

Abstract #35884 Table 1 Sub-group analysis among participants in BP and NT group

Designation	BP				NT			
	Time-to-target	Learning satisfaction	Confidence	p value	Time-to-target	Learning satisfaction	Confidence	p value
Specialist	13 [3]	0.01*	0.27*	0.59*	8 [3]	0.32*	0.01*	0.02*
Medical officers	9 [4]	28 [4]	13 [3]	13.5 [3]	8 [4]	27 [4]	13 [3]	13 [3]
Medical officer	11 [4]	28 [4]	13 [3]	13 [3]	8 [4]	24 [7]	13 [3]	13 [3]
Specialty								
Anesthesiology	15 [4]	0.87*	0.54*	0.40*	7 [4]	0.74*	0.16*	0.67*
Non-anesthesiology	16 [12]	27 [4]	13 [3]	14 [3]	7 [3]	24.5 [7]	12 [3]	12 [3]
Gender								
Male	14 [3]	0.42*	0.00*	0.01*	8 [3]	0.82*	0.88*	0.37*
Female	14 [14]	28 [4]	12.5 [3]	15 [3]	7 [7]	24.5 [7]	11.5 [3]	12 [3]
Frequency of performing a RA block								
At least once a week	11 [7]	0.08*	0.63*	0.99*	4 [3]	0.15*	0.65*	0.12*
At least once a month	17 [14]	27 [7]	13 [3]	13 [3]	8 [7]	24.5 [7]	11.5 [3]	11.5 [3]
At least once a year or never	10 [9]	28 [4]	13 [3]	13 [3]	8 [3]	15 [7]	12 [3]	12 [3]

* Kruskal-Wallis test. * Mann-Whitney test. * p<0.05. Data were presented as median and interquartile range [IQR].

Conclusions We postulated that the artificial intelligence structure recognition software enables NT users to attain shorter time-to-target. In conclusion, BP provides better operator learning satisfaction, improved confidence, higher success and lower complication rates among novice RA practitioners, possibly due to greater tactile feedback during the simulated training.

Attachment Ethics approval.pdf

#35955 INADVERTED INTRATHECAL INJECTION OF ATROPINE AND ANAPHYLACTIC SHOCK

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Background and Aims Medication errors are a common source of iatrogenicity. Intrathecal administration of wrong drugs can be life-threatening. A patient suffered an anaphylactic shock after accidental intradural administration of atropine. The aim of this work is to find out if these two facts were related.

Methods Performing spinal anesthesia for postoperative pain treatment, inadvertent intrathecal injection of 0.2 mg of atropine instead of morphic chloride occurred to a patient. General anesthesia was induced and then the error was discovered. Surgery was performed without incidents until intravenous administration of metazolone, when severe hypotension underwent. It was resolved with norepinephrine and epinephrine and he recovered without sequelae. Investigating about this episode, authors carried out a bibliographic search in Pubmed, without limiting dates, for studies in which intrathecal administration of atropine was described, in order to find similar cases, consequences and its management.

Results We found that intrathecal atropine is described by several studies as prevention of postoperative nausea and vomiting after caesarean section with spinal anesthesia. As far as the patient was concern, subsequent allergy testing showed that he was allergic to metazolone, concluding that the episode of hypotension had been consequence of an anaphylactic shock due to this drug, and no related with the medication error.

Conclusions It has been shown that anticholinergics can be used for prevention of postoperative nausea and vomiting in different routes of administration, including intrathecal route at small doses. Regarding medication errors, a good practice protocol is necessary to avoid serious consequences that, fortunately in this case, did not occur.

#36390 A CASE OF ANTI SYNTHETASE SYNDROME WITH INTERSTITIAL LUNG DISEASE FOR LAPAROSCOPIC SURGERY

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Application for ESRA Abstract Prizes: I don't wish to apply for the ESRA Prizes

Background and Aims Anti-synthetase syndrome (ASS) is a rare chronic autoimmune disorder of unknown cause. The hallmark of ASS is the presence of serum autoantibodies directed against amino act-tRNA synthetase. ASS is 2-3 times more common in women than in men. The morbidity and mortality of ASS are usually linked to pulmonary findings.

Methods 48 years old lady who was diagnosed having Anti - Synthetase syndrome in 2020. She has interstitial lung disease with pulmonary function test of FeV1 1.4 (61%) FVC 1.65 (61%) and DLLO 40%. She was scheduled for total laparoscopic hysterectomy and salpingoophrectomy. She was assessed by respiratory unit pre operative where surgical risk was moderate, aim for early mobilisation and suggested for spinal anaesthesia if possible. Rheumatologist was also consulted preoperatively. The surgery was conducted under general anaesthesia with IPPV and securing the airway, neuromuscular blockade monitoring and surgeon was told to be careful with the intraabdominal pressure. The surgery went well she was extubated with sugamadex.

Conclusions ASS is a rare idiopathic inflammatory multi system disorder which can lead to serious postoperative complications secondary to muscle weakness and respiratory complications. As laparoscopic surgery requires inflation of gas to intra abdominal cavity and head down position during the surgery

, regional anaesthesia would be a challenge for this patient. A multidisciplinary teams including respiratory unit, rheumatology, physiotherapist and anaesthesiology is essential in the care of a patient with ASS.

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#34723 LIDOCAINE SPRAY VERSUS OTHER FORMS FOR LOCAL ANESTHESIA IN UPPER GASTROINTESTINAL ENDOSCOPY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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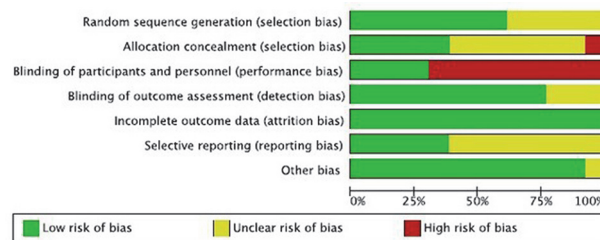
Application for ESRA Abstract Prizes: I don't wish to apply for the ESRA Prizes

Background and Aims Pharyngeal anesthesia before esophago-gastroduodenoscopy (EGD) reduces pain and discomfort. Many forms of lidocaine are used as local anesthesia.

However, it remains unclear which method is the best. We aimed to assess effective each lidocaine's form during EGD compared with spray.

Methods We searched PubMed, Scopus, EMBASE, the Cochrane Central Register of Controlled Trials, CENTRAL, Web of Science Core Collection, World Health Organization, International Clinical Trials Registry Platform, and Clinical-Trials.gov databases in December 2022. Selection criteria were randomized controlled trials comparing lidocaine spray with other forms (gel, lozenges, nebulized, popsicle, and viscous) in EGD. Outcomes of interest included ease of instrumentation, participants' satisfaction scores, tolerance scores, or pain, endoscopist's satisfaction scores, and procedural time.

Results We included 13 trials with 3,711 participants undergoing EGD. The quality of trials was poor. Lidocaine spray provided better ease of instrumentation (Risk ratio (RR) 1.19, 95% confident intervals (CI) 1.06, 1.34; I²=66%; very low certainty of evidence), decreased participants' pain (Mean difference (MD) 0.38, 95% CI 0.25, 0.5; I²=92%; very low certainty of evidence), and shorter procedural time (MD 0.22, 95% CI 0.10, 0.35; I²=13%; low certainty of evidence). However, spray had lower participants' highest satisfaction scores (RR 0.83, 95% CI 0.76, 0.92; I²=62%; very low certainty of evidence), participants' mean satisfaction scores (MD -0.61, 95% CI -0.29, -0.04; I²=92%; very low certainty of evidence), participants' tolerance scores (RR 0.83, 95% CI 0.71, 0.97; I²=0%; low certainty of evidence), and endoscopist's satisfaction scores (MD -0.33, 95% CI -0.45, -0.21; I²=94%; very low certainty of evidence).



Abstract #34723 Figure 3 Risk of bias graph

Conclusions Lidocaine spray may be better for ease of instrumentation during EGD. However, evidence is still determined due to the quality of trials.

#36076 INVESTIGATING THE MOST DIFFICULT CONCEPTS IN ANAESTHESIA FOR MEDICAL STUDENTS

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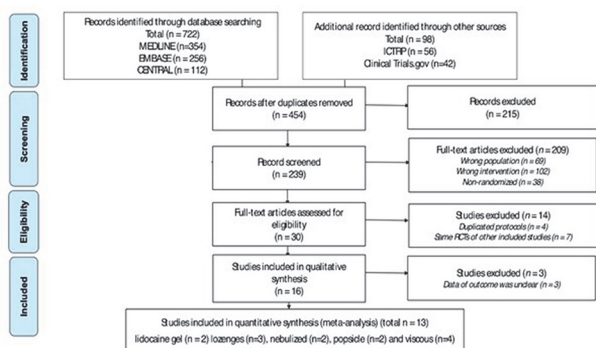
Please confirm that an ethics committee approval has been applied for or granted: Not relevant (see information at the bottom of this page)

Background and Aims In clinical postings, time for teaching is limited. To maximize effectiveness, educators should prioritize teaching topics that students struggle to learn independently. We surveyed medical students to identify these topics and better inform lesson planning.

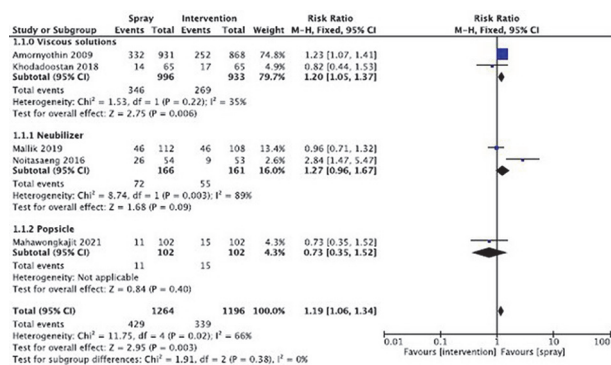
Methods We derived the anaesthesiology curriculum from the textbook 'Anesthesiology Student Survival Guide'. With input from an anaesthetist educator and a pilot survey, we identified the 5 most important and challenging concepts from major topics including Pharmacology & Physiology, Intensive Care, Peri-operative Care, and Traditional Anaesthesia. We then asked clinical year medical students at the Lee Kong Chian School of Medicine, Singapore to rate the concepts (1 to 5, 5 indicating extreme difficulty). We also surveyed why they found these concepts challenging and how they overcame the difficulties.

Results We received 139 out of a maximum of 394 responses (35.3% response rate), yielding a margin of error of ±6.70% at the 95% confidence interval. The hardest concepts are as follows (with scoring): Pharmacology & Physiology: Pharmacokinetics of anticoagulants (3.25/5), context sensitive half-life (3.56/5) Intensive Care: Approach to hypo/hyperthermia (3.34/5) Peri-operative Care: Capnograph interpretation (3.06/5), minimum alveolar concentration (MAC) (3.47/5) Traditional Anaesthesia: Neuromuscular blocking agents (3.12/5), nerve block anatomy (3.56/5) For intensive care, lack of practice was the main challenge, while for the other topics, it was difficulty understanding the concepts. The most effective learning method for all topics was a teaching by someone else.

Conclusions Our study identifies key anaesthesiology topics and effective teaching strategies for educators, helping to



Abstract #34723 Figure 1 Preferred reporting items for systematic reviews and meta-analyses (PRISMA) flow diagram



Abstract #34723 Figure 2 Forest plot of ease of instrumentation