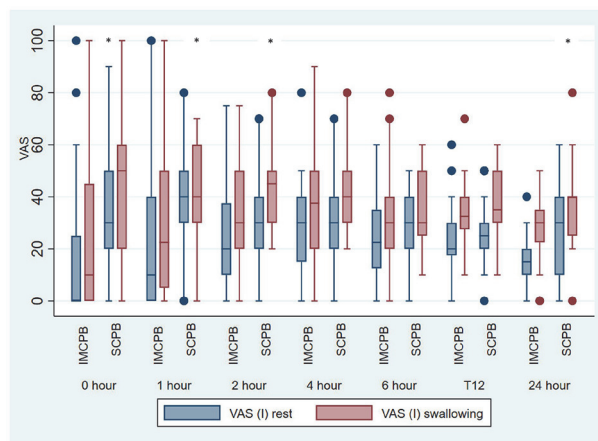


Background and Aims Thyroid surgery maybe associated with mild-moderate pain, with 66-90% patients requiring opioids on the first postoperatively. This study compared superficial cervical plexus block (SCPB) [USG subcutaneous local anaesthetic (LA) injection at Erb's point] and intermediate CPB (IMCPB) [USG LA injection below posterior SCM border] for thyroid surgery under general anaesthesia. Primary outcome was 24-hr postoperative fentanyl requirement; secondary outcomes included time to first analgesic, 24-hr pain at rest and swallowing, pre and 20 min post block diaphragmatic excursions (normal, deep breathing, sniffing), diaphragmatic thickening fraction (TFdi), PFT (phrenic nerve function), hoarseness (RLN nerve function), Horner's syndrome and dermatomes blocked.

Methods Following ethics committee approval, 57 consenting ASA I-II, 18-75-year patients undergoing thyroidectomy were randomly allocated to IMCPB (n=28) or SCPB (n=29) groups. Ropivacaine 10ml, 0.375% was injected bilaterally, pre-induction in both groups.



P<0.05% is statistically significant

Abstract EP044 Figure 1 Incisional pain VAS (0-100mm) at rest and swallowing at 0,1,2,4,6 and 24 hours postoperatively

Abstract EP044 Table 1 Perioperative fentanyl requirement

Table 1: Perioperative fentanyl requirement.

Fentanyl requirement (mcg)	IMCPB [median (IQR)]	SCPB [median (IQR)]	P value
Intraoperative supplementary	0 (0-22.5)	30 (0-35)	0.0051*
Postoperative upto 24 hours (PCA+ clinical bolus)	380 (237.5-500)	630 (450-825)	0.0016*
Total peri-operative 24 hours	380 (242.5- 530)	690 (500-845)	0.0008*
Time for first rescue analgesic after surgery (mins)	120 (60-240)	30 (10-60)	0.003*

*P<0.05 is statistically significant.

Abstract EP044 Table 2 Diaphragmatic excursion and other adverse effects

Table 2: Diaphragmatic excursion and other adverse effects

Group	IMCPB	SCPB	P value
Right deep breathing			
Pre	3.46±1.05	3.30±0.81	0.509
Post	2.87±0.79	3.25±0.65	0.055
P value	0.005*	0.764	
Left deep breathing			
Pre	3.28±0.92	2.97±0.89	0.196
Post	2.91±0.95	3.16±0.96	0.330
P value	0.030*	0.804	
PEFR			
Pre	3.64±1.32	3.35±1.24	0.397
Post	3.35±1.22	3.23±1.33	0.713
P value	0.005*	0.366	
Ear lobe numbness	16	4	0.001*
Hoarseness	13	1	0.000*
Horner's syndrome	9	1	0.005*

* P<0.05 is statistically significant

Results C2-C4 dermatomes were blocked in both groups. 24-hr postoperative fentanyl requirement was significantly lower and time to first rescue analgesic was shorter in the IMCPB group. (table 1) VAS on rest and swallowing was significantly lower in the IMCPB group for 2-hrs and at 24-hrs. (figure 1) 53% IMCPB patients developed a sympathetic haemodynamic response 5min post-block that lasted for 30-45min. Diaphragmatic excursions on deep breathing and PEFR were significantly reduced in the IMCPB group. Incidence of hoarseness, ear lobe numbness, Horner's syndrome was significantly higher in the IMCPB group. (table 2)

Conclusions IMCPB resulted in better analgesia but more adverse effects. Further studies need to ascertain optimal LA dose for IMCPB in patients undergoing thyroid surgery.

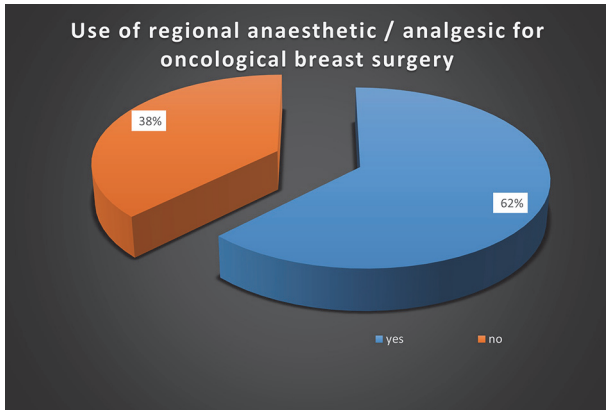
EP045 A SURVEY OF REGIONAL ANAESTHETIC/ANALGESIC PRACTICES FOR ONCOLOGICAL BREAST SURGERY ACROSS THE UNITED KINGDOM

¹Matthew Brown, ¹John Schutzer-Weissmann, ²Haren Jothiraj, ¹Candice Ramdin, ¹Smita Lisa Alwin Almeida*. ¹Anaesthetics/Pain Medicine/Intensive Care, The Royal Marsden NHS Foundation Trust, London, UK; ²Anaesthetics/Pain Medicine/Intensive Care, Imperial College London, London, UK

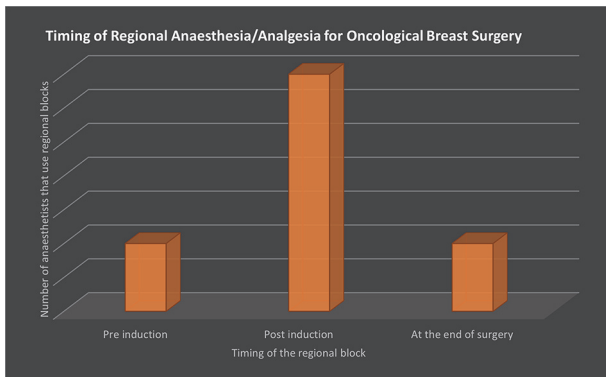
10.1136/rapm-2023-ESRA.107

Background and Aims In 2020, 11.7% of cancers diagnosed were female breast cancers, making it the most common cancer worldwide(1). With alarming incidence, surgery remains the main modality of management of resectable breast cancer. Despite the PROSPECT(2) guidelines, the regional anaesthetic /analgesic practices for breast surgery vary greatly. This survey aims to determine the current regional anaesthetic/analgesic practices for oncological breast surgery across several centres of the UK.

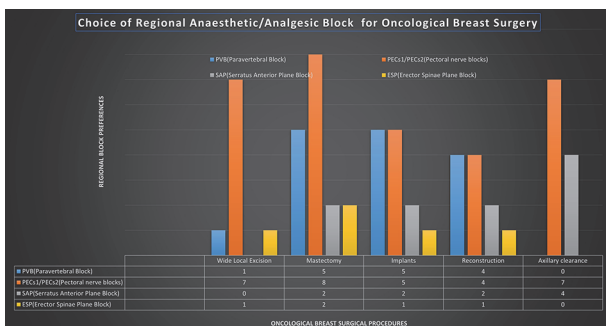
Methods 60 anaesthetists from the Association of Breast Surgery(3) database of hospitals across the UK were emailed survey (Microsoft) forms, in order to ascertain their regional anaesthetic/analgesic practices for oncological breast surgery. The choice of regional block (if performed), its timing and the follow-up practices were determined.



Abstract EP045 Figure 1 Survey of the use of regional anaesthesia/analgesia for oncological breast surgery



Abstract EP045 Figure 2 The timing of the regional block (if used) for oncological breast surgery



Abstract EP045 Figure 3 The choice of the various regional techniques for oncological breast surgery

Results A 40% response to the survey was received, of which 62% responded positively to the use of regional blocks. 66%

of anaesthetists preferred blocks post, rather than pre-induction (12%) or at the end of surgery (12%). Follow up of patients for persistent post-surgical pain is not being done at present in any of the centres surveyed. The pectoral nerve block (PECs I/II) and thoracic paravertebral blocks (PVB) were the preferred choices of blocks, with PECs I/II overtaking PVB for most breast surgeries. Serratus anterior plane (SAP) and Erector spinae plane block (ESP) are yet to gain their popularity, and axillary clearance has limited regional options at present.

Conclusions Though supplementing a regional technique over GA alone, for oncological breast surgery has a well-established advantage(4), further work in the field will help identify the barriers in its execution.

EP046 EFFECTIVENESS OF BEST PRACTICE ALERT (BPA) IN THE PREDICTION AND REDUCTION OF POSTOPERATIVE HYPONATREMIA

¹Kethy Jules-Elysee, ²Kyle Kunze, ¹James Beckman, ²Linda Russell, ³Anna Distad, ²Peter Sculco, ⁴Pa Thor*, ¹Jonathan Beathe. ¹Anesthesiology, Hospital for Special Surgery, New York City, USA; ²Adult Reconstruction and Joint Replacement, Hospital for Special Surgery, New York City, USA; ³Hospital for Special Surgery, New York City, USA; ⁴Anesthesiology, Hospital for Special Surgery, New York, USA

10.1136/rapm-2023-ESRA.108

Background and Aims Post-operative hyponatremia is a relatively common occurrence. We identified risk factors (see table 1) for the development of hyponatremia and developed a risk calculator (http://orthoapps.shinyapps.io/Hponatremia_TJA/) (Kunze, 2022). In a prospective study, a best practice alert (BPA) was sent to the practitioner advising them to use plasma-lyte instead of lactated rangers along with other precautions for patients having 3 of the 4 pre- op risk factors. **Methods** We examined joint replacement patients at the Hospital for Special Surgery from March 2022 to March 2023. Prescribers received best practice alerts (BPA) when patients were determined to be at risk for hyponatremia. Descriptive statistical analyses were performed.

Results Between March 2022 and March 2023, the hospital's overall hyponatremia rate dropped from 29% to 14% (p<0.05). Moderate hyponatremia dropped from 3.4% in March 2022 to 1.3% in March 2023. During the same period, severe hyponatremia dropped from 0.57% to 0.22%. The instituted BPA was sent 16,357 times across 1,078 patients at risk for hyponatremia. 31% of these patients developed mild hyponatremia (Na = 130-134) and 10% developed moderate (Na < 130). Plasma-lyte usage is on the rise throughout hospitals and will soon become the standard IV fluid solution for surgical patients.

Abstract EP046 Table 2 Hyponatremia rates

Table 2 Hyponatremia Rates

	March 2022	March 2023	p-value
Hyponatremia Rate (Overall)	29%	14%	<0.05
Moderate Hyponatremia Rate (Sodium = 125 – 129)	3.4%	1.3%	<0.05
Severe Hyponatremia Rate (Sodium < 125)	.57%	.22%	<0.05