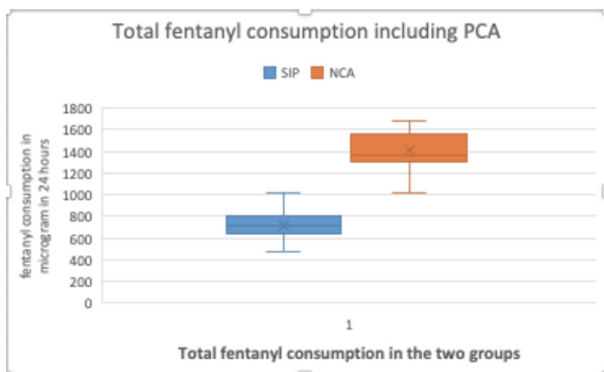


Abstract B2 Table 1

Table showing important results of this study

Parameters (Mean ± SD)	Group 1 (n=27)	Group 2 (n=28)	P-value
Age (years)	59.83 ± 7.17	57.66 ± 8.5	0.552
Sex (M:F)	26:3	24:6	0.372
Body weight (kg)	67.6 ± 7.6	67.6 ± 6.7	0.686
BSA (m ²)	1.74 ± 0.13	1.73 ± 0.10	0.677
Duration of Surgery (min)	276 ± 15.41	287 ± 20.7	0.063
Extubation time (Hrs)	4.62 ± 0.65	4.69 ± 0.45	0.039
NRS at extubation	1.7 ± 0.44	8.5 ± 0.69	<0.001
Intraop. fentanyl use (mcg)	535 ± 91	720 ± 71.4	<0.001
Total length of ICU stay	2.07 ± 0.26	3.46 ± 0.50	<0.001

* p < 0.05 was considered as statistically significant



Abstract B2 Figure 1 The 'whisker plot' depicts total fentanyl consumption in both the groups (including PCA used by the subjects in the SIP group)

B3 COMPARISON OF DIAPHRAGMATIC ACTIVITY BETWEEN PROPOFOL AND DEXMEDETOMIDINE SEDATION IN SPONTANEOUSLY BREATHING PATIENTS UNDER REGIONAL ANAESTHESIA: A PROSPECTIVE RANDOMIZED, COMPARATIVE STUDY

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Background and Aims Propofol and dexmedetomidine are commonly used for sedation during regional anaesthesia. Although there are many studies comparing these two agents, none of the studies have compared the effect of these agents on diaphragmatic activity. Hence this trial was done after institutional ethics committee approval to evaluate whether dexmedetomidine sedation during regional anaesthesia preserves diaphragmatic thickness fraction compared to propofol sedation.

Methods One hundred and twenty-six patients scheduled for elective surgery undergoing regional anaesthesia were randomized into either dexmedetomidine (Group D) or propofol (Group P) sedation during surgery. For both the groups diaphragmatic ultrasound was done at baseline (T1), 20 minutes after the block (T2), after achieving a target bispectral index score (BIS) of 70–80 & Observer's assessment of alertness/sedation (OAA/S) score of 3 (T3) & at the end of surgery after sedation has been stopped (T4). The primary objective was to compare diaphragmatic thickness fraction (DTF) at (T3) during surgery. The diaphragmatic excursion (DE) and velocity were compared as secondary outcomes.

Results Significant difference was seen in percentage change in thickness fraction at T3 between group P and D (p value <.05). Mean of percentage increase in thickness fraction at T3 in group D was significantly higher as compared to group P. DE was also found to be significantly decreased in the Group P.

Conclusions Dexmedetomidine sedation preserves the baseline diaphragmatic thickness in comparison to propofol.

B4 TRANEXAMIC ACID AND PERIOPERATIVE MYOCARDIAL INFARCTION: A POPULATION-BASED ANALYSIS

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Background and Aims Over the past years, tranexamic acid (TXA) has been used extensively to reduce blood loss during total joint arthroplasty (TJA).¹ However, questions remain in respect to the risk of cardiac ischemic events, especially in those with coronary artery disease. We aimed to study if the use of TXA is associated with increased risk of myocardial infarction (MI) among 1) the overall population who underwent TJA, and 2) the population who had coronary artery disease before TJA.

Methods This study is approved by Hospital for Special Surgery Institutional Review Board (IRB# 2016–436). We used Premier Healthcare database to identify patients undergoing TJA from 2006–2019, and their history of stent placement or coronary artery bypass graft (CABG) procedures. The primary exposure was intravenous TXA administration, and outcome is perioperative MI. Multilevel multivariable logistic regression models were performed to identify if TXA use was associated with perioperative MI.

Results Out of all patients who underwent TJA, 44.7% received TXA. Upon adjusting for all covariates, patients who received TXA had a 30% lower odds of having MI compared to patients without TXA. After restricting the cohort to patients who received stent placements/CABG surgery before TJA, TXA administration was not significantly associated with perioperative MI. (Table 1)

Abstract B4 Table 1

Table 1. Results from multilevel logistic regression model predicting perioperative myocardial infarction

	TXA		Crude OR, 95% CI (TXA vs no TXA)	P value	Adjusted OR, 95% CI (TXA vs no TXA)	P value
	No, N (%)	Yes, N (%)				
Overall TJA cohort, outcome: stroke	2995 (0.2)	1041 (0.1)	0.43 (0.4, 0.46)	<.001	0.7 (0.56, 0.89) [1]	0.003
Patients who had coronary surgeries before TJA, outcome: stroke	487 (2.6)	138 (1.2)	0.47 (0.39, 0.57)	<.001	0.92 (0.72, 1.18) [2]	0.511

[1] A multilevel multivariable logistic regression model with a random intercept to account for within-hospital correlation was run to see if TXA use was a significant predictor of perioperative stroke after controlling for age, gender, race, comorbidity burden, procedure group (THA, TKA), history of coronary surgery, anesthesia type, hospital location, teaching hospital, hospital bed size, region, and year of TJA surgery
 [2] A multilevel multivariable logistic regression model with a random intercept to account for within-hospital correlation was run to see if TXA use was a significant predictor of perioperative stroke after controlling for age, gender, race, comorbidity burden, procedure group (THA, TKA), history of coronary surgery, anesthesia type, hospital location, teaching hospital, hospital bed size, region, year of TJA surgery, time between last coronary surgery and TJA, and if patient underwent multiple coronary surgeries.

Conclusions In conclusion, we found that patients who received TXA were less likely to experience MI events in the TJA population. For patients who had coronary procedures before their joint arthroplasty, the use of TXA was not associated with an increase in the odds for MI.