

**Methods** This study was approved by the Institutional Review Board at our hospital review board (IRB#2012-050). From the Premier Healthcare database (Premier Healthcare Solutions, Inc., Charlotte, NC; 2006-2021) we identified patients who had a primary diagnosis of hip fracture and underwent surgical procedures. The primary exposure of interest was time from hip fracture diagnosis to surgery (categorized as 0-1 day, 2 days, and 3 days). Outcomes of interest included any major complications, length of stay, ICU admission (identified by billing code), and total opioid consumption during hospitalization.

**Results** We identified 65,111 patients who underwent surgical treatment within 3 days of hip fracture onsite, with 29.1% of patients receiving the surgery within 1 day, and 53.8% of patients receiving the surgery within 2 days. Prolonged wait time to have surgery increased the risk of having major complications, mortality, ICU admission, and longer hospitalization (table 1).

**Abstract EP003 Table 1** Mixed modeling outcomes comparing different time between surgery and fracture onsite

	2 days vs 0-1 day		3 days vs 2 days		3 days vs 0-1 day	
	Adjusted OR (95% CIs)**	p value	Adjusted OR (95% CIs)**	p value	Adjusted OR (95% CIs)**	p value
Major complications*	1.10 (1.07, 1.12)	<.001	1.28 (1.25, 1.32)	<.001	1.17 (1.14, 1.2)	<.001
Mortality	1.12 (1.06, 1.17)	<.001	1.35 (1.27, 1.44)	<.001	1.21 (1.15, 1.27)	<.001
ICU admission	1.06 (1.04, 1.08)	<.001	1.44 (1.41, 1.48)	<.001	1.36 (1.33, 1.39)	<.001
	% change (95% CIs)**	p value	% change (95% CIs)**	p value	% change (95% CIs)**	p value
LOS	18 (17, 18)	<.001	43 (42, 44)	<.001	22 (21, 22)	<.001

\*Major complication includes acute renal failure, delirium, myocardial infarction, pulmonary embolism, respiratory failure, stroke, and in-hospital mortality

\*\* Mixed-effects models were applied to compare the outcomes between the all three groups in a pair-wise way. Models were adjusted for age, sex, race (black, white, or other), Elixhauser comorbidity index (categorized as 0, 1, 2, 3 or more), admission type (emergency, urgent, elective, trauma center, and unknown), fracture location (femoral neck, subtrochanteric, intertrochanteric, or multiple), type of surgery (total hip arthroplasty, hemiarthroplasty, or internal fixation), type of anesthesia (general, neuraxial, general and neuraxial, PNB, others, and unknown), year of surgery (2006-2021), hospital location (urban versus rural), bed size (<300 beds, 300-500 beds, >500 beds), teaching status, and region (Midwest, Northeast, South, West). A random intercept term that varies at the level of each hospital was included in the model, accounting for the cluster effect of patients within hospitals as they are likely to experience similar care.

**Conclusions** Delayed surgery after hip fracture is associated with increased morbidity and mortality, increased length of hospital stay, and increased use of resources. It is recommended that healthcare providers prioritize timely surgical intervention for patients with hip fractures to optimize their chances of a successful recovery.

#### EP004 NEW APPROACH FOR SUPRASCAPULAR NERVE BLOCK: UP TO EASIER

<sup>1,2</sup>Pierre Goffin\*, <sup>3</sup>Hipolito Landeyra, <sup>4</sup>Alberto Prats-Galino, <sup>5,4</sup>Xavier Sala-Blanch. <sup>1</sup>Anesthesia and intensive care, MontLegia Hospital, CHC Groupe Santé, Liege, Belgium; <sup>2</sup>Master's Degree in Advanced Medical Competences, Regional Anesthesia Based on Human Anatomy, University of Barcelona, Barcelona, Spain; <sup>3</sup>Human Anatomy and Embryology, University of Barcelona, Barcelona, Spain, <sup>4</sup>Human Anatomy and Embryology, University of Barcelona, Barcelona, Spain; <sup>5</sup>Department of Anesthesia, Hospital Clinic, Barcelona, Spain

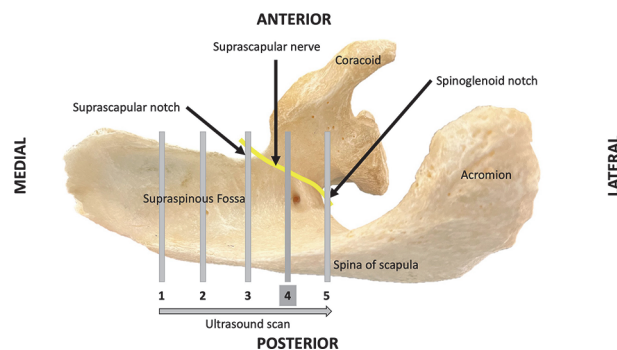
10.1136/rapm-2023-ESRA.67

**Background and Aims** Suprascapular nerve block (SSNB) is commonly used for shoulder analgesia. Two approaches are described but associated with risk and difficulties. We designed a cadaveric anatomical study to assess availability of an easier posterior approach.

**Methods** The probe is placed above the scapula, move from medial to lateral to identify the upper edge of the scapula which will be shorter until it reaches the suprascapular notch (1-3). We continue until identify a superior bony growth of the scapula (corresponding to the coracoid process) (4). By

moving laterally, we identify the infrascapular notch(5). Between the image of the suprascapular notch and the spino-glenoid notch, neurovascular bundle runs the fossa (4). At that point, we advance the needle 'out of plane', from medial to lateral, until bone contact. We injected 5ml of contrast, methylene blue and ropivacaine 0.5% mixture. We realize CT scanner and then dissected the suprascapular nerve in order to determine spread injection.

**Results** In all of the 20 blocks performed, suprascapular fossa was fully covered by contrast. Contrast passed through suprascapular notch (in 80%) and through spino-glenoid notch (in 75%). Anatomical dissections demonstrated that suprascapular fossa was colored in 90%. In 2 case, methylene blue move into suprascapular muscle. Suprascapular nerve is blue-toned in 85% of case before its separation in sensitive and motor branches.



**Abstract EP004 Figure 1** US-probe schematical localisation

**Conclusions** In this pre-clinical study, this SSN approach seems to be effectiveness. We postulate is easier referring to easy identifiable bone structure and associate with less risk.

#### EP005 PECS 2 BLOCK FOR OPEN BICEPS TENODESIS: NO ANALGESIC BENEFIT VS. SURGICAL FIELD INFILTRATION

<sup>1</sup>Arthur Hertling\*, <sup>1</sup>Germaine Cuff, <sup>2</sup>Thomas Youm, <sup>2</sup>Mandeep Virk, <sup>2</sup>Kirk Campbell, <sup>1</sup>Ekow Commeh, <sup>1</sup>Avra Hammerschlag, <sup>1</sup>Iman Suleiman. <sup>1</sup>Anesthesiology, NYU School of Medicine, New York, USA; <sup>2</sup>Orthopedic surgery, NYU School of Medicine, New York, USA

10.1136/rapm-2023-ESRA.68

**Background and Aims** Open subpectoral biceps tenodesis is often performed to treat biceps tendinopathy in conjunction with shoulder arthroscopy. We tested the hypothesis that a Pecs 2 block would provide better analgesia than surgical infiltration following open biceps tenodesis surgery.

**Methods** Patients were randomly assigned to either the treatment group (Pecs 2 block with 20 mL of 0.25% bupivacaine) or the control group (local infiltration of up to 15 mL of 0.25% bupivacaine by the surgeon). All subjects received an interscalene nerve block using 20 mL of 0.5% bupivacaine, as well as either intravenous sedation or general anesthesia. The primary outcome was opioid utilization during the first 24 hours after surgery (PACU + POD1). Secondary outcomes were NRS pain scores in PACU, on POD1 and POD3, reaction to surgical subpectoral incision (such as motion or

tachycardia) and postoperative skin assessment of sensation in the axilla (to evaluate block or infiltration success).

**Results** At the time of submission, complete data for at least POD1 is available for only 107 participants out of 133 patients enrolled (81%). For the first 24 hours after surgery, the treatment group used  $29.8 \pm 9.3$  mg morphine mg equivalents (MME) vs.  $32.2 \pm 9.6$  for the control group;  $p = 0.19$ . There were no differences in terms of reaction to incision, postoperative paresthesia/anesthesia on skin distal to surgical dressing, or postoperative pain scores.

**Conclusions** Reynolds et al., comparing Pecs 2 block to a sham block, found an analgesic benefit. However, surgical infiltration is simpler and appears to provide comparable analgesia.

**EP006 IMPLEMENTATION OF THE FRAILTY EVALUATION IN THE PREOPERATIVE ASSESSMENT IN THE MAJOR ORTHOPEDIC SURGERY-AN EFFICIENT TOOL FOR PERIOPERATIVE CARE AND DISCHARGE PLANNING**

<sup>1</sup>Denisa Anastase\*, <sup>1</sup>Simona Cionac Florescu, <sup>2</sup>Georgiana Nedelea, <sup>2</sup>Serban Dragosloveanu, <sup>2</sup>Nicolae Mihailide. <sup>1</sup>Anesthesiology and Intensive Care, Clinical Hospital of Orthopedy Foisor, Bucharest, Romania; <sup>2</sup>Department of Orthopedics, Clinical Hospital of Orthopedy Foisor, Bucharest, Romania

10.1136/rapm-2023-ESRA.69

**Application for ESRA Abstract Prizes:** I apply as an Anesthesiologist (Aged 35 years old or less)

**Background and Aims** One of the important concepts that has an impact on health services is the frailty of the elderly. The preoperative assessment of the older patients can be improved by using of a frailty scale in order to identify the high-risk patients. The aims of this study were to identify the frail older patients proposed for major orthopedic surgery, to evaluate the prognosis and the discharge prospectives.

**Methods** In this prospective study, we enrolled adults 65+ years admitted for elective or traumatic major orthopedic surgery between December 1st and June 1st. For preoperative frailty evaluation, we used the Fried Frailty Index for Elders (FIFE) from 0-10 points and the patients were divided by the number of positive answers: non-frail: 0 points, frailty risk: 1-3 points and frail:  $\geq 4$  points.

**Results** 150 patients, with mean age (SD) 76,56 (7,31) years, female 55,15% were screened for frailty. The frailty prevalence divided by age stratification was 32% for ages 65-70 years, 35% for ages 71-80 years, and 43,33% for older than 81 years. The age category over 81 years influences the frailty score to the extent of 92.2%, there is no significant difference between the women and men, in terms of frailty score with  $p > 0.05$ , the length of stay and the need for community services post-discharge were significantly longer ( $p < 0,05$ ).

**Conclusions** We conclude that FIFE score is an independent tool for frail patients' assessment. Its implementation in the hospital setting could improve perioperative outcomes and enhance the postoperative recovery of older surgical patients.

## ePOSTER session 1 – Station 2

**EP007 INTERVENTIONS TO REDUCE POSTSURGICAL PAIN, AND OPIOID USE, IN PATIENTS WITH PRE-EXISTING CHRONIC PAIN OR HIGH-DOSE OPIOID USE: A SYSTEMATIC REVIEW**

<sup>1</sup>Terri-Anne Russell\*, <sup>2,3</sup>Charles Oliver, <sup>4</sup>Marie-Josée Daly, <sup>5</sup>Vincenzo Calascibetta, <sup>3,6,7</sup>Alan Fayaz. <sup>1</sup>Anaesthesia and Intensive Care, University Hospital of the West Indies, St. Andrew, Jamaica; <sup>2</sup>Anaesthesia and Perioperative Medicine, University College London Hospital NHS Foundation Trust, London, UK; <sup>3</sup>Honorary Associate Professor, University College London, London, UK; <sup>4</sup>Anaesthesia and Intensive Care, Geneva University Hospitals, Geneva, Switzerland; <sup>5</sup>Pain Clinical Nurse Specialist, Barts Health NHS Trust, London; <sup>6</sup>Anaesthesia and Pain Medicine, University College London Hospital NHS Foundation Trust, London, UK; <sup>7</sup>Pain Education Research Lead, University College London, London, UK

10.1136/rapm-2023-ESRA.70

**Application for ESRA Abstract Prizes:** I apply as an Anesthesiologist (Aged 35 years old or less)

**Background and Aims** Background Patients with pre-existing chronic pain or those on high-dose opioid medications while presenting for surgery may be at increased risk of severe post-surgical pain and associated complications. However, findings from existing scientific literature that explore the role of adjunctive therapies to minimise postoperative pain or perioperative opioid use have been discordant. This review aimed to identify and evaluate the effectiveness of opioid-sparing interventions on post-surgical pain in patients with pre-existing chronic pain or high-dose opioid use.

**Methods** The databases PubMed, EMBASE, CINAHL Plus, Web of Science Core Collection and PsychINFO were searched for contemporary studies meeting pre-specified inclusion criteria. Methodological rigour was assessed, and data was extracted using bespoke forms. The last search was conducted on January 29, 2023.

**Results** Sixteen studies were eligible for inclusion. Eight studies were suitable for meta-analysis to explore perioperative ketamine administration. We identified a tendency towards improvement in early postoperative pain scores (-0.27 [-0.79, 0.26]) and opioid use (-0.27 [-0.55, 0.00] SMD); however, this did not achieve statistical significance. Celecoxib improved pain scores in THA and TKA patients  $p = 0.024$  and pregabalin reduced opioid consumption by 64.78%  $p < 0.001$ ; however, periarticular liposomal bupivacaine did not show benefit.

**Conclusions** We identified some improvement in postoperative pain scores and reduction in analgesic requirements with the use of ketamine, pregabalin and celecoxib individually as anaesthetic adjuncts in targeted surgical populations. The heterogeneity of study endpoints and the risk of bias limit the ability to make definitive conclusions. More research, in potentially higher risk-of-pain populations, using internationally agreed definitions, would be helpful.