

OP007

ANALGESIC EFFICACY OF SELECTIVE TIBIAL NERVE BLOCK VERSUS PARTIAL LOCAL INFILTRATION ANALGESIA FOR POSTERIOR PAIN AFTER TOTAL KNEE ARTHROPLASTY: A RANDOMISED, CONTROLLED, TRIPLE-BLINDED TRIAL

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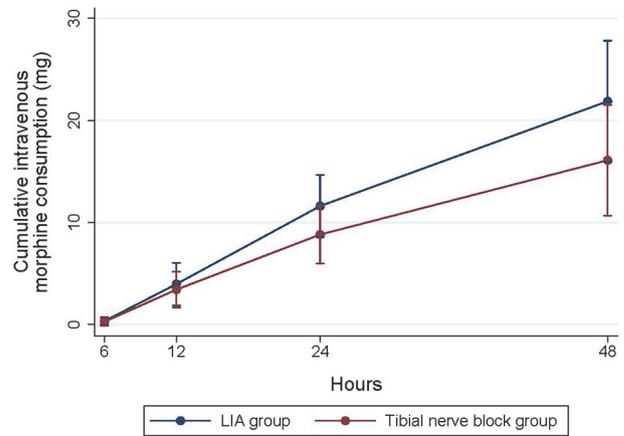
Application for ESRA Abstract Prizes: I apply as a Trainee/ Resident/Fellow (no age limit)

Background and Aims The adductor canal block relieves pain on the anterior aspect of the knee after arthroplasty. Pain on the posterior aspect might be treated either by partial local infiltration analgesia of the posterior capsule or by a tibial nerve block. This randomised, controlled, triple-blinded trial tested the hypothesis that a tibial nerve block would provide superior analgesia than a posterior capsule infiltration in patients scheduled for total knee arthroplasty under spinal anaesthesia with an adductor canal block.

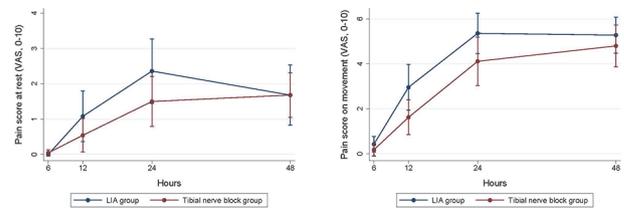
Methods Sixty patients were randomised to receive either an infiltration of the posterior capsule by the surgeon with ropivacaine 0.2%, 25mL or a tibial nerve block with ropivacaine 0.5%, 10mL. Sham injections were performed to guarantee proper blinding.

Results The primary outcome was intravenous morphine consumption at 24h. Secondary outcomes included intravenous morphine consumption, pain scores at rest and on movement, and different functional outcomes, measured at up to 48h. When necessary, longitudinal analyses were performed with a mixed-effects linear model. The median (interquartile range) of cumulative intravenous morphine consumption at 24h was 12mg (4–16) and 8mg (2–14) in patients having respectively the infiltration or the tibial nerve block (p=0.20). Our longitudinal model showed a significant interaction between group and time in favour of the tibial nerve block (p=0.015).

Conclusions No significant differences were present between groups in the other above-mentioned secondary outcomes. In



Abstract OP007 Figure 2 Our longitudinal model showed a significant interaction between group and time



Abstract OP007 Figure 3 The trajectory of the pain scores at rest and on movement during the course of the study

conclusion, a tibial nerve block does not provide superior analgesia when compared to infiltration. However, a tibial nerve block might be associated with a slower increase in morphine consumption along time.

OP008

EVALUATION OF THE 'SIP TIL SEND' REGIMEN BEFORE CAESAREAN DELIVERY USING BEDSIDE GASTRIC ULTRASOUND: A PAIRED PRAGMATIC COHORT STUDY

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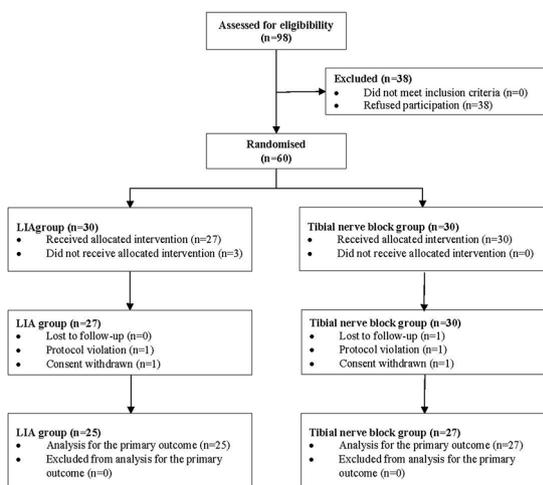
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Background and Aims Preoperative fasting partially mitigates against pulmonary aspiration following anaesthesia. International guidelines specify fasting periods of 6-8 hours for food and 2 hours for clear fluid prior to all surgeries, including caesarean delivery (CD). Prolonged fasting has deleterious effects and contemporary anaesthesia practice has evolved towards reduced fasting times for CD via liberal drinking regimes, including 'Sip Til Send'. Our primary aim was to compare standard fasting against 'Sip Til Send' using gastric ultrasound in a paired cohort non-inferiority study using a pragmatic study design.

Enrollment
Allocation
Follow-up
Analysis



Abstract OP007 Figure 1 The flow of patients during the trial

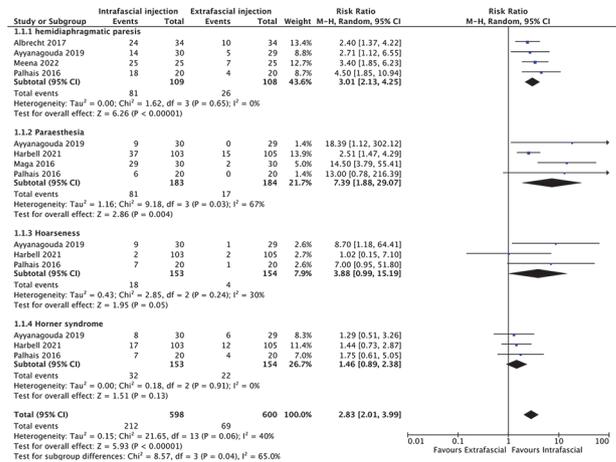
Abstract OP008 Table 1 Summary of results. Data presented as median [interquartile range] or incidence; p values presented from Mann Whitney U test or Chi-squared test, as appropriate. CSA = cross sectional area

	Standard Fasting	'Sip Til Send' Fasting	p value
Semi-recumbent antral CSA	343.7 [268.3-410.6]	305.7 [279.0-401.0]	0.663
Right lateral antral CSA	403.2 [321.7-598.3]	405.9 [309.7-593.2]	0.884
Estimated gastric content volume	53.5	53.5	0.609
Incidence of Perlas 2	11/55	4/54	0.093

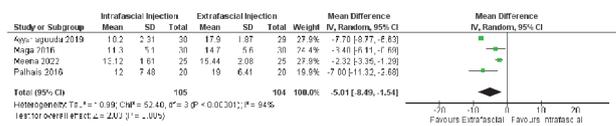
Methods Fully fasted parturients due to undergo elective CD under neuraxial anaesthesia were recruited and commenced on 'Sip Til Send' fasting before surgery. Qualitative and quantitative gastric ultrasounds were performed via a standardised approach following recruitment and prior to induction of anaesthesia.

Results 69 patients were assessed for eligibility and 55 recruited. Analysis was incomplete on two scans due to artefact impeding interpretability. The mean 'Sip Til Send' fasting time was 192.6 ± 108.7 minutes, with participants drinking a mean of 113.7 ± 70.4 ml.hr⁻¹. Notably, seven participants drank more than the suggested 170 ml.hr⁻¹. There were no statistical differences between groups (table 1). Estimation of gastric content volume yielded 3 and 5 parturients with gastric contents greater than 1.5ml.kg⁻¹ in the fully fasted and 'Sip Til Send' fasted states, respectively.

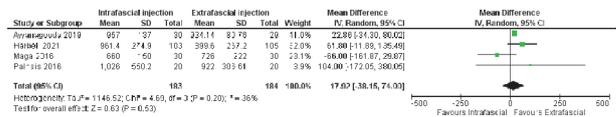
Conclusions 'Sip Til Send' fasting with water was non-inferior to a standard fasting protocol as tested in a pragmatic hospital setting. Therefore, it should be considered for elective CD and may prove beneficial in other areas of anaesthesia.



Abstract OP009 Figure 1 Forest plot depicting the incidence of extrafascial versus intrafascial incidence of complications



Abstract OP009 Figure 2 Forest plot describing the onset of sensory block of extrafascial versus intrafascial injection in interscalene brachial plexus block



Abstract OP009 Figure 3 Forest plot describing the duration of sensory block between the extrafascial versus intrafascial injection during interscalene brachial plexus block

OP009 EXTRAFASCIAL INJECTION VERSUS INTRAFASCIAL INJECTION FOR INTERSCALENE BRACHIAL PLEXUS BLOCK: A SYSTEMATIC REVIEW AND META-ANALYSIS

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

Background and Aims Ultrasound-guided Interscalene brachial plexus block is typically administered to patients undergoing surgery in the upper limbs. Recently, extrafascial injection has been introduced; however, its efficacy and safety remain debatable. This systematic review meta-analysis (PROSPERO: CRD42023426498) sought to compare extrafascial and intrafascial injections.

Methods We systematically searched six electronic databases for randomised clinical trials comparing extrafascial and intrafascial injections for interscalene brachial plexus block. A random-effects model calculated risk ratio or mean differences

(MD) with a 95% confidence interval (CI). The Cochrane Risk of Bias tool was used to assess the risk of bias.

Results Six studies, a total of 485 patients, met our criteria. The risk of bias in four studies was low, with some concerns in two. The incidence of hemidiaphragmatic paresis was less in the extrafascial injection: [RR 3.01; 95% CI (2.13, 4.25); P < 0.00001]. There was a significantly higher incidence of complications in intrafascial compared to the extrafascial group for paraesthesia and hoarseness; RR 7.39; 95% CI (1.88, 29.07); P = 0.004] and [RR 3.88; 95% CI (0.99, 15.19); P = 0.05], respectively. Onsets of motor and sensory block were rapid in the intrafascial group: [MD -5.48; 95% CI (-8.85, -2.11); P = 0.001] and [MD -5.01; 95% CI (-8.49, -1.54); P = 0.005], respectively. The duration of sensory block was not significantly different between both groups: [MD 17.92; 95% CI (-38.15, 74.00); P = 0.53].

Conclusions Extrafascial injection effectively reduces block-related complications such as hemidiaphragmatic paresis and is associated with preserving respiratory parameters such as forced vital Capacity.