prospective, multi-centered, randomized, single-blinded clinical trial was conducted to study the effects of Oasis-ultra combined with negative pressure wound therapy (NPWT) on the healing rate of stage IV pressure wounds versus NPWT alone.

MATERIALS AND METHODS: Twelve subjects were involved in the study: six patients in the study group and six in the control group. NPWT was changed twice a week for all subjects, and Oasis-ultra was applied weekly. The wounds were measured weekly, and the healing rate was calculated for each subject for 12 weeks. The canisters were collected monthly for three months. For cytokine and growth factors analysis, 100 μl 1XPBS were added to the sample, and protein concentration was determined using the Bradford assay. A Bio-Rad BioPlex 96 well plate was set up with 50 μl of the sample and duplicated for cytokine analysis using Bio-Plex.

RESULTS: In the study group, the healing rate calculated at 12 weeks was found to be ~87% when compared to the control group, which was ~55%. Analysis of different growth factors, normally present in stage IV pressure wounds, revealed higher concentrations in the oasis-ultra treated group when compared with the control group. Additionally, the other proinflammatory cytokines that accused of wound chronicity were down regulated as a result of treating the subjects in the study group with oasis-ultra.

CONCLUSION: Our study demonstrates that the use of Oasis-ultra accelerates the healing rate of stage IV pressure wounds when combined with NPWT. Also, in the Oasis-ultra treated group, the proinflammatory cytokines were successfully inhibited. At the same time, Oasis-ultra promoted and upregulated the beneficial growth factors that had positive impact on the healing rate.

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Evaluation of Diastasis of the Recti Muscles Correction using Two Different Techniques: A Comparative Study

Amr A. Mabrouk, MD; Hesham A. Helal, MD; Nada A. Mahmoud, MD

INTRODUCTION: The technique used for correction of rectus abdominis diastasis has been a debatable issue since the original description of abdominoplasty.1-2 The aim of this study is to evaluate the long term efficiency of two different methods used for plication of the anterior rectus sheath during abdominoplasty.

PATIENTS AND METHODS: The study was conducted on 40 patients with normal body mass index having Rohrich type IV B deformities. All were females; with age ranging from 31 to 43 years. The patients were divided randomly into two groups based on the technique used for plication of anterior rectus sheath:

Group (I) included 20 patients who underwent the rectus abdominis “myofascial release”

Group (II) included 20 patients who underwent conventional midline plication of the external oblique aponeurosis.

Patients are assessed and the 2 groups were compared using:

(1) Hip waist ratio preoperative and postoperatively at 3 and 6 months.
(2) the width of rectus diastasis using computed tomography of their anterior rectus abdominis sheath preoperatively and postoperatively at 3 and 6 and 12 months at 3 points: a) at the umbilicus, b) midway between umbilicus and xiphoid process and c) midway between umbilicus and symphysis pubis.
(3) Evaluation of ventilatory function using spirometry and intraoperative measurement of intra-abdominal pressure and airway resistance before and after plication of the anterior rectus sheath.

RESULTS: Postoperative follow-up time averaged 14 months (range 12–24 months). A significant reduction in the mean distance between rectus muscles before surgery and 12 months postoperatively was noted with no statistically significant difference between both groups. Most of the cases showed no recurrence of diastasis except one in group I and two in group II. There was a significant reduction in spirometry values after surgery but there was no correlation between the type of plication and changes in spirometry.

CONCLUSION: Plication of the anterior rectus sheath is a mandatory procedure to correct rectus diastasis for long lasting results.

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REFERENCES:
1 Mestak O, Kullac R, Mestak J, Nosek A, Krajcova A, Sukop A. Evaluation of the long-term stability of sheath plication using absorbable sutures in 51 patients with diastasis of the recti muscles: an ultrasonographic study. Plast Reconstr Surg. 2012 Nov;130(5):714e-719e.
2 Tadiparthi S1, Shokrollahi K, Doyle GS, Fahmy FS. Rectus sheath plication in abdominoplasty: assessment of its longevity and a review of the literature. J Plast Reconstr Aesthet Surg. 2012 Mar;65(3):328–32.

Filling Prominent Nasolabial Fold Applying Platelet Rich Plasma (PRP) Gel

Zekeriya Tosun, MD; Tugba Gun Koplay, MD; Murat Aktan, PhD; Selcuk Duman, MD; Osman Akdag, MD; Mehtap Karamese, MD

INTRODUCTION: PRP gels has been used for a few years in facial plastic surgery to decrease hematoma formation, seroma formation, postoperative swelling, and healing time.1 Despite having a volume itself, PRP gel hasn’t ever used as a filling material in aesthetic plastic surgery practice. The gel has not only volume advantage but also the benefits of PDGF and cytokines. Due to this, we used the PRP gel as a filling material for nasolabial folds.

MATERIALS AND METHODS: 3,W patients were referred to our clinic with prominent nasolabial fold due to aging. Mean age was 46 (42-48). We obtained PRP gel from their own blood without anesthesia by embryologists. Blood was centrifuged, and the platelet and fibrinogen rich plasma component were harvested. It was applied in policlinic doing injection with 18 G canule about 2 cc. Patients were visited at 1th week, 1th, 3th and 6th months. Photos and videos were taken. For one patient MR imaging was performed.

RESULT: In one patient PRP gel was seen at MR imaging at nasolabial fold area at 1th month. In physical examination, gel was perceivable. Nasolabial fold depth was reduced at static and dynamic visualization and their face were looked younger.

CONCLUSION: Prominent nasolabial folds due to ageing are a major aesthetic concern among women. There are many treatments like injection of artificial fillers, fat grafting operations, facelift procedures. And the most popular is fat graft. We shared our patients whom we used PRP gel for filling the nasolabial fold. PRP gels has been used for a few years in facial plastic surgery to decrease hematoma formation, seroma formation, postoperative swelling, and healing time. Their use as a biological dressing after laser resurfacing has demonstrated faster healing and decreased erythema. The application of platelet gels to fat grafts enhances the longevity when injected for contour augmentation. When platelet gel is used in conjunction with sutures it provides for greater tensile strength. PRP gel hasn’t ever used as a filling material in aesthetic plastic surgery practice. In this study we used PRP gel as a tissue filler. It an easy harvesting, cost effective method and the main advantage is restoring the problem with autologous tissue even easier than fat graft.

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REFERENCES
1 Edward P. Melmed, MD, Autologous Platelet Gel in Plastic Surgery. Aesthetic Surgery Journal. 2001:21:377–379

Fingertip Reconstruction with Adipofascial Island Flap

Seungwoo Lee, MD; Jinsoo Kim, MD, PhD; Dongchul Lee, MD; Siyoung Roh, MD; Kyungjin Lee, MD

INTRODUCTION: The fingertip reconstruction requires durable coverage, with good color and contour, so that, adequate coverage of the fingertip wounds is often a demanding problem for hand surgeons.1 Fingertip defects with bone exposure should be covered as promptly because of its chance of infection and bone desiccation.2 Adipofascial flap is one of the methods covering soft tissue defect at fingertip. This study is designed to introduce the new method of fingertip reconstruction using a pedicled adipofascial island flap.

MATERIALS AND METHODS: From August 2014 and June 2015, 8 patients with bone-exposed fingertip soft tissue defect were treated. At first, we dissected subdermal layer of undamaged area and elevated adipofascial flap based on branches from terminal arch of digital arteries. After that, we sacrificed one side of terminal arch of digital artery, which becomes island flap pattern with comparatively longer pedicle, and transposed the flap onto the bone exposure area. The remaining skin layer of the donor site