tended to have higher ASA classifications (p<0.0001). The MSC patients also had lower operation times (p<0.0001) and longer hospital stays (p<0.0001). Additionally, MSC patients had higher rates of unexpected reoperation (p=0.019) and greater postoperative complication rates (p<0.0001). Because age was noted to be significantly different between the SSC and MSC groups, age-matching was then performed between the two groups to control for age. Once age was controlled, ASA class was no longer significantly different between groups. However, bleeding was still significantly different (p<0.0001), and operative time (p<0.0001) and hospital stay (p<0.0001) were still longer in the MSC group. However, the occurrence of postoperative complications as a whole was no longer significantly different between groups (p=0.187), and neither was the reoperation rate (p=0.509).

CONCLUSION: Multi-suture craniosynostosis patients tended to have shorter operative times and longer hospital stays, which was a significant difference even after age-matching. Nevertheless, age, more than type of craniosynostosis, was the most critical predictor of postoperative complication in single-suture versus multiple suture craniosynostosis.

Is Ketorolac Safe in Cranial Vault Remodeling Surgery?

Presenter: Fatma Betul Tuncer, MD

Co-Authors: Ananth Murthy, MD; Niyant Patel, MD

Affiliation: Akron Children’s Hospital, Akron, OH

BACKGROUND: Ketorolac is a nonsteroidal anti-inflammatory drug (NSAID), which has been shown to effectively control postoperative pain rather than narcotics alone in different studies. Many surgeons are reluctant to use ketorolac following major surgeries because of a theoretical increased risk of bleeding associated with NSAIDs. Our goal in this study is to assess the risk of postoperative bleeding associated with ketorolac use after cranial vault remodeling (CVR) surgery and to investigate its safety profile and possible secondary benefits.

METHODS: All patients undergoing CVR for single/multi suture synostosis at a single institution over 56 months were retrospectively reviewed. Patients undergoing limited cranietomies were excluded. A total of 74 consecutive patients included in the study were divided into two groups: 43 in ketorolac and 31 in the control group. The primary outcome was the risk of bleeding associated with ketorolac use in this population. Secondary outcomes were other side effects of ketorolac such as intracranial hemorrhage, gastrointestinal bleeding or renal insufficiency. Primary outcome was investigated by intraoperative and postoperative transfusion rate and change in hemoglobin (Hb) over the postoperative period. Total analgesic use, emesis and oral intake were also analyzed separately for each patient. Discharge Hb was expressed as a percentage of the first postoperative hemoglobin (postop Hb). Patient demographics and perioperative details were also analyzed.

RESULTS: Groups (ketorolac vs control, respectively) showed no statistically significant differences in terms of age (1.1 vs 0.9, p=0.21), operative time (320 min vs 319 min, p=0.9) or type of suture synostosis (simple vs complex, 13/30 vs 8/23, p=0.6). Only significant difference between the groups was the higher ratio of posterior CVR to anterior CVR in ketorolac group (24/19 vs 7/24, p<0.01). Postoperative and intraoperative transfusion rates were similar between the groups (1/43 vs 2/31 and 7/43 vs 9/31, respectively). Mean discharge hemoglobin values in both groups were lower than the first postop Hb (9.2 vs 8.2 mg/dL in ketorolac group, 9.7 vs 9.1 mg/dL in control group). Ketorolac group showed a similar decrease in Hb to the control group (%10 vs %8.1, p=0.39). There was no incidence of bloody emesis suggesting gastrointestinal hemorrhage, no focal neurological deficits which would otherwise require imaging studies for intracranial hemorrhage, or no renal insufficiency. Patients in ketorolac group required less opioid for pain management (p=0.02) and had a shorter length of stay in the hospital (2.1 vs 2.6 days, p=0.04). Oral intake and number of emesis episodes were similar in between the groups.

CONCLUSION: This study provides evidence for safe administration of ketorolac in pediatric patients following major cranial vault remodeling surgery with secondary benefits such as less opioid consumption and shorter hospitalization.
SUNDAY, SEPTEMBER 30, 2018

AESTHETIC SESSION 1

Can It be Safe and Beautiful?
A Retrospective Review of Mastopexy with Concurrent Breast Augmentation

Presenter: Jourdain D. Artz, MD
Co-Authors: Shukan P. Patel, MS; Radbeh Torabi, MD; Steven Clark, MD; Oren Tessler, MD, MBA; Michael D. Moses, MD, FACS
Affiliation: Louisiana State University, New Orleans, LA

BACKGROUND: Debate concerning the safety of performing mastopexy concurrently with breast augmentation still exists with concerns of breast tissue neurovascular compromise and overall high complications rates. We describe a single stage procedure using a “Tailor-Tack” technique that consistently achieves an aesthetically pleasing breast while preserving tissue viability.

METHODS: This is a retrospective chart review of all consecutive breast augmentations performed concurrently with mastopexy by the senior authors (M.M. and O.T.), from 2006 to 2017 using the current “Tailor-Tack” technique. We report patient demographics, breast implant placement, implant type, shape, and size, duration of follow-up, and complications. Complications reviewed include recurrent breast ptosis, poor shape of the nipple areolar complex, hypertrophic scarring, implant rupture, capsular contracture, nipple tissue loss, breast skin loss, decreased nipple sensation, implant infections or extrusion, reoperation, and scar revisions. In brief, the key principles of the technique included first placing the breast implant in the submuscular space, then performing tailor tacking of the skin in a modified Wise pattern to approximate the skin resection for the mastopexy. The patient was then placed in the sitting position and final adjustments were made.

RESULTS: Fifty-six patients underwent augmentation with the “Tailor-Tack” mastopexy. The average age of the studied patients was 41.2 years. The average follow-up time period was 2.1 years (+/- 8.9 months). Fifty-four patients (96.4%) had implants placed through a periareolar incision, two patients (3.6%) had implants placed through infra-mammary incisions. All implants were placed in a dual plane. Fifty-two patients (92.9%) received silicone implants and four patients (7.1%) received saline implants. Patient preference determined implant choice. All implants except five were textured. Average implant size was 277 ml (range 120–800).

Ten patients had complications (17.9%). Complications included hypertrophic scarring in 5 (8.9%) patients, 4 (7.1%) poor NAC shape, 3 (5.4%) implant ruptures, 3 (5.4%) capsular contracture, and 2 (3.6%) with recurrent ptosis. There was no reported nipple tissue loss, breast skin loss, decreased nipple sensation, or implant infections or extrusion. Six patients (10.7%) required return trips to the operating room for revisions and one patient (1.8%) had a nipple areolar complex scar revised in the office yielding a 12.5% surgical revision rate.

CONCLUSION: Mastopexy can safely be performed concurrently with breast augmentation. In our eleven-year review, there were no catastrophic complications such as skin loss, nipple loss, implant extrusion, or infection. The complications that occurred were common complications known to occur with mastopexy alone and/or breast augmentation alone and occurred at rates comparable to or less than the national averages for those procedures when they are performed independently. The paramount principle for the success of this technique is to adjust breast volume initially and then perform an intra-operatively planned skin resection to fit the new breast volume.

Amount of Blood Drained after Pre-Pectoral Breast Implants. Analysis of a Cohort of 30 Patients Submitted to Primary Breast Augmentation with Silicone Gel Implants

Presenter: Jaime Anger, MD
Co-Author: Nelson Letizio, MD
Affiliation: Hospital Israelita Albert Einstein, São Paulo

GOALS/PURPOSE: The use of tubular drains in silicone gel breast augmentation remains a source of debate up to the risk of hematoma and capsular contracture as