LSU Health
NEW ORLEANS

Department of Orthopaedic Surgery

19th Annual Robert D. D'Ambrosia Lectureship & Research Day

Faculty, Staff, & Residents 2019

Saturday, June 25, 2022

LSUHSC School of Medicine, Lion's Building

2020 Gravier St., 6th Floor

Join Zoom Meeting :

The Lectureship and Research is named in honor of:

Robert D. D'Ambrosia, M.D.

Dr. D'Ambrosia's service to the LSU department Departmnet of Orthopaedic Surgery has spanned over 30 years. While Chair of the Department, he trained and mentored over 100 LSU graduates. His contributions to the LSU program is long laasting and lectureship and chair has been established in his honor. We are very grateful for Dr. D's contributions to LSU and to the department. He exemplifies leadership and humanity, and we are proud to honor his legacy with our eighteenth year of Lectureship Series.

ROBERT D'AMBROSIA LECTURESHIP & RESEARCH DAY AGENDA

SATURDAY, JUNE 25, 2022
AGENDA

8:00am- 8:30am **BREAKFAST**

8:30am - 8:45am **Introduction**

8:45am – 8:55am* **Corinne Cloud, MD**
Advantages of a Dedicated Orthopaedic Trauma Room (DOTOR) for diaphysial femur fractures

9:00am - 9:10am* **Ryan Roubion, MD**
Cartilage Wear and its Association with Meniscus Tears During Knee Arthroscopy

9:15am – 9:25am* **Peter D'Amore, MD**
Rule Breakers: Upper Instrumented Level Selection and Shoulder Balance in Adolescent Idiopathic Scoliosis

9:30am – 9:40am* **Cristina Graphia, MD**
Delayed fixation of distal radius fractures: demographics, fellowship training association, and consequential radiographic outcomes

9:45am – 10:15am **Jessica C. Rivera, MD, PhD**
Advances in Distraction Osteogenesis

10:15am – 10:30am **BREAK**

10:30am - 11:10am** **Rising L4 Presentations**

Stefan Sarkovich
Attenuating Collagen Deposition by Synoviocytes from Osteoarthritic Patients with Synovial Fibrosis.

Katelynn Donnelly
Influence of Disparities and Risk Factors on Periprosthetic Joint Injection Rates Following Joint Arthroplasties

Gregory Benes

Differences in Total Hip Arthroplasty Utilization for Femoral Neck Fracture vs. Osteoarthritis.

Jeffrey Mauras

Does Changing Adductor Canal Block (ACB) with Ropivacaine to Liposomal Bupivacaine Improve Patient-reported Outcomes and Reduce Opioid Prescribing After Total Knee Arthroplasty?

11:20pm - 12:05pm **Guest Speaker: L. Scott Levin, MD, FACS**

Hand and Reconstructive Surgery, Philadelphia, PA

Discussion Topic: Orthoplastic Extremity Reconstruction

On the Hot Seat

CLOSING REMARKS

***Denotes 5 minutes of Q & A**

Poster Presentations:

Ankur Khanna (L3)

Total Joint Arthroplasty Complication and Reoperation Rates Vary by Region and Season

Jose A Cruz (L3)

Myofiber Switching and Fibrosis of the Articularis Genu Relative to Osteoarthritic Knee Disuse

Connor Maginnis (L3)

Gender Diversity in Orthopaedic Sports Medicine Fellowships

Andrew Longanecker (L3)

Human synovial cells generate cartilage in response to Bone Morphogenetic Protein 9

Peter Issa (L2)

Preoperative Laboratory Predictors of Post-Operative Complication in Total Joint Surgery

Guest Speaker - L. Scott Levin, MD

Discussion Topic: Orthoplastic Extremity Reconstruction

L. Scott Levin, MD, FACS, is the Paul B. Magnuson Professor of Bone and Joint Surgery (with tenure), Chair of the Department of Orthopaedic Surgery at the University of Pennsylvania School of Medicine, and Professor of Surgery (Plastic Surgery). He is also the Medical Director of the Penn Musculoskeletal and Rheumatology Service Line. He also serves as Vice President and Associate Dean for Resource Development at Penn Medicine. Dr. Levin is Board-certified in Orthopaedic Surgery and has a Certificate of added Qualification in hand surgery. In addition, he is Board-certified in Plastic Surgery.

As an accomplished clinician, his expertise focuses on surgery of the hand and upper extremity, reconstructive microsurgical techniques for extremity reconstruction and limb salvage. His research interests focus predominantly on extremity soft tissue reconstruction and vascularized composite allotransplantation. In 2022 he was awarded the Kappa Delta Elizabeth Winston Lanier Award from the American Academy of Orthopedic Surgery. This award is the highest honor awarded for achievement in Orthopedic research.

Working collaboratively with colleagues across medical disciplines, Dr. Levin established and was the Director of Duke's Human Tissue Laboratory and also directed the Anatomic Gifts Program. He also established a Human Tissue Laboratory at Penn which opened in May 2011.

Laboratory acts as a teaching tool and a research facility benefiting students, residents and CME participants. Dr. Levin heads the Vascularized Composite Allotransplantation (VCA) Program at Penn and directed the teams that performed bilateral hand and arm transplants, one in September 2011 and two international patients, one in August 2016 and then February 2019. In 2015, as Director of the Pediatric Hand Transplantation Program of Children's Hospital of Philadelphia, he led the team that performed the world's first bilateral hand transplant in a child.

As a committed educator, Dr. Levin has been recognized for his commitment to teaching with the 2007 Master Clinician/Teacher Award for his accomplishments in both clinical care and education at Duke and in 2014 was awarded the I.S. Ravdin Master Clinician Award, a Penn Medicine Award of Excellence at the Perelman School of Medicine at the University of Pennsylvania . In 2015, he was named Individual Innovator of the Year at the Philadelphia Business Journal Healthcare Innovator Awards. He was inducted in 2018 into the Academy of Master Surgeon Educators of the American College of Surgeons.

Widely published with more than 410 peer-reviewed journal articles, 93 book chapters and 11 books, Dr. Levin also actively participates in senior leadership activities of many international and national professional societies and associations including serving as Board of Regents Chair (2020-2021) and Orthopaedic Regent of the American College of Surgeons, Past President of the American Society for Surgery of the Hand, Past Chair of the VCA Transplantation Committee of the United Network for Organ Sharing, President of the World Society of Reconstructive Microsurgery, President of the American Society for Reconstructive Microsurgery, member-at-large of the American Society of Plastic and Reconstructive Surgeons, President of the American Society for Reconstructive Transplantation and member of the Board of Directors of the American Board of Plastic Surgery. In addition, Dr. Levin has been honored as a North American Traveling Fellow, the American British Canadian Traveling Fellow by the American Orthopaedic Association and the Sterling Bunnell Traveling Fellow by the American Society for Surgery of the Hand. In 2015, he was awarded the Andrew J. Weiland Medal by the American Society for Surgery of the Hand. He has served as the Orthopaedic Trauma Association's Landstuhl Scholar, caring for our war-injured soldiers in Germany.

Dr. Levin is responsible for developing the field of "Orthoplastic Surgery" and currently is Editor-in-Chief of the journal Orthoplastic Surgery (Elsevier).

Corinne Cloud, MD

Advantages of a Dedicated Orthopaedic Trauma Room (DOTOR) for diaphysial femur fractures

Objective: Examine the impact of instituting a dedicated orthopaedic trauma operating room (DOTOR) at a Level I trauma center on diaphyseal femur fracture management.

Design: Retrospective cohort study.

Setting: Regional, university-based Level I trauma center.

Patients: Trauma patients 18 to 65 years of age presenting between October 2016 and December 2018 (approximately 1 year before and after implementation of the DOTOR) who underwent surgery for diaphyseal femur fractures. 128 patients met eligibility criteria for inclusion: 60 were treated before and 68 after implementation of the DOTOR.

Intervention: Implementation of a DOTOR in October 2017.

Main Outcome Measures: Percent of external fixation versus intramedullary nailing, time from ED to definitive fixation, duration of surgery, and hospital length of stay (LOS).

Results: The only significant difference in patient demographics between the before and after groups was mechanism of injury ($p=0.003$). Percentage of external fixators as an initial procedure decreased from 15% to 2.9% ($p=0.024$). Time to definitive fixation with intramedullary nail

decreased from 1083 minutes to 659 minutes (p=0.002). There was no significant change in median operative time of intramedullary nailing (p=0.573). While not statistically significant, hospital LOS decreased from 7 days to 5.5 days after implementation (p=0.158). Cost analysis revealed annual cost savings of over $261,678 for diaphyseal femur fractures alone by implementing a DOTOR.

Conclusions: For diaphyseal femur fractures, instituting a DOTOR at a Level I trauma center reduced the percent of patients requiring two-stage fixation, reduced the time to definitive fixation, and yielded cost savings.

Ryan Roubion, MD

Cartilage Wear Patterns Within the Knee Found During Knee Arthroscopy for Meniscus Tears

Background: Cartilage wear on the various surfaces of the knee seen during arthroscopic treatment of meniscus tears has not been reported.

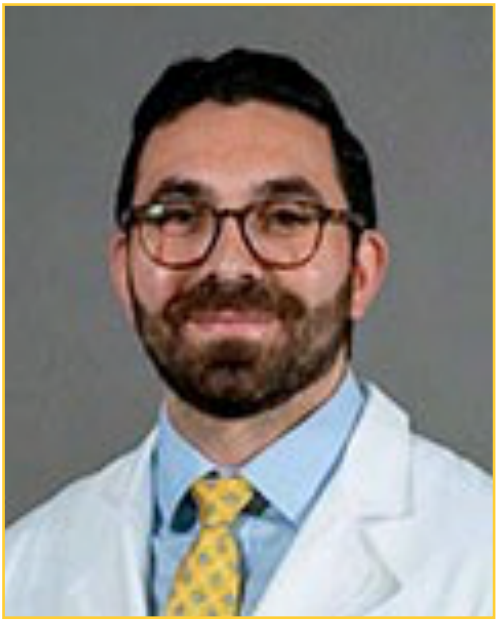
Hypothesis: High grade cartilage wear on the tibia as defined at OAGS ≥ III will be seen more often with lateral meniscus tears (LMTs) as compared to medial meniscus tears (MMTs), but will be highest with combined medial and lateral meniscus tears (MLMTs). High grade cartilage wear on the femur will be seen more often with LMTs as compared to MMTs, but will be highest with combined MLMTs. High grade cartilage wear in the patellofemoral joint will be seen more often with MMTs compared to LMTs, but will be highest with combined MLMTs.

Methods: A retrospective chart review analyzed intraoperative cartilage wear patterns in the knee at the time of arthroscopic surgery for meniscal pathology. Arthroscopic outerbridge grading system (OAGS) scores were collected for each surface of the knee within the medial, lateral and patellofemoral compartments. The presence of medial, lateral, or combined medial and lateral meniscus tears was also collected. Percentage of cases with high grade cartilage wear defined by OAGS scores of ≥ III on each surface of the knee were reported with respect to the presence of medial, lateral, and combined medial and lateral meniscus tears. Patient age, body mass index (BMI), preoperative Kellgren Lawrence (KL) score, sex, race, insurance status, and laterality were all recorded.

Results: 210 patients were included in the final analysis. Within the medial compartment, high grade cartilage wear was observed in most of the patients on both the femoral and tibial side with MMTs, LMTs, and combined MLMTs (61.0% - 95.2%). The medial tibia was most often affected with high grade wear (92.5% and 95.2%) in conjunction with MMTs and MLMTs compared to LMTs (73.2%), $p = 0.002$. The medial femur exhibited a similar pattern of high grade wear (82.1% and 81.0%) with MMTs and MLMTs compared to LMTs (61.0%), $p = 0.022$. In the lateral compartment, most patients exhibited OAGS ≥ III on the tibia in all meniscus tear locations (75.6% - 90.5%), but a minority of patients exhibited high grade cartilage wear on the femoral side (24.5% - 49.2%). No difference was found when comparing tibial sided wear in the lateral compartment with respect to MMTs, LMTs, or MLMTs ($p = 0.13$). Femoral sided wear in the lateral compartment was found most often (49.2%) in combined MLMTs, compared to LMTs (39.0%) and MMTs (24.5%), $p = 0.005$. The majority of knees had OAGS ≥ III on both the patella and trochlea in all meniscus tear locations (61.0% - 92.1%). The patella was more often affected with high grade wear (92.1%) with combined MLMTs compared to MMTs (82.1%) and LMTs (68.3%), $p = 0.013$. No statistical difference was found with trochlear wear with respect to tear location.

Conclusion: At the time of arthroscopy for meniscus tears, both medial compartment joint surfaces were often affected with high grade cartilage wear despite tear location. In the lateral compartment, the tibia was often associated with high grade cartilage wear despite tear location, while the femur was often less affected by high grade wear. The majority of patients exhibited high grade cartilage wear in the patellofemoral joint on both joint surfaces with all meniscus tear locations.

Peter D'Amore, MD



Rule Breakers: Upper Instrumented Level Selection and Shoulder Balance in Adolescent Idiopathic Scoliosis

Background: Current upper instrumented vertebrae (UIV) selection guidelines in surgical treatment of adolescent idiopathic scoliosis (AIS) are based on pre-operative relative shoulder height and are a main determinant of post-surgical shoulder balance. Improved post-surgical shoulder balance in AIS patients is strongly associated with improved satisfaction and self-image. We sought to compare post-operative shoulder balance at 2-year follow up based on UIV selection adherence or deviation from current fusion level selection guidelines, i.e., ruler followers (RF) and rule breakers (RB).

Methods: A retrospective analysis was performed on AIS patients who underwent PSF between 2015 and 2017 at a tertiary academic center with minimum of strict 2-year radiographic follow up. Patients with Lenke type 5 curves were excluded. Radiographic measurements of shoulder balance included first rib angle (FRA), T1 tilt, coracoid process height difference (CPH), and clavicle angle (CA) and were documented at pre-op, post-op, 6 months, 1 year, and 2-year time points. Strict shoulder balance was defined as CPH <1 cm. Post-operative outcomes were compared between groups using mixed models adjusting for pre-operative values and including surgeon as a random effect.

Results: A total of 92 patients met strict inclusion criteria. Age, body mass index, gender, rod type, hook utilization, and Lenke distribution were not significantly different between groups. Pre-operative T1 tilt , FRA and CPH were similar between RB and RF groups ($p>0.05$). UIV selection differed between groups ($p<0.0001$). Overall post-surgical outcomes numerically favored RF in T1 tilt (4.5 vs. 5.1°, $p=0.309$), FRA (3.4 vs. 4.3°, $p=0.144$), CA (2.4 vs. 2.8°, $p=0.152$) and CPH (10.3 vs 11.3 mm, $p=0.386$). However, there was no difference determined between RF vs. RB in T1 tilt (4.3 vs. 5.2°, $p=0.198$), FRA (3.2 vs. 4.2°, $p=0.059$), CA (2.3 vs. 2.2°, $p=0.764$), and CPH (8.6 vs. 8.1 mm, $p=0.733$) at

2-year follow up. Shoulder balance (defined as CPH was <1cm) was achieved in 60% of RF and 67.4% of RB at 2 years post-operatively (p=0.163).

Conclusions: Adherence to current UIV selection guidelines did not predict better shoulder balance in this cohort. Although rule breakers had worse shoulder balance on first erect radiographs, outcomes were similar at two-year follow up. UIV selection rule breakers had similar shoulder balance compared to rule followers at two-year follow up. The results of this study suggest that current UIV selection guidelines should be revisited and validated to best optimize final post-operative shoulder balance.

Cristina Graphia, MD

Delayed fixation of distal radius fractures: demographics, fellowship training association, and consequential radiographic outcomes

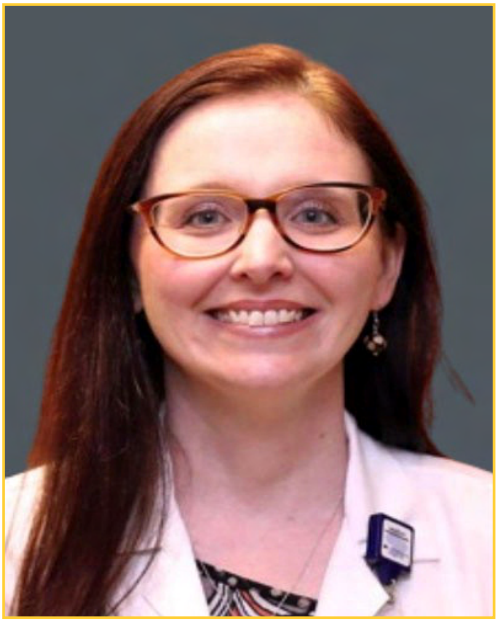
Background: Distal radius fractures are the most common upper extremity injury. Patients referred to safety-net tertiary facilities following a fracture may experience significant delays in treatment due to financial and language barriers as well as poor access to care at outlying community hospitals. This delay in treatment can affect postoperative functional outcomes and complication rates due to failure to restore anatomic alignment. The purpose of this multicenter study is to evaluate the impact of delayed treatment on radiographic alignment following distal radius fracture fixation.

Methods: Patients with a distal radius fracture treated surgically at two hospital systems during a two year period were identified. Measures included time from injury to surgery, demographic information, fracture classification, attending surgeon subspecialty, and radiographic parameters. The effect of surgery delay on radiographic outcomes was assessed at 11 and 21 days out from injury.

Results: One-hundred and eighty-three patients met study inclusion criteria. Medicaid and indigent patients were more likely to experience a delay in surgical treatment. Delayed treatment of 11 days or more was associated with worse radial height and inclination on postoperative radiographic imaging. Patients who underwent treatment by a surgeon who was not hand fellowship trained had worse postoperative radial inclination on postoperative radiographs.

Conclusion: Medicaid and indigent patients are more likely to have delayed surgery. Delayed surgery $\geq$11 days negatively affects postoperative radiographic outcomes in the treatment of distal radius fractures. Distal radius fractures $\geq$21 days out from injury may benefit from treatment by a hand fellowship trained surgeon.

Dr. Jessica Rivera, MD, PhD



Topic: "Advances in Distraction Osteogenesis"

Dr. Jessica Rivera has been with LSU Orthopaedics for just over two years. She attended medical school at the University of Tennessee Health Science Center which was followed by orthopaedic surgery residency at Brooke Army Medical Center. While in San Antonio on active duty she completed her PhD in Translational Science. Following military service, Dr. Rivera completed a limb lengthening and deformity reconstruction fellowship at Rubin Institute for Advanced Orthopaedics.

Her research and clinical interests include distraction osteogenesis, deformity correction, osteomyelitis, and congenital limb deficiency. At today's event she will be discussing the history and recent advances in limb lengthening.

Stefan Sarkovich

Attenuating Collagen Deposition by Synoviocytes from Osteoarthritic Patients with Synovial Fibrosis.

Background: Synovial fibrosis (SFb) presents heterogeneously across knee osteoarthritis (KOA) patients and is fundamentally characterized by aberrant collagen (COL1) fibril deposition. Severe SFb contributes to functional limitations and is a major component of arthrofibrosis complication after total knee arthroplasty (TKA). Minoxidil (MXD) inhibits lysyl hydroxylase 2b (LH2b), which catalyzes pyridinoline (Pyd) crosslinks that aid in COL1 fibril strengthening and resistance to protease degradation. By supplementing cultures of primary fibroblastic synovial cells (FSCs) derived from a local KOA patient group, this study tests if targeted administration of MXD could help compromise fibrous deposits to attenuate SFb and enhance peri-articular soft tissue rehabilitation strategies.

Methods: FSCs from KOA patients classified with high and low SFb, and naïve human fibroblast-like synoviocytes (HFLS) challenged with 4ng/mL of recombinant TGFβ-1 were treated with 0.5mM MXD for 8 days. COL1 and Pyd expression were quantified from RNA and protein extracts by QPCR and immunoassays, respectively. Data were compared using ANOVA.

Results: COL1 and Pyd content decreased by 33% and 31%, respectively, in KOA patient FSC cultures supplemented with 0.5 mM MXD compared to untreated controls. COL1 deposition decreased by 28% in HFLS co-incubated with TGFβ-1 and MXD relative to cultures stimulated with TGFβ-1 alone.

Discussion and Conclusion: These data suggest that MXD exerts an anti-fibrotic effect on KOA FSCs consistent with published findings on similarly treated clubfoot fibroblasts. Future studies will

employ this platform to test novel anti-fibrotics for intra-articular and individualized peri-operative delivery to supplement rehabilitation strategies that will enhance the success of TKA on improving functional recovery.

Katelyn Donnelly

Rule Breakers: Upper Instrumented Level Selection and Shoulder Balance in Adolescent Idiopathic Scoliosis

Background: Periprosthetic joint infections (PJIs) are severe complications of arthroplasties that can lead to poor health outcomes for patients. Identification of any risk factors before and during a total joint arthroplasty (TJA) by the surgical team is imperative for the prevention of PJIs. Risk factors for PJIs documented in literature include patient demographics and comorbidities such as age, gender, obesity, rheumatoid arthritis, and diabetes. Still, there is inconsistent data in the current literature on the level of impact of other potential risk factors, such as alcohol use and liver disease. Furthermore, social determinants of health are frequently unaccounted for in current research analyzing PJI development. This study aims to analyze the current data provided by REACHnet database to analyze risk factors for PJIs following total hip and knee arthroplasties (THA and TKA, respectively). Additionally, it aims to highlight possible disparities in PJI prevalence due to patient demographics.

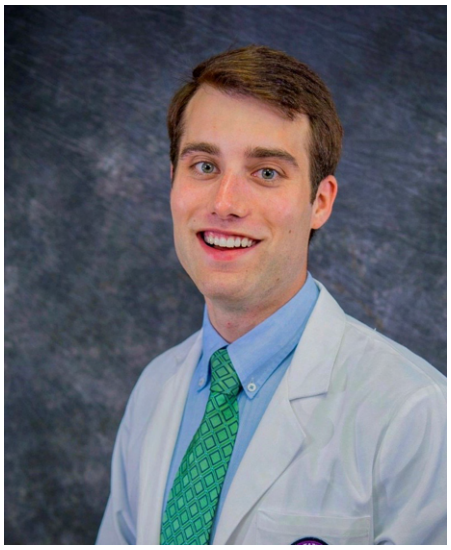
Methods: For this retrospective cohort, data was abstracted from Research Action for Health Network (REACHnet) for patients who received a primary THA or TKA from 2014-2019. Patients were excluded if the procedure was a revision THA or TKA, if the patient had a PJI code before surgery, or if the patient had a fracture code within 30 days prior to the procedure. Further exclusions were for patients without recorded BMI, race, insurance status, or follow-up within one year, as well as patients with free pay insurance and/or hospital stay over three days. This resulted in 15,979 patients who underwent an elective primary THA or TKA. Diagnostic codes for PJIs were used to determine rates of PJIs for each independent variable group. Patient data and demographic information collected included race, ethnicity, alcohol use, smoking, insurance, BMI, age, gender, length of stay, procedure year, liver disease, avascular necrosis, and Charlson Comorbidity Index (CCI). Counts, percentages, means, standard deviations, t-tests, and multivariable logistic regression were then utilized for statistical analysis.

Results: Collectively, 1.8% of all TJA recipients had a PJI within 1 year of surgery. Factors that increased rate of PJI after TJA included alcohol use (aOR = 2.4, 95% CI = 1.47-3.92), BMI over 40 (aOR = 1.45, 95%

CI = 1.1-10.91), male gender (aOR = 1.56, 95% CI = 1.22-1.98), and increased CCI (aOR = 1.14, 95% CI = 1.08-1.21). Additionally, THAs increased risk of PJI development when compared to TKAs (aOR = 1.33, 95% CI = 1.02-1.72). Black patients had a decreased risk of PJI (aOR = .68, 95% CI = .48-.97) compared to white patients, as well as those with private insurance (aOR = .56, 95% CI = .37-.87) or increased age (aOR = .97, 95% CI = .95-.9).

Conclusion: In conclusion, our study further supports the literature for increased risk of PJIs in BMI over 40, male gender, public insurance compared to private insurance, and increased CCI. The most noteworthy finding in our study is the substantial increase in PJI rates associated with alcohol use. Further studies are needed to clarify and expand on the effects of alcohol and liver disease.

Gregory Benes



Disparities in Elective and Nonelective Total Hip Arthroplasty

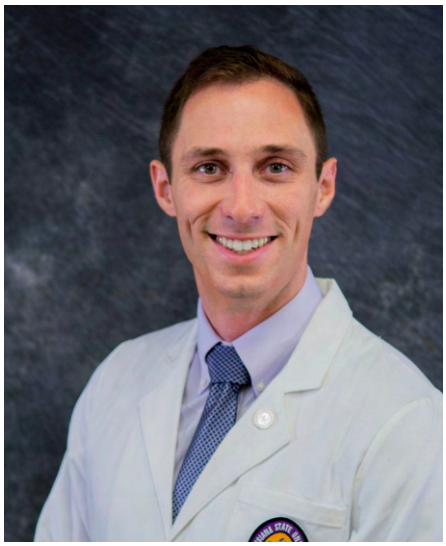
Background: Prior studies have shown disparities in utilization of primary and revision total hip arthroplasty (THA). However, little is known about patient population differences associated with elective and nonelective surgery. Therefore, the aim of this study is to explore factors that influence primary and revision THA based on surgery indication.

Methods: Data was obtained from 14,092 patients who had primary THA from 2014-2020 in the REACHnet database, which consists of multiple health partner systems in Louisiana and Texas. THA was classified as "elective" or "nonelective" if the patient had an ICD code associated with osteoarthritis or hip fracture, respectively.

Results: 5.3% had a nonelective THA. After multivariate logistic regression, nonelective THA was associated with Hispanic ethnicity ($p=0.005$), female gender, lower BMI, alcohol dependence, and increased CCI as well as age ($p=<0.001$). 327 patients underwent revision surgery within 3 years of primary THA. Nonelective THA had an increased risk of revision compared to elective surgeries (11.5% vs. 6.9%, $p<0.001$). Patients with alcohol dependence had an increased risk of reoperation regardless of surgery indication ($p=<0.001$). In the elective cohort, smokers had an increased risk of revision ($p=0.03$) and African American patients had a decreased risk of revision ($p=0.001$).

Conclusions: Demographic and social factors impact utilization of elective and nonelective primary THA and subsequent revision surgery. Frailer individuals were more likely to undergo THA due to femoral neck fracture; however, BMI had no impact on THA reoperation risk. Clinicians should appropriately counsel patients about alcohol use and smoking cessation as modifiable risk factors for revision surgery. Findings suggest lack of access to elective THA among the Hispanic population. Additionally, underutilization of THA revision by African American patients could represent a racial disparity in access to orthopedic surgery from primary to revision surgery.

Jeffrey Mauras



Does Changing Adductor Canal Block (ACB) with Ropivacaine to Liposomal Bupivacaine Improve Patient-reported Outcomes and Reduce Opioid Prescribing After Total Knee Arthroplasty?

Background: Newer analgesic techniques to reduce opioid use and pain after total knee arthroplasty (TKA) include preoperative cryoneurolysis, adductor canal block (ACB), and interspace between the popliteal artery and the capsule of the posterior knee (IPACK) block. The purpose of the present study was to evaluate whether changing ACB with ropivacaine, a traditional local analgesic, to ACB with liposomal bupivacaine (LB), an extended release local analgesic, would provide superior pain relief and reduce opioid requirements in the first 2 and 12 weeks following TKA.

Methods: This was a retrospective chart review of 140 consecutive primary TKA patients at a single site who received ACB with ropivacaine (ACB-R; n=70) or ACB/IPACK with LB (ACB/IPACK-LB; n=70) in the context of multimodal analgesia including preoperative cryoneurolysis. Main outcomes were filled opioid prescriptions (morphine milligram equivalent; MME) at discharge and over the first 12 weeks after TKA as well as patients-reported outcomes (PROs) assessed by the Knee Osteoarthritis and Outcomes Score (KOOS) and PROMIS-29 Pain Intensity and Pain Interference scales at 2 and 12 weeks post-surgery.

Results: The median MME for the discharge opioid prescription and all opioid prescriptions was, respectively, 65% ($p<0.0001$) and 48% ($p<0.0001$) lower for patients in the ACB/IPACK-LB compared with the ACB-R group. ACB/IPACK-LB was associated with significantly better PROs 2 weeks after TKA compared to ACB-R.

Conclusion: ACB/IPACK with LB may reduce opioid requirements during acute and short-term recovery while improving PROs during early recovery compared with ACB-R in the context of multimodal analgesia including preoperative cryoneurolysis.

Congratulations On Your Fellowships, Chiefs!

Dr. Corinne Cloud –
Hand and Upper Extermity Fellowship
The Cleveland Clinic
Cleveland, OH

Dr. Peter D'Amore –
Spine Fellowship
Harvard Beth Israel Deaconess Medical Center
Boston, IL

Dr. Cristina Graphia –
Hand and Upper Extremity Fellowship
The University of Chicago
Chicago, IL

Dr. Ryan Rubion –
Sports Medicine Fellowship
Mississippi Sports Medicine & Orthopedic Center
Jackson, MS


Graphia
04.09.22

Many thanks to our sponsors!

LSU Health NEW ORLEANS

ACGME ACCREDITED

LSU Health Sciences Center
Department of Orthopaedic Surgery
1542 Tulane Avenue, Box T6-7
New Orleans, LA 70112
Phone: (504) 568-4680
Fax: (504) 568-4466

https://www.medschool.lsuhsc.edu/orthopaedics/