this fascia with over 100 fresh cadaver heads performed in Paris – Laboratoire d’Anatomie, Ecole de chirurgie du Fer À Moulin and over 900 fresh facelift dissections over 10 years in Santa Barbara – Keller Surgicenter. These massive anatomical and surgical dissections led to the observation of these new anatomical concepts regarding this fascial layer and its relationship with the surrounding structures of the midface: 1. This deep fascia is contiguous with the superficial layer of the deep temporal fascia and the parotid fascia 2. It inserts on the peristeal layer of the inferior orbital rim 3. It is a fibrofatty layer whose histological structure corresponds exactly to the superficial layer of the deep temporal fascia’s one 4. It covers the mimetic muscles of the infraorbital area 5. It separates the SubOrbicularisOculi Fat from the pre-periostal fat 6. It protects the zygomatic branch of the facial nerve and the zygomaticofacial nerve. New anatomical concepts have to be integrated in the anatomy of the midface and applied in the surgical procedures performed on this area to be able to obtain good results lowering the risk of facial nerve damage.

RESULTS: Mean tumor size was 54mm (5-90mm). One patient presented orbital and another one cranial invasion, four patients (44.4%) presented recurrences following previous surgery. The average treatment duration was 6.1 months (2 – 9 months). Total Response Rate was 100%. Complete Response was evidenced in five (55.6%) and Partial Response in four (44.4%) patients. No Progression was reported. Two patients with Partial Response and considerable tumor size reduction refused surgery: one died due to another disease and the other underwent non-surgical treatment. The other two had surgery with clear margins. The Disease Free Survival rate was 20.8 months (5 – 48 months). Grade I – II side effects were evidenced in 8 patients: muscle spasms in 6 (75%), alopecia in 5 (62.6%), and dysgeusia in 5 (62.6%) patients. Only one (11.1%) patient experienced Grade IV muscle spasms which led to treatment withdrawal.

CONCLUSIONS: Our study, which represents the largest series recorded to date by a Plastic Surgery Department in Latin America showed that Vismodegib achieved a consistent response in patients with locally advanced periorbital and orbital basal cell carcinoma reducing morbidity of surgical resection and avoiding exenteration. Prospective studies to assess neoadjuvant Vismodegib in these patients, with long-term follow-up, are needed.

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TRACK: RESEARCH/TECHNOLOGY

PAPER

Effects of Platelet-rich Plasma Infiltration to Donor Area on Harvested Fat Grafts

Presenter: Ufuk Durgun
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INTRODUCTION: Fat grafting is a frequently performed procedure in plastic surgery. There are numerous studies conducted with the goal of increasing the survival rate of an existing fat graft at the recipient area. In our research, we have discovered that stimulating the fat tissue at the donor area with biological auxiliary factors and putting it through the priming process prior to harvesting for the purpose of boosting the survival rate of the graft weren’t in the literature. In our study, the purpose was to reveal the changes caused by the infiltration of platelet-rich plasma (PRP) to the donor area as well as its effect on the survival rate of fat grafts in rats, using various parameters.

METHOD: In the study, a total of 30 Sprague-Dawley rats weighing between 300 and 350 grams were used, dividing them into random groups of 6, for a total of 4 groups. 6 rats were used for PRP preparation. The control group was administered saline solution and the study group was administered PRP. After the administration, half of the control and PRP groups were sacrificed in the 1st week by harvesting fat grafts from their left inguinal fat pads, The same procedure was repeated for then 2nd half in the 2nd week. The harvested fat graft samples were evaluated via histological (evaluation of the histological appearance of the fat tissues, inflammation status, fibrotic changes, health and number of vessels via light microscope examination and immunohistochemistry and biochemical analysis (Measurement of IL-1β, IL-6, TNF-α, EGF, VEGF, CK18-M30, TAS and TOS levels using ELISA kits). For statistical analysis, Shapiro-Wilk, Student t and Mann Whitney U tests were used in SPSS Windows Version 24.0 package program. A value of p<0.05 was considered statistically significant.

RESULTS: In our study, the levels of proinflammatory markers such as IL-1β, IL-6, TNF-α, were determined to be significantly lower in both the 1st and 2nd weeks in the PRP group compared to the control group (p<0.05). VEGF and EGF levels were determined to be higher both in the 1st and 2nd weeks in the PRP group compared to the control group (p<0.05). CK18-M30 levels were determined to be significantly lower in the PRP group compared to the control group both in the 1st and 2nd weeks (p<0.05). TOS values of the control group were determined to statistically be significantly higher than the PRP group in the 1st week (p=0.002).

CONCLUSION: In our study, as the results obtained with the utilized parameters revealed that the PRP group had fat cells that were more resistant to oxidative stress, impacted less by inflammation, had less apoptosis and higher neovascularization potential compared to the control group and as the values for the 1st week were even more dramatic for the 1st week has led us to believe that a delay period of 1 week would suffice. We’re of the opinion that the data revealed by our current study will grant a new perspective to fat grafting and pave the way for new studies on fat graft survival.

TRACK: BREAST
Exploring Infectious Complications following Breast Reconstruction Tissue Expander Placement in Penicillin-allergic Patients

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INTRODUCTION: In an effort to avoid anaphylaxis, penicillin-allergic patients are often given vancomycin or clindamycin as alternative perioperative antibiotics.1 In implant-based breast reconstruction patients, many of whom are at heightened risk for surgical site infections, it is prudent to evaluate the complication profile of those receiving alternative antibiotic coverage. Without additional risk factors for infection following breast reconstruction, the risk of infection is below 5%.2 However, seldom do studies consider patient allergies to penicillin as a risk factor. When given via the intravenous route, it takes clindamycin 45 minutes to reach peak serum concentrations whereas it takes cefazolin 15 minutes to reach peak serum concentration.3,4 We hypothesize that patients who experience penicillin allergies experience increased infection rates with different speciation compared to their penicillin nonallergic counterparts because current recommendations do not facilitate sufficient time for the prophylactic antibiotic to reach peak concentration and efficacy.

METHODS: This was a retrospective review of consecutive patients who underwent breast reconstruction with tissue expander placement between 1/1/2010 and 12/31/2018. Demographic data was collected, and the primary outcome...