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BACKGROUND: Giant Congenital Melanocytic Nevus (GCMN) is a proliferation of melanocytic cells present at time of birth with an expected diameter >20cm by the time of adulthood.1 GCMN has been associated with malignant melanoma, rhabdomyosarcomas and other tumors.1 Nevertheless, its resection in order to reduce the risk of malignancy is still controversial.2 Surgical excision is in most cases performed for aesthetic purposes, therefore, the need for techniques that minimize surgical sequelae.1 Coverage of the wound bed can be challenging, specially with nevi that involve more than 20% of total body surface area (TBSA). Serial extirpation after tissue expansion is the gold standard treatment for nevi located in the trunk, scalp and face. However, for lesions located in the buttocks or limbs skin grafts are the elective treatment, involving important aesthetic sequelae at donor site.3

We present our long-term results with autologous engineered skin (AES) for coverage after GCMN resection.

METHODS: We performed a retrospective review of the medical records of a series of 5 pediatric patients suffering from Giant Congenital Melanocytic Nevus, operated in our department. Nevus resection was performed in one or more surgical procedures depending on nevus extension. A maximum of 15%TBSA was removed on each procedure and the defect was then covered with artificial dermal matrix. A skin biopsy of an unaffected area was obtained from the patient and sent for culture to the Tissue Engineering Unit. After 3 weeks, which allowed for dermal matrix neovascularization and for keratinocytes expansion; AES was grafted over a well vascularized homogeneous wound bed.

RESULTS: The average take percentage per grafting procedure was 46%SCT (15 – 95%). the major cause for graft loss was wound bed infection in early stages. Average follow-up period was 11 years with a range of 2 – 14 years. Patient’s degree of satisfaction was evaluated with EQ-5D-Y health questionnaire, showing a health status evaluated between 95–100%. Results were evaluated with Modified Vancouver Scar Scale (MVSS) and Patient Observer Scar Assesment (POSAS). MVSS showed a total score of 6,25, being 14 the worst result. POSAS global evaluation was a 4,25, being 1 equal to normal skin, and 10 very different to normal skin.

CONCLUSION: GCMN management needs to be individualized. We can conclude that AES is a good surgical resource for coverage of defects after GCMN resection when tissue expansion might not be an option, avoiding or limiting donor sites and acting as a stable coverage with growth potential over time.

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What Are the Applicants Thinking? A Longitudinal Assessment of Integrated Plastic Surgery Program Attributes during the Interview Season

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PURPOSE: Integrated plastic surgery residency positions continue to grow at a soaring rate. From 2013 to 2017, the number of available positions rose from 116 to 159. Despite this increase, the caliber of applicants has remained competitive. While numerous publications highlight the attributes of a successful applicant, few look at program characteristics that appeals to applicants. Our study aims to elucidate program attributes are attractive to applicants at the beginning and end of their interview season, and how the importance of these attributes may change during the process.

METHODS: An ASPS endorsed survey was distributed to applicants applying for an integrated plastic surgery
position at the beginning of the 2017 interview season. Program attributes were individually rated from 1–9, 9 being most important and 1 being least important. A follow up survey was sent out after the interview season before match day to the same cohort to compare differences over time.

RESULTS: Out of 199 surveys, 76 were returned for both the initial and follow up survey. 49% of the applicants were female, 51% male. The most important factors to choosing a residency program in the beginning of interview season were perceived good fit with residents, good fit with faculty, strong program leadership, surgical case volume and fellowship placement. The least important factors were small program size, strong burn training, clinical rotations at a VA or free-standing children’s hospital and feedback from other current applicants. Comparing program characteristic scores before and after interview season, there was a statistically significant decrease in importance of both strong burn training (p=0.01) and strong cosmetic training (p=0.03). Furthermore, feedback from other current applicants had a significant increase in importance (p=0.04). Other attributes such as good fit with residents and faculty, strong program leadership, high surgical case volume and fellowship placement showed minimal change and maintained high scores throughout the study.

CONCLUSION: Some of the best and brightest medical students continue to apply for positions in integrated plastic surgery residencies. While this is fortuitous for programs and the specialty as a whole, we would be remiss not to explore what the applicants deem important in a training program. It is not surprising that fit with residents and faculty, strong leadership and high operative volume are core values for a successful match. However, it is interesting to see that applicants began to value feedback from fellow applicants more at the conclusion of the interview season. It was also insightful that the more attractive applicants who received 10+ interviews placed a higher value on larger programs as well as a strong microsurgery and hand experience. As we continue to evolve our training paradigm, our understanding of our applicants should be kept current to ensure we continue to attract the best candidates available.

Epidural Nerve Blocks Increase Intraoperative Vasopressor Consumption and Delay Surgical Start Time Compared to General Anesthesia Alone in DIEP Free Flap Breast Reconstruction

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**PURPOSE:** The use of epidural anesthesia (EA) as an adjunct to general anesthesia (GA) has been widely used in abdominal and thoracic surgeries, and recently shown efficacy in autologous breast reconstruction.1-3 While the utility of reducing postoperative narcotic consumption, nausea, and length-of-stay in hospital cannot be understated, concerns remain as to the whether these blocks reduce operating room efficiency by delaying case start time and whether block-induced hypotension is associated with increased intraoperative vasopressor requirements. The purpose of this study was to examine the effectiveness of epidural blocks in patients undergoing deep inferior epigastric perforator (DIEP) flap breast reconstruction.

**METHODS:** A retrospective analysis from 2015–2017 of patients who underwent DIEP flap reconstruction under GA, with and without EA and no supplementary local anesthetic. Electronic records were analyzed for patient demographics, intraoperative data, and postoperative outcomes. Primary outcome was 48-hour narcotic usage. Secondary outcomes were intraoperative vasopressor consumption, surgical delay time, and safety.

**RESULTS:** Fifty-one patients underwent DIEP reconstruction, 40(78%) underwent EA in addition to GA, and 11(22%) underwent GA alone. There was a significant delay in OR start time in the EA/GA group (67min vs 43min, p=0.001.) Patients in the EA/GA group also had a statistically significant increase in vasopressor use (n=33 vs n=5, p=0.021).

**CONCLUSION:** Epidural blocks improve average postoperative pain, while increasing intraoperative vasopressor use and delaying the start time of the case. The benefits of improved pain control must continue to be weighed against the potential for increased surgical complications, as well as increased costs to the health care system.

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