B408 INTERMEDIATE CERVICAL PLEXUS BLOCK FOR POSTOPERATIVE PAIN CONTROL IN THYROID SURGERY: A PRODROMAL RANDOMIZED STUDY OF DIAPHRAGMATIC FUNCTION EVALUATION AND BLOCK EFFECTIVENESS

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Background and Aims The cervical plexus block (CPB) is used in a variety of head and neck surgeries providing sufficient anesthesia and analgesia. It can be divided into superficial (above superficial fascia of the neck), intermediate (between superficial and prevertebral fascia) and deep (below prevertebral fascia) CPB. We studied the postoperative analgesic efficacy of intermediate CPB on thyroid surgery and the degree of phrenic nerve blockade caused by the block.

Methods 14 patients scheduled for thyroid surgery were randomized into two groups of 7; Group A received bilateral intermediate CPB using 15 ml ropivacaine 0.375% along with paracetamol and dexketoprofen upon patient’s demand, for postoperative analgesia. Group B received the same painkillers without CPB. The primary outcome of our study was diaphragmatic excursion on the right side, preoperatively and immediately postoperatively, measured ultrasonographically by a POCUS experienced anesthesiologist during forced inspiration. We additionally measured diaphragmatic thickening fraction as long as time for first analgesic demand and pain scores (NRS) in 6 and 24 hours postoperatively.

Results Postoperatively the diaphragmatic excursion decreased in both groups, but it decreased more in Group A (46 ±6mm vs 48 ±5mm), nevertheless statistically and clinically insignificantly (p>0.05). Thickening fraction was > 25% in all instances. In Group A, we observed longer time for first analgesic demand postoperatively and lower pain scores in all instances.

Conclusions Intermediate CPB can be an effective and safe method for postoperative pain control in thyroid surgery. Diaphragmatic dysfunction due to the block seems to be insignificant, but larger studies are needed to confirm this observation.

B410 POINT-OF-CARE GASTRIC ULTRASOUND: A TRAINING OPPORTUNITY TO ENHANCE DECISION-MAKING AND IMPROVE PATIENT SAFETY?

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Background and Aims Aspiration accounts for 50% of anaesthesia related deaths. Inadequate pre-operative risk assessment is one of the contributing factors. Point-of-care gastric ultrasound (POCUS-UGS) is a novel but valid diagnostic tool to quantify gastric volume (GV) and ascertain risk of aspiration.

The aims of our project were to determine, in fasted patients undergoing emergency surgery:
- if quantitative and qualitative methods of assessment of gastric volume (GV) correlate with each other
- if GV assessment identifies at high risk of aspiration, and if higher risk of aspiration was identified, whether this changed the plan for airway management
- if GV assessment identifies at high risk of aspiration, and if higher risk of aspiration was identified, whether this changed the plan for airway management

Methods Patients booked onto the emergency list were prospectively scanned using low frequency ~5MHz curvilinear transducer. GV was estimated by inputting cross sectional area of the antrum in the right lateral decubitus position (RLD-CSA) into a validated model. This was compared to acceptable GV determined by the patient’s weight (low risk for aspiration = <1.5 ml kg⁻¹; high risk >1.5 ml kg⁻¹). Qualitative assessment was categorised as grade 0–2 based on antrum appearance. Risk was communicated to the anaesthetist and the final airway plan recorded.

Results There was 100% (n=15) correlation between qualitative and quantitative methods. 3 were identified at high risk.
of aspiration (GV >1.5 ml kg⁻¹). All these patients were fasted >6h. 2 had a change in airway plan and 1 patient was undergoing a regional technique.

Conclusions Fasting >6h does not always preclude a high risk of aspiration. POC-USG can aid decision-making as part of a multi-modal assessment of aspiration risk to improve patient safety. Ethics approval not required.

Central nerve blocks

**B411 'THE EFFECT OF DEXMEDETOMIDINE ON LIDOCAINE IN SUBARACHNOID ANAESTHESIA FOR TRANSURETHRAL SURGERY'**

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Background and Aims Regional anaesthesia is the technique of choice in many urological surgeries, such as transurethral surgeries of the bladder (TurBT) and prostate (TurP).

Methods In the present randomized double blind study, 90 patients scheduled for TurP and TurBT received subarachnoid anaesthesia with either dexmedetomidine in combination with hyperbaric lidocaine 2% (3 ml) (LD-group) or hyperbaric lidocaine 2% (3 ml) (L-group) or hyperbaric ropivacaine 0.5% (3 ml) (R-group).

Results Patients’ demographic characteristics were similar in the 3 groups; the participants had a mean age of 70 years, with no difference among the groups (p = 0.491). BMI had a mean value to 25.9kg/m² with no difference among the groups (p=0.160). Regarding intraoperative haemodynamic parameters, a statistically significant difference in blood pressure was found over time in all groups (p <0.001). The heart rate showed a statistically significant change only in the LD-group (p = 0.002). Regarding block characteristics, the addition of dexmedetomidine was associated with a higher sensory block (T6 in the LD-group versus T10 in the L-group). Ropivacaine was also associated with high sensory block (T6) compared to lidocaine (p <0.001). The pain assessment performed with the Numerical Rating Scale (NRS, 0–10) showed statistically significant lower values in the LD-group compared to both L-group (p <0.001) and R-group (p <0.001) all time periods, intra- and post-operatively.

Conclusions The addition of dexmedetomidine improved the quality of anaesthesia in transurethral bladder and prostate surgery compared to lidocaine alone. It provided satisfactory analgesia both intraoperatively and postoperatively, reducing opioid use, without significant haemodynamic side effects.

**B412 NEURAXIAL USE AMONG TOTAL KNEE AND HIP ARTHROPLASTY PATIENTS WITH MULTIPLE SCLEROSIS OR MYASTHENIA GRAVIS**

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Background and Aims Regional anesthesia use has historically been categorized as relative contraindication among patients with certain preexistent neurological disorders (1–3). It is unclear if the fear of developing new or worsening symptoms among this group is driving anesthesiologists to prefer or