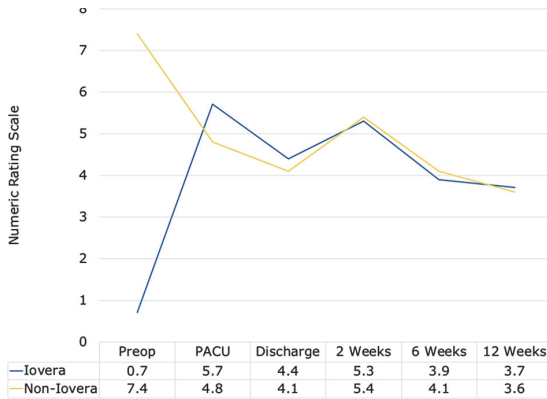
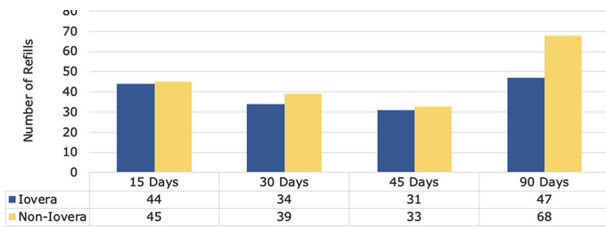


postoperative opioid consumption. The aim of this study was to determine the effect of cryoanalgesia on opioid consumption by evaluating the number of prescription refills up to 90 days postoperatively.

**Methods** A retrospective chart review of 103 subjects that received a standard ERAS protocol with peripheral nerve blocks. 45 subjects received cryoanalgesia treatment to three anterior femoral cutaneous and the infrapatellar branch of the saphenous nerves and 58 subjects did not receive cryoanalgesia. Outcomes evaluated were total postoperative opioid prescription refills at days 15, 30, 45, and 90, total morphine milliequivalents, postoperative pain scores between time intervals, and pain scores.



Abstract OP058 Figure 1 Pain scores



Abstract OP058 Figure 2 Number of refills

# of Refills Cryoanalgesia vs. Non-Cryoanalgesia: p-values	
15 days	0.215
30 days	0.313
45 days	0.533
90 days	0.743

Abstract OP058 Figure 3 Stats for refills

**Results** There was not a significant reduction in total postoperative opioid prescription refills or total morphine milliequivalents at any time interval between the groups. There was a significant difference ( $p < 0.001$ ) in refills between days 45 and 90 in the Non-Cryoanalgesia group. There was a statistically significant reduction in the average preoperative pain scores with 0.7 in the cryoanalgesia group and 7.4 in the non-cryoanalgesia group ( $P < 0.001$ ).

**Conclusions** Preoperative cryoanalgesia treatment does not significantly decrease postoperative opioid consumption, but significantly lowers preoperative pain scores in patients undergoing TKA and refills between 45 and 90 days. This could be an excellent treatment for patients who cannot undergo or the procedure must be delayed for optimization.

**OP059 ANESTHETIC TECHNIQUE AND POSTOPERATIVE PULMONARY COMPLICATIONS (PPC) AFTER VATS LOBECTOMY**

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10.1136/rapm-2023-ESRA.59

Please confirm that an ethics committee approval has been applied for or granted: Not relevant (see information at the bottom of this page)

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**Background and Aims** Thoracic surgery is associated with a high incidence of PPCs. Despite advancements in surgical technique, pulmonary complications due to pain are the most common cause of morbidity. Our study examined the association between anesthetic technique and PPCs after VATS lobectomy (Video Assisted Thoracoscopic surgery).

**Methods** This study was determined to be exempt from University of Virginia ethics committee review. National American College of Surgeons National Surgical Quality Improvement Program database was searched for VATS lobectomy cases from 2017 to 2021. Cases were stratified into four groups—GA alone, GA + local, GA + Regional, and GA + Epidural. Generalized linear regression models were used to examine the effect of anesthetic technique on study's primary outcome—any occurrence of PPC (pneumonia, reintubation, or postoperative ventilation >48 hours). The secondary outcome was length of stay (LOS).

**Results** A total of 15,084 cases were identified and 14,477 cases met study inclusion. The 4 groups had PPC rate between 3.5-5.2%. There was no statistically significant difference in the odds of PPCs when an additional anesthesia technique was added to GA (figure 1). As compared to GA alone group, LOS was significantly lower in the regional and local group by 7.8% and 8.6% respectively (both  $ps < 0.001$ -figure 2). The epidural group had longer LOS by 16% ( $p < 0.001$ ).

## Miscellaneous – Free papers 8

**OP060 GASTRIC ULTRASOUND PERFORMED BY INEXPERIENCED EXAMINERS (MEDICAL STUDENTS) IS HIGHLY SENSITIVE BUT NOT SPECIFIC FOR THE DETECTION OF GASTRIC CONTENT**

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10.1136/rapm-2023-ESRA.60

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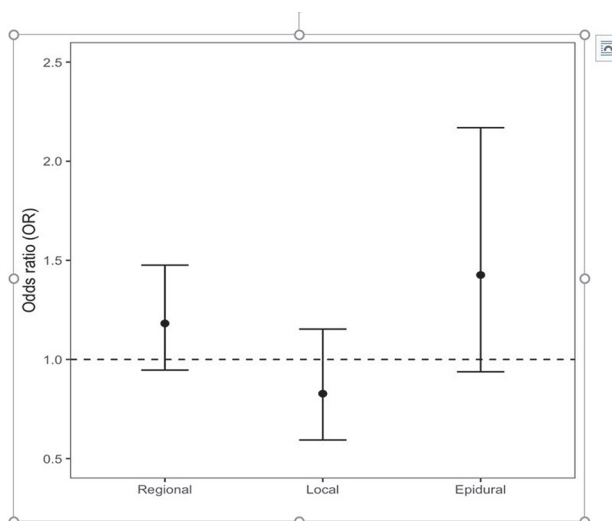
**Application for ESRA Abstract Prizes:** I apply as a Trainee/Resident/Fellow (no age limit)

**Background and Aims** Aspiration of gastric content in patients with a full stomach is a serious complication of anesthesia, associated with high mortality and morbidity. Recent studies demonstrated that fasting status can be assessed accurately by gastric ultrasound. However, there is still a lack of evidence regarding the application of this technique by inexperienced examiners. We aimed to determine the accuracy of gastric ultrasound performed by medical students after a standardized training sequence.

**Methods** In this prospective, randomized, examiner-blinded study, five medical students performed 80 gastric ultrasound examinations on healthy, normal weight volunteers (ethics committee approval: Project-ID 2022-00795). The study was conducted from July to September 2022 at the University Hospital Basel. Standardized training consisted of blended online training, one lecture and 2h of hands-on-training. Volunteers were randomized in a 1:1 ratio to 'fasted' or 'not fasted'. Sensitivity, specificity, positive and negative predictive values were calculated from the acquired data.

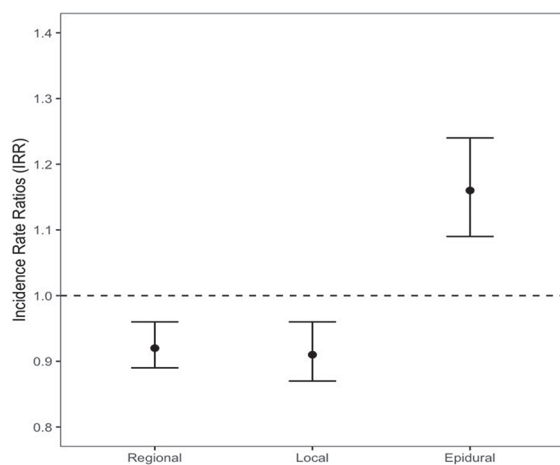
**Results** Data from 80 individuals were analyzed. All 'not fasted' volunteers were correctly identified (sensitivity 1.00, 95% CI: 0.91-1.00). 15 out of 40 'fasted' volunteers were wrongly classified as 'non-fasted' (specificity 0.63, 95% CI: 0.46-0.77). Positive predictive value was 0.73 (95% CI: 0.59-0.84) and negative predictive value 1.00 (95% CI: 0.86-1.00).

**Conclusions** Examiners with limited experience in ultrasound diagnostics may accurately identify a full stomach in normal weight volunteers after a standardized training sequence. However, the detected specificity of 0.63 was low, and more focused training on the ultrasound anatomy of an empty stomach may be needed to rule out gastric content in a clinical scenario.



**Abstract OP059 Figure 1** Odds ratio of PPCs comparing anesthesia techniques against general group (OR = 1 refers to equal odds of PPC between the GA group and the comparison groups)

#### PPC and anesthesia technique



**Abstract OP059 Figure 2** Incidence rate ratios of total length of stay (LOS) comparing anesthesia techniques against general group. The regional and local group showed statistically significant decreases in LOS compared to GA by 7.8% and 8.6% respectively (both  $p < 0.001$ ), while the epidural group showed increased LOS by 16% ( $p < 0.001$ )

#### Anesthesia technique and length of stay

**Conclusions** Our results suggest that addition of regional or local anesthesia is associated with reduced LOS after VATS lobectomy. However, their use was not associated with lower PPCs. Further research into other areas of risk reduction for these patients is needed to continue to improve outcomes.