acid for the treatment of moderate to severe melasma

Objective 3: None

ABSTRACT

Background: Melasma is a common pigmented disorder which is often difficult to treat. Tranexamic acid (TA) is a promising treatment for melasma; however, few controlled studies exist. Methods: Patients were recruited from a single tertiary medical center from July 2015 to October 2016. Eligible patients were 18 years or older, female, and with moderate or severe melasma. Moderate melasma was defined as modified Melasma Area and Severity Index (mMASI) score of 5.8 to 7.9 and severe melasma with mMASI > 8. Patients were treated with 250mg of TA or placebo capsules twice daily for 3 months and daily sunscreen. Primary outcome measure was the mMASI score after 3 months of treatment. Primary and secondary endpoints were analyzed using a three-way ANOVA. Results: 44 patients were enrolled and 39 completed the study. At 3 months, there was a 59% reduction in mMASI score in the TA group vs. 22% in the control group (P = 0.0006). Severe melasma improved more (49% reduction, P= 0.004) than those with moderate melasma (33% reduction, P = 0.0004). No serious adverse events were noted in either group. Conclusions: Oral TA appears to be an effective treatment for moderate to severe melasma with minimal side effects

1:10 PM - 1:20 PM

5059 - Microneedling with tranexamic acid in treatment of melasma/Maya Vedamurthy, MD

Objective 1: To evaluate the efficacy of microneedling with tranexamic acid in treatment of melasma

Objective 2: To evaluate safety of microneedling and tranexamic acid in treatment of melasma

Objective 3: None

ABSTRACT

TITLE: MICRONEEDLING WITH TRANEXAMIC ACID IN TREATMENT OF MELASMA Introduction: Melasma is a common pigmented disorder involving the facial as well as extrafacial sites. It has a considerable psychological impact on patients and is often difficult to treat due to recurrence. Aim: We aim to evaluate the effectiveness of microneedling with tranexamic acid in treatment of melasma. Method: Fifteen patients of age 30–45 years, out of which 12 females and 3 males with melasma were enrolled in the study. Microneedling was performed using 1.5mm dermaroller followed by topical application of tranexamic acid. The procedure was done twice a month for 4 months and the clinical response was assessed based on objective evaluation of serial photographs and MASI scores before and after a period of four months. Results: All the fifteen patients completed the protocol and it was observed that there was 60% improvement in pigmentation in most of them. Conclusion: Transdermal delivery of tranexamic acid with the use of dermaroller appears to be a safe and more effective treatment for melasma.
1:20 PM - 1:30 PM

5332 - The use of tranexamic acid solution in treatment of erythematotelangiectatic rosacea./Fotini Bageorgou

Objective 1: Propose a new treatment for erythematotelangiectatic rosacea.

Objective 2: Evaluate the efficacy and tolerability of tranexamic solution in treatment of erythematotelangiectatic rosacea.

Objective 3: None

**ABSTRACT**

Erythematotelangiectatic rosacea is a common, chronic, relapsing disease characterized mainly by vascular components, for which many therapies may exist but with limited efficacy. In our study we included 20 patients, having erythematotelangiectatic rosacea. All patients were women between 27-65 years-old. We divided the patients in 2 groups, the 1st group was treated only with tranexamic acid solution (Transamin inj/sol 500mg/5ml) infused wet dressing for 20 minutes, and the 2nd group was treated with microneedling simultaneously with tranexamic acid solution topical application followed by tranexamic acid solution infused dressing therapy, every 15 days for four sessions. The improvement was outlined according to the Investigator Global Assessment of Rosacea Severity Score (IGA-RSS) and the use of clinical photos and dermoscopy. All patients were improved in the end of the therapy. There was statistically significant improvement, 2 units IGA-RSS in the first group, whereas 3 units IGA-RSS in the second group. The improvement lasted more than four months. The tolerability of the use of tranexamic acid was also assessed. According to our results a new really promising simple, safe and cheap treatment option targeting mainly to the vascular net and the erythema of rosacea is proposed.

1:30 PM - 1:40 PM

5282 - Epidermal harvesting system - An innovation in vitiligo surgeries/Sanob Daruwalla, MBBS

Objective 1: To study repigmentation in recipient site

Objective 2: To study donor site morbidity

Objective 3: None

**ABSTRACT**

Introduction: Split-thickness skin grafting (SSG) is an important modality for vitiligo. However, the donor site has complications of pain, infection and scarring. Alternatively, epidermal harvesting system (cellutome), combines negative pressure and heat to form epidermal micrografts. It has minimal donor site morbidity and is relatively pain-free, allowing autologous skin grafting in an outpatient setting. Method: Recruited 10 patients with stable vitiligo. Harvester head was applied on thigh. In 30–40 minutes, the formation of micrografts was visible. Micrografts were transferred directly from the harvester to the recipient site after derma-abrasion using Tegaderm dressing. Primary outcome measures - percentage of repigmentation and donor site healing time. Secondary outcome measures - time for repigmentation, pain score, patient satisfaction and incidence of adverse events. Results: Micrograft engraftments were observed between 3 - 4 weeks in all patients. The donor sites completely healed without scarring within 2 weeks and required no further treatment. Repigmentation began within 1 month. By 3 months 8 patients showed 50-75% repigmentation. 2 patients showed 100% repigmentation by 4 months. Conclusion: Cellutome epidermal graft harvesting device is a novel alternative, providing pain-free epidermal skin grafts in outpatient setting with projected minimal donor site trauma and improved patient satisfaction.
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1:40 PM - 1:50 PM

5058 - Treatment of Xanthelasma palpebrarum with 100% Dichloroacetic acid/Maya Vedamurthy, MD

Objective 1: Efficacy of 100% dichloroacetic acid in treatment of xanthelasma palpebrarum

Objective 2: safety profile of 100% dichloroacetic acid in treatment of xanthelasma palpebrarum

Objective 3: None

ABSTRACT

Title: Treatment of Xanthelasma palpebrarum with 100% Dichloroacetic acid

Introduction: Xanthelasma palpebrarum is the most common type of xanthomas. Though it is a benign lesion it is of a great cosmetic concern to the patients. Although many treatment modalities have been described for xanthelasma palpebrarum, no single technique has emerged as dominant.

Objective: To determine the safety and efficacy of topical 100% Dichloroacetic acid application in the management of xanthelasma palpebrum.

Method: A total of fifteen patients in the age group of 20-60 years were enrolled in the study. The affected area was degreased and 100% dichloroacetic acid solution was applied on the lesion with a wooden toothpick till the end point i.e frosting is seen. The lesion healed well in 7-10 days, without leaving any scar or dyspigmentation.

Results: The results were assessed by pre and post treatment clinical photographs. After single application of 100% dichloroacetic acid, 13 patients (87%) experienced complete clearing, 2 patients (13%) had near complete resolution which cleared after second session of dichloroacetic acid application a month later. None of the patient had recurrence during the follow up period of 6 months.

Conclusion: Topical 100% dichloroacetic acid is an excellent alternative for management of xanthelasma. It is easy, cost effective and efficacious with good patient compliance and satisfaction.

1:50 PM - 2:00 PM

5227 - Molluscum Contagiosum Treated With Dilute Povidone-Iodine/Kara Capriotti, MD

Objective 1: Discuss the clinical utility of Povidone-Iodine

Objective 2: Discuss the clinical utility of Dimethylsulfoxide

Objective 3: Discuss our results using a dilute Povidone-Iodine/Dimethylsulfoxide gel for Molluscum Contagiosum

ABSTRACT

Background: Povidone-Iodine is a resistance-free, biocidal agent that eradicates microorganisms including bacteria, viruses, yeasts, molds, fungi and protozoa. Dimethylsulfoxide is an effective vehicle, greatly enhancing percutaneous penetration when used in combination with other substances.

Approach: Molluscum contagiosum lacks consensus treatment. Only in-office cantharidin application is FDA approved. Local destruction, chemical irritation and immunologic means are used off-label but often not tolerated well by children. We have been prescribing compounded dilute povidone-iodine in dimethylsulfoxide gel for molluscum contagiosum.

Results: Twelve patients with molluscum contagiosum were treated twice daily. Patients returned to office for evaluation at 4-week intervals, with number and location of lesions being recorded at each visit. All 12/12 (100%) of patients demonstrated complete or partial resolution. There were a total of 115 lesions treated, and 103/115 (90%) resolved at 8 weeks. Mild skin irritation and dryness were the only reported adverse effects.

Innovation: We have found remarkable success with this novel combination that has not been previously reported in the literature, warranting further investigation to elucidate clinical utility.

Relevance: Our results may have far reaching impact in dermatology, offering well-tolerated at-home treatment, along with eliminating morbidity from current treatments and frequent office visits.
2:00 PM - 2:10 PM

5140 - Efficacy and Safety of Collagenase Clostridium Histolyticum for the Treatment of Edematous Fibrosclerotic Panniculopathy (Cellulite)/Mitchel Goldman, MD

Objective 1: To assess the efficacy of clostridium collagenase histolyticum for the treatment of edematous fibrosclerotic panniculopathy, also known as cellulite

Objective 2: To assess the safety and tolerability of clostridium collagenase histolyticum for the treatment of edematous fibrosclerotic panniculopathy (cellulite)

Objective 3: None

ABSTRACT

Objective: To evaluate clostridium collagenase histolyticum (CCH) for the treatment of edematous fibrosclerotic panniculopathy (EFP; cellulite). Methods: In a randomized, double-blind, placebo-controlled study, adult women with moderate or severe EFP [Clinician-Reported Photonumeric Cellulite Severity Scale (CR-PCSS) and Patient-Reported PCSS (PR-PCSS) scores of 3-4) in ?1 quadrant (left or right buttock or posterolateral thigh) and Hixel cellulite severity scale (CSS) score ?13 received up to 3 treatment sessions (days 1, 22, and 43) of CCH (0.84 mg/session) or placebo subcutaneous injections into one eligible quadrant. The primary endpoint was the proportion of composite responders (individuals with ?2-point improvement for both CR-PCSS and PR-PCSS) at day 71. Results: The population consisted of 375 women (mean age, 46.5 years; 86.4% white) randomized to CCH (N=189) or placebo (N=186). At day 71, 10.6% of CCH-treated individuals and 1.6% of placebo-treated individuals were 2-point composite responders (P<0.001). In a secondary endpoint analysis, 72.3% and 51.6% of individuals, respectively, were 1-point PR-PCSS responders (P<0.001). The most common adverse events were mild or moderate in intensity and injection-site related. Conclusions: Treatment with CCH significantly improved the appearance of EFP versus placebo; however, further evaluation of CCH for EFP (cellulite) is warranted. Funding: Endo Pharmaceuticals Inc, Malvern, PA.

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2:10 PM - 2:20 PM

5278 - Pan-facial Aesthetic Treatment Positively and Significantly Impacts Social Perception/Conor Gallagher, MD

Objective 1: Determine the impact of pan-facial aesthetic treatment on social perception

Objective 2: Describe the formation of observer impressions based on facial appearance

Objective 3: None

ABSTRACT

Background: A recent study demonstrated the impact of pan-facial treatment on psychosocial endpoints, such as social confidence, psychological well-being, and aging appearance. The current post hoc analysis aimed to evaluate the impact on social perceptions: the formation of observer impressions based on facial appearance. Methods: Baseline and month 4 images of eligible HARMONY study subjects were pooled. In an online task, participants viewed 6 randomized subject images (neutral facial expression) or 6 before/after image pairs in random order. Participants evaluated specific traits associated with their first impressions of the images (eg, attractive, successful, healthy, approachable, perceived age). Results: Overall, 2000 participants viewed subject images. Subjects in post-treatment images were considered significantly more socially adept, successful at attracting others, attractive, friendly, healthy, approachable, and younger. They were also considered more educated, financially successful, and hirable. The findings were consistent whether images were viewed individually or as before/after pairs. Conclusions: Pan-facial treatment positively and significantly impacted the social perception of HARMONY subjects. These data suggest the impact of aesthetic treatment could extend beyond physical improvements to providing greater occupational, social, and personal opportunities. Consideration should be given to the role of social perception in facial aesthetic treatments.
5147 - Ranpirnase is effective against HPV - anogenital warts. Results of a phase I/II double blinded against vehicle clinical trial. Luis Squiquera, MD

Objective 1: To test the efficacy of a topical compound containing 1% ranpirnase against anogenital warts

Objective 2: To test the local and systemic side effects of topically applied ranpirnase

Objective 3: To test the reduction of the lesional area in a short treatment with ranpirnase in anogenital warts

ABSTRACT

Ranpirnase is a member of the RNase A superfamily that selectively targets dsRNA, like tRNA, pre-miRNA and viral RNA with has a mechanism similar to Dicer cytoplasmic RNase III.

Our group has proven the broad in vitro antiviral spectrum of ranpirnase ranging from HSV to Ebola. The efficacy of ranpirnase was previously tested in cultured cells, and showed specific activity against HPV-11 with low toxicity (selectivity index >88) and in a compassionate study in subjects with anogenital warts.

We are reporting the results of a clinical trial performed in Cochabamba (Bolivia) designed as double blinded against placebo. The trial included 75 subjects randomly assigned in two arms: active drug (n: 39), vehicle (n: 36). The endpoints were: total wart area reduction, and number of cases showing over 80% improvement. In the ITT analysis, after 8 weeks of topical application, the lesional area was reduced in 71.09% (p> 0.0025) and in 60.60% of the subjects the lesions were reduced by over 80% (p> 0.0194). Further analysis showed total remission in 39.4% of the cases vs. 16.7% in the placebo group (p> 0.0288). No systemic side effect were reported, and irritative responses were minimal and no statistically significant in the two groups.

5079 - Itch Relieving Effect of Botox: A Study in Healthy Subjects/ Leigh Nattkemper, PhD

Objective 1: To test the antipruritic effect of Botox versus a saline control

Objective 2: To test the effect of Botox on warm and pain thresholds

Objective 3: To test the effect of Botox on pain intensity

ABSTRACT

Botulinum toxin type A (BoNT/A) has an antipruritic effect due to the inhibition of acetylcholine and other pruritic factors, such as substance P and glutamate. We aimed to test the itch-relieving effect of BoNT/A on a non-histaminergic, cowhage (Mucuna pruriens) model for chronic itch. BOTOX® (BoNT/A; 10 units; Allergan) was intradermally injected in a 4x4 cm area on one volar arm of 35 healthy subjects (16M:19F; age 26.8 ± 6.8), with a saline control (10 units) injected into the contralateral arm. Itch intensity (VAS 0-10) after cowhage application were examined on the test areas at baseline (before treatment) and then 1 week, 1 month, and 3 months after treatment. The intradermal injection of BOTOX statistically reduced overall cowhage itch (AUC) compared to the saline control at 1 week (p=0.006), 1 month (p<0.0001), and 3 months (p<0.0001). The percent change of peak intensity of itch was reduced with BOTOX at 1 week (p=0.001), 1 month (p=0.002), and 3 months (p<0.0001) compared to the saline treatment. The duration of itch after BOTOX treatment was significantly reduced from baseline at 1 week (p=0.009), 1 month (p=0.027), and 3 months (p=0.15). These results suggest that BOTOX is a potential long-lasting treatment for non-histaminergic itch.
2:40 PM - 2:50 PM

5054 - Transdermal iontophoresis patch with reverse electrodialysis/Joon Lee, MD

Objective 1: transdermal patch

Objective 2: iontophoresis

Objective 3: reverse electrodialysis

ABSTRACT

Reverse electrodialysis (RED) technology generates energy from the salinity gradient by contacting waters with different salinity. Herein, we develop the disposable skin patch using this eco-friendly energy. A typical RED structure is a series of alternating cells determined by anion- and cation-exchange membranes in a stack placed between two electrodes. The current density, which can be controlled easily without special circuit, is enough to iontophoretic drug delivery. We characterized the electrical performance of the disposable RED system and studied the efficacy of transdermal delivery via measurement of fluorophore distribution and Franz diffusion cell apparatus. In vitro study, this iontophoretic system enhanced the transdermal delivery of peptide, e.g. poly-L-lysine, which is difficult to penetrate the skin barrier by simple diffusion. We design the disposable iontophoretic skin patch using RED system and suggest this patch can be apply on new cosmetic patch or disposable drug patch.

2:50 PM - 3:00 PM

5084 - A comparison of surgical site infection (SSI) rates in using sterile gloves (SG) versus non-sterile gloves (NSG) during Mohs micrographic surgical (MMS) reconstruction in a private practice dermatology office/Sarah Weingarten, BA

Objective 1: To determine the cost-savings of using non-sterile gloves (NSG) versus sterile gloves (SG) for Mohs micrographic surgery (MMS) reconstruction.

Objective 2: To determine if NSG produce similar surgical site infection (SSI) rates to SG for surgical reconstruction during MMS.

Objective 3: None

ABSTRACT

Background: MMS is a tissue-sparing procedure for multiple types of skin cancer that provides low infection rates. Over the last fifteen years, studies have focused on comparing the use of SG with NSG on MMS infection rates. In this study, we determined the SSI rates at a small, private practice before and after the use of NSG. Methods: Data were collected over seven years for MMS cases before and after employment of NSG for all MMS reconstruction. Results: A total of 5582 cases used SG for reconstruction and 1407 cases used NSG. Infections complicated 189 of the SG cases, 3.39%, and 43 of the NSG cases, 3.06% (p = 0.537). The cost of one reconstruction case, requiring 2 pairs of gloves, was $2.20 for SG and $0.38 for NSG. Conclusion: No significant difference was found in the infection rates between SG versus NSG in MMS tumor reconstruction. There is substantial cost-savings when using NSG. Herein, use of NSG can be a cost-effective alternative without compromising patient safety for MMS reconstruction or any other dermatological surgical procedure.