and class III obesity. Mean follow-up was 17 months. No significant difference was found in demographics studied except BMI. No significant difference was found in flap complications among all groups, including super obese women. However, patients with BMI > 35 were associated with higher rates of reoperation for surgical correction compared to patients with BMI <35 (11.1% vs. 1.5%; p = 0.045).

CONCLUSION: The surgical outcomes in patients with class II and III obesity were similar to those with a normal or overweight BMI. We modified our surgical technique in order to optimize our outcomes in the morbidly obese patient population. Based upon these preliminary findings, we were unable to determine a prohibitive BMI for performing microsurgical breast reconstruction.

24.

MELANOMA: HOW MUCH DOES TIME TO TREATMENT MATTER?

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PURPOSE: Melanoma is a worldwide problem that continues to rise. The recommended timing for melanoma treatment is within 3–6 weeks, but no “ideal” time has been determined. We aim to examine survival based on time to definitive melanoma surgery, and factors affecting overall survival.

METHODS: The National Cancer Database (NCDB) was used to identify patients with cutaneous melanoma who were stage I-III, had overall survival and time to definitive surgery that was greater than 0 days but less than 120 (n=151,298). T-test and Chi-square were used to compare variables, and multivariate analysis was performed using Cox proportional hazards model.

RESULTS: Patients with longer times to treat tended to be male, use Medicare, have melanoma on the head and neck and have a higher melanoma stage. Younger age at diagnosis, lack of comorbidities, and lower melanoma stage favorably affected survival. After multivariate adjustment, there was no difference between patients treated in 1–30 days, 31–60 (HR 1.02, 95%CI 0.99–1.04) and 61–90(1.03, 95%CI 0.99–1.08). Patients who were treated between 91–120 days (HR 1.09, 95%CI 1.01–1.18) are 9% more likely to die compared to patients who were treated within 30 days.

CONCLUSION: Currently, there is no evidence to support that time to treatment less than 90 days has an impact on melanoma survival. Most likely the impact of time to detection and biopsy greatly outweigh the impact of time to surgery in the case of melanoma. When caring for these patients, further emphasis should be placed on occurrences prior to melanoma biopsy.

25.

PEDIATRIC JUXTA-EPIPHYSEAL PHALANGEAL FRACTURES ARE DISTINCT FROM SALTER-HARRIS FRACTURES AND MORE FREQUENTLY NEED OPERATIVE FIXATION

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PURPOSE: Salter-Harris type 2 (SH2) fractures are the most common pediatric phalangeal fracture. A juxta-epiphyseal (JE) fracture is a distinct fracture pattern that, although similar in radiographic appearance, occurs 1–2 mm distal to the growth plate involving the metaphysis only. Although the radiographic differences are subtle, we believe there are important differences in behavior and management of these two fractures.

METHODS: An IRB-approved retrospective chart review was conducted of patients presenting to our tertiary care center. 97 patients with either SH2 or JE finger fractures were identified and charts analyzed.

RESULTS: SH2 fractures were more common than JE fractures (85% vs. 15%). There was no significant difference between the two fracture types in patient’s age, gender, or mechanism of injury. JE fractures were radiographically more angulated on presentation than SH2 fractures (mean angulation 18.29 vs. 11.32 degrees, p=0.02). JE fractures required significantly more operative fixation by closed reduction and percutaneous pinning compared to SH2 fractures.
fractures (42.9% vs. 10.8%, p=0.002). There was no difference in outcome obtained between the two groups.

CONCLUSION: Despite their similarities in clinical and radiographic presentation, pediatric JE phalangeal fractures are a distinct entity from SH2 fractures. Presenting with significantly more radiographic angulation and clinical instability, JE fractures more frequently required operative fixation compared to SH2 fractures. This distinction is important when determining the treatment strategy employed (operative fixation versus nonoperative management) as well as potential length and degree of immobilization/stabilization for nonoperative management to increase the success of treatment.

26.

BIOFILM MANAGEMENT: ATTACK THE MATRIX WITH ULTRASOUND

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PURPOSE: Implant infections are highly morbid and costly. Staph species are the primary agents. Despite extensive efforts, satisfactory treatment is elusive, largely due to the persistence of biofilm. Ultrasound is a known biofilm disrupter. A new low frequency direct contact ultrasound (LFDCU) device is available for wound debridement. This study is meant to determine if the energy levels available in this instrument are effective in dispersing biofilm.

METHODS: Staph. epidermidis biofilm was grown on one centimeter diameter metallic discs of both medical grade stainless steel and titanium. The discs were treated in wells with the LFDCU for ten seconds at a three different power levels. The discs were stained with crystal violet and effluent was cultured. The study was repeated with hypochlorous acid as the device irrigant. Controls were performed.

RESULTS: Biofilm was completely removed at all power levels. With saline irrigant, the effluent had viable planktonic bacteria. With hypochlorous acid irrigant, the effluent was sterile.

CONCLUSION: The new LFDCU completely disperses biofilm from metallic discs at all energy levels. This suggests that biofilm can potentially be cleared from infected metallic implants even at low energy levels. In such cases, hypochlorous acid device irrigation can remove any loosened bacteria.

27.

THE USE OF LIPOSOMAL BUPIVACAINE IN PATIENTS UNDERGOING ABDOMINALLY-BASED AUTOLOGOUS AND IMPLANT-BASED BREAST RECONSTRUCTION

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PURPOSE: Federal mandates to reduce opioid use have placed analgesia management in the national conversation. Liposomal bupivacaine (LB) is an effective analgesic in the immediate postoperative period. This study explores the effect of LB on postoperative narcotic use, length of stay (LOS), and patient satisfaction in women undergoing autologous and implant-based breast reconstruction.

METHODS: In our previous study, patients undergoing autologous (n=37) and implant-based reconstruction (n=20) who were injected with LB demonstrated significantly decreased total and oral narcotic use compared to controls. We subsequently changed our post-operative protocol and examined these changes over a 90-day implementation period. Patients undergoing abdominally-based autologous reconstruction (n=9) were transitioned to oral narcotics on post-operative day (POD) 2 rather than POD 3. Patient controlled analgesia (PCA) was eliminated from post-operative protocol in patients undergoing implant-based reconstruction (n=16). These patients were discharged on POD 1