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Implementing a liberal fluid fasting policy before elective caesarean section

Author(s): N. Ni Leathlobhair¹, D. McMahon¹, H. Ayub¹, S. Immani²

Author(s) Affiliations:

1. Department of Anaesthesiology & ICU, University Hospital Waterford, Waterford

Abstract

Aims

To implement a liberal fluid fasting policy known as 'Sip Til Send' (STS) for women undergoing elective caesarean section in a regional maternity unit. This strategy has been shown to reduce fluid fasting duration and improve patient satisfaction.¹

Methods

We organised education sessions on STS guidelines for relevant healthcare workers. An information leaflet was disseminated to maternity patients on antenatal visits. We surveyed patients before and after initiation of the STS policy to investigate the impact on patient-centred outcomes including fasting times and patient satisfaction.

Results

We surveyed 33 women who adhered to strict fluid fasting prior to elective caesarean section from January to March 2023. We applied the same survey to 37 women post initiation of a STS policy from January to May 2024. Median fluid fasting times were reduced from 12.37 hours to 1.15 hours in the post-implementation group. Patient reported sensations of extreme thirst or thirst were reduced from 76% in the strictly fluid fasted patients to 35% in STS patients. Symptoms of stress, nausea and dizziness were all reduced in the STS cohort.

Discussion

In this regional maternity unit, introduction of a liberal fluid fasting policy significantly reduced fluid fasting times with a positive impact on patients' symptoms and experience of elective caesarean section.

References

1. Wiles MD, Macdonald A. The effect of a 'Sip til Send' policy on patient satisfaction: a quality improvement project. *Anaesth Rep.* 2024 Jan 6;12(1):e12271. doi: 10.1002/anr3.12271. PMID: 38187936; PMCID: PMC10771015

A move to 12-hour weekday Anaesthesia call shifts

Author(s): R. Hollingsworth, J. Coady, S. Yousuf, S. Hoesni.

Author(s) Affiliations: Department of Anaesthesia, Coombe Hospital, Dublin 8, Cork St.

Abstract

Aims

The aim of this single-centre study was to investigate the impact of NCHD's changing from 16-hour to 12-hour weekday call shifts. This change was brought in as part of the IMO-NCHD agreement 2023, which requires an NCHD to work no more than 13 hours per shift.

Methods

A retrospective service evaluation was completed 2 months after the introduction of the 12-hour call shift pattern. An online survey was completed by trainees and consultants participating in on-call duties during this time. We evaluated the impact on work life balance, fatigue, burnout, quality of life, training and patient care.

Results

The results demonstrate a clear trainee preference for 12-hour weekday shifts (87%). The change had a positive impact on NCHD quality of life and work life balance, with no detrimental effect on training or patient care.

Discussion

In conclusion, the results of this service evaluation demonstrate that the move to 12-hour shifts has been beneficial for trainees with an improvement of quality of life and trainee satisfaction within the work environment. There was no perceived negative impact on patient safety or care.

Carnitine Palmitoyl Transferase (CPT) II deficiency- Anaesthetic Management at Elective Caesarian Section

Author(s): N. Van Staden, C. Murphy

Author(s) Affiliations: Department of Anaesthesiology, The Rotunda Hospital, Dublin.

1. Registrar Department of Anaesthesiology, The Rotunda Hospital, Dublin, Ireland
2. Consultant Anaesthesiologist, Department of Anaesthesiology, The Rotunda Hospital, Dublin, Ireland

Abstract

Presentation

We describe the case of a 33 year old primigravida with Carnitine Palmitoyl Transferase II Deficiency (CPT II deficiency), presenting for elective caesarean section.

Diagnosis

CPT2 deficiency is a rare metabolic disorder of long chain fatty acid oxidation. Anaesthetic challenges reported in limited available literature include malignant hyperthermia (MH) susceptibility, propofol infusion syndrome and prolonged neuraxial blockade following spinal anaesthesia.[1] Increased metabolic stress can result in hypoglycaemia, rhabdomyolysis, hyperkalaemia, metabolic acidosis, myoglobinuria and acute kidney failure.

Treatment

National Centre for Inherited Metabolic Disorders recommendations included maximum 3 hrs fasting period, high carbohydrate drinks up to the time of surgery, intraoperative dextrose 20% infusion and restarting oral intake in PACU. MH precautions were in place. A CSE technique using intrathecal prilocaine 2% (2.4 ml), fentanyl and PF morphine, with supplemental epidural lidocaine 2% was used for surgical delivery. Resolution of motor blockade was documented at 10 hrs post CSE. Postoperative diarrhoea resulted in a rise in CK (>3000) which resolved with increased caloric intake. Discharge home was Day 7.

Discussion

This case demonstrates the numerous anaesthetic challenges for consideration in managing a parturient presenting with CPT II deficiency and the importance of specialist input in the perioperative and postpartum period.

1. Rasheed MA, Murphy D. Prolonged neuraxial block following spinal anaesthesia in a patient with carnitine palmitoyl transferase II deficiency undergoing caesarean section. IJOA 2023;55:103895–103895.

Hypersensitive Gag Reflex in Pregnancy During Awake Flexible Bronchoscopic Intubation

Author(s): B. Doyle, P Watters, J. Porter

Author(s) Affiliations: St. James's Hospital, Dublin.

Abstract

Presentation

A 22-year-old patient at 24 weeks' gestation presented with a left-sided submandibular abscess, requiring incision and drainage.

Diagnosis

Airway assessment showed significant submandibular swelling, trismus, dysphagia, and an interdental gap <1cm. Symptoms had worsened over the week despite antibiotics.

Management

Awake tracheal intubation (ATI) was planned prior to induction of anaesthesia. The right nasopharynx and oropharynx were topically anaesthetised using co-phenylcaine spray and lidocaine spray and gel. Despite numbing of the nasopharynx, subjective numbing of the oropharynx, and judicious remifentanil using a target -controlled infusion, the patient's gag was activated by stimulation of the posterior oropharyngeal wall. Attempts to improve topicalisation via nasoendoscopy were poorly tolerated due to increasing gag, retching, and hypersalivation. Additional lignocaine or deeper sedation were deemed unsafe, as SpO₂ was 94% despite high-flow nasal oxygen. The approach was converted to uneventful modified rapid sequence induction with flexible bronchoscope oral intubation.

Discussion

Hyperactive gag reflex affects around 3% of the population¹, and is possibly increased in pregnancy, though is poorly documented in the literature. Dose limitation of lignocaine is important to avoid significant systemic absorption and the use of sedation to suppress the gag reflex is particularly hazardous in pregnancy due to effects on minute ventilation and functional residual capacity.

References:

1. Leder, Steven B. "Gag reflex and dysphagia." *Head & Neck: Journal for the Sciences and Specialties of the Head and Neck* 18.2 (1996): 138-141.

Quantitative Neuromuscular Monitoring availability in Irish Obstetric Units

Author(s): B. Doyle¹, P Watters¹, T. Tan^{1,2}, A. Sherwin¹

Author(s) Affiliations:

1. St. James's Hospital, Dublin.
2. Coombe Hospital, Dublin.

Abstract

Background

The 5th National Audit Project highlighted an increased risk of Accidental Awareness under General Anaesthesia (AAGA) for caesarean section. The potential for profound neuromuscular blockade and AAGA after GA caesarean section is significant as the dosage of rocuronium for RSI is high and duration of surgery is short. Potential underdosing of Sugammadex and altered pharmacokinetics in pregnancy may further elevate these risks. Sugammadex dosing is dependent on depth of neuromuscular blockade, hence neuromuscular blockade should always be quantitatively measured after a GA section and is strongly recommended by the Association of Anaesthetists (AoA)¹. Qualitative neuromuscular blockade monitoring (NBM) has been shown to be unreliable in confirming reversal. This study evaluates the availability of Quantitative NBM in hospitals with obstetric units in Ireland.

Methods

An online survey was distributed to all hospitals in Ireland providing obstetric anaesthesia, with responses received from 8 of 19 eligible anaesthesia departments (42% response rate).

Results

Quantitative NBM was available in 75% (6) of respondent sites, however only one site had dedicated Quantitative NBM in every operating theatre.

Discussion

Lack of dedicated Quantitative NBM in every operating theatre in most Irish hospitals, as per AoA guidelines, presents a safety risk for women undergoing emergency caesarean section under GA.

References

- 1) Klein, A. A., et al. "Recommendations for standards of monitoring during anaesthesia and recovery 2021: Guideline from the Association of Anaesthetists." *Anaesthesia* 76.9 (2021): 1212-1223.

An audit of critical care activity at the Rotunda Hospital in 2023.

Author(s): S. Ring¹, E. Elshabrawy¹, M Kennelly^{1,2,3}, T. Drew^{1,4,5}

Author(s) Affiliations: ¹ Rotunda Hospital, Dublin. ² The Mater Hospital, Dublin, ³ UCD school of Medicine and Health Sciences, ⁴ Beaumont Hospital, Dublin. ⁵ RCSI University of Medicine and Health Sciences.

Abstract

Aims

The aim of this audit was to review high dependency unit (HDU) activity during the year of 2023.

Methods

Data was compiled and cross checked from a manual record of HDU admissions and electronic healthcare records.

Results

In 2023, 353 women required admission to the Rotunda HDU, 325 women from the obstetric and 28 from the gynaecology services. This represents an increase of 50 admissions (17%) from 2022. Seven readmissions occurred, with one patient readmitted to HDU twice, marking a readmission rate of 2%. Obstetric haemorrhage was the most frequent indication for HDU admission. (n=170, 52%) (figure 1) Gynaecology admissions rose significantly in 2023; nearly double that of 2022. In 2023, 82 arterial lines (23% of women) and 8 central venous access lines (2% of women) were maintained in HDU. There were 19 inter-hospital transfers of patients from the Rotunda HDU. Additionally 21% of days saw an occupancy of 3 or even 4 women in need of HDU level care.

Discussion

There has been a significant increase in admissions over recent years, often surpassing capacity. This data demonstrates strong support for increasing HDU capacity.

Improving Maternal Satisfaction and Analgesia through the Introduction of Ambulatory Labour Epidurals

M Leonard¹, D Davitt², M Dado², L Johnson², T Tan¹

1. Department of Perioperative Medicine and Anaesthesiology, The Coombe Hospital, Dublin
2. Department of Midwifery, Delivery Suite, The Coombe Hospital, Dublin

Aims

This quality improvement project aimed to introduce a low-concentration, ambulatory labour epidural analgesia regimen, aligning with international recommendations and responding to patient interest in mobility during labour.^{1,2}

Methods

Initiated in 2022, the project included three Plan-Do-Study-Act (PDSA) cycles to test feasibility, implement and refine the ambulatory epidural protocol.

Analgesia was initiated using bupivacaine 0.1% 10ml with fentanyl 100mcg and maintained by programmed and patient top-ups using ropivacaine 0.1% plus fentanyl 2mcg/ml. Primary outcomes included patient satisfaction, conversion to the standard regimen, safety (motor block, falls), and effectiveness for surgical anaesthesia. Secondary outcomes included midwife satisfaction and comparisons of labour outcomes with standard epidurals.

Results

Between April and August 2024, 160 ambulatory epidurals were performed. High satisfaction with analgesia and mobility was reported by patients and midwives (median scores of 10 out of 10). 18 patients (11%) converted to the standard regimen. Surgical anaesthesia was effective in 41 (98%) of cases. Labour outcomes were analysed using Fischer's exact test, showing no significant difference compared to the standard regimen. There were no adverse safety events.

Discussion

The project's success supports continued refinement and plans for broader implementation of the ambulatory epidural regimen, aiming to further enhance patient mobility and satisfaction whilst ensuring safety.

References

1. Lawrence A, Lewis L, Hofmeyr GJ, Styles C. Maternal positions and mobility during first stage labour. The Cochrane database of systematic reviews. 2013;4(10):CD003934.
2. Halliday L, Kinsella M, Shaw M, Cheyne J, Nelson SM, Kearns RJ. Comparison of ultra-low, low and high concentration local anaesthetic for labour epidural analgesia: a systematic review and network meta-analysis. *Anaesthesia*. 2022 May 24.

Knotted Labour Epidural Catheters – What to Do?

Author(s): S. Khan¹, M. Baagahah², **M. A. Khan**³, S. Arfin⁴, K. Caulfield⁴.

Author(s) Affiliations: Department of Anaesthesiology, St. Luke's General Hospital, Kilkenny, Ireland.

Abstract

Presentation

Epidural catheter knotting within the epidural space is a rare complication. In our case, a lumbar epidural was sited for labour analgesia in a 24 year old primigravida for induction of labour. Catheter was inserted successfully on the first attempt, with loss of resistance at 5cm, with 5cm left within the epidural space. The labour analgesia epidural was topped-up successfully for a C-section 9hours later for failure to progress.

Diagnosis

Post C-section, resistance was encountered while removing the catheter despite multiple attempts with gentle manipulation.

Treatment

The patient was assisted into a sitting position and encouraged to cough with continuous gentle traction. Successful removal of the epidural catheter showed a knot at 4cm from the tip.

Discuss

Literature review concluded that 4-5cm of epidural catheter should remain in the epidural space, greater than 5cm can increase risk of complications. If presented with a difficult catheter removal, recommended manoeuvres include applying slow, continuous pressure to avoid breakage; having the patient assume the same position as during insertion or positioning the patient in the lateral decubitus position; reapplying gentle traction after several hours; injecting normal saline through the catheter, which may reveal if the catheter is knotted. Interventional Radiology and Surgical expertise is often required.

Evaluation of Patient Satisfaction and Quality of Recovery Post Caesarean Section: A Single Centre Prospective Observational Study

Author(s): J Fitzgibbon, R Ffrench-O'Carroll, S MacColgain, P O'Concur

Author(s) Affiliations: Department of Anaesthesia, The National Maternity Hospital, Holles St

Abstract

Aims

Patient satisfaction and quality of recovery (QoR) are important patient-reported outcomes and quality metrics. Quality of recovery tools integrate several components of patient recovery and provide a reliable and reproducible measure of health status after surgery(1). Patient satisfaction on the other hand, is a subjective measure of patient experience, influenced heavily by patient expectations in addition to cultural, socio-demographic, cognitive and affective factors(2). Both these measures are important quality metrics.

Methods

Approval for the study was granted. Quality of recovery was assessed using the Obstetric Quality of Recovery Score (ObsQoR-10), while satisfaction was assessed using the Maternal Satisfaction Scale for Caesarean Section scale (MSCS). Both measures were assessed using paper questionnaires at 24 hours post caesarean delivery. Qualitative data was assessed using free text responses.

Results

Of the 52 questionnaires collected, 98% were fully completed.

ObsQoR-10 scores; Maximum and minimum total score is 100 and 0 respectively. Median (IQR[range]) score was 79 (73-87[35-100]). Lowest scoring domain was pain, with median 5(3.5-6[0-10]). Highest scoring areas were being able to carry out personal hygiene and ability to hold the baby.

MSCS scores; Maximum and minimum total score was 154 and 22 respectively. Median (IQR[range]) was 129 (117-142[90-153]). Highest scoring domains were feeling the anaesthetic was safe for the patient, safe for the baby and communication with staff. Lowest scoring domains were itchiness, shivering and pain on insertion of needle during spinal. Free text comments provided largely positive feedback with themes of feeling the patient was at the centre of the care.

Discussion

Baseline ObsQoR and maternal satisfaction scores were high. Areas identified for improvement include the presence of pain, shivering, itchiness and nausea post operatively.

References

1. Léger M, Campfort M, Cayla C, Lasocki S, Rineau E. Postoperative quality of recovery measurements as endpoints in comparative anaesthesia studies: a systematic review. *British journal of anaesthesia*. 2021;126(6):e210-e2.
2. Heidegger T, Saal D, Nübling M. Patient satisfaction with anaesthesia – Part 1: Satisfaction as part of outcome – and what satisfies patients. *Anaesthesia*. 2013;68(11):1165-72.

Pain Management after Caesarean Section

A. Sherif¹, R. ffrench-O`Carroll^{1,2}, O. Elabbasy¹

1. Anaesthesia Department, National Maternity Hospital, Dublin
2. University College Dublin.

Abstract

Aim

To evaluate post caesarean section (CS) pain management practices in our institution compared to NICE guidelines and to identify areas for improvement.

Methods

A retrospective audit examined data of 50 CS patients in July 2024 after audit committee approval. Data collected included demographics, perioperative analgesia practices, pain scores, analgesic side effects experienced and levels of monitoring.

Results

There were 27 (54%) elective cases and 23 (46%) emergency cases. Anaesthesia type included spinal 37 (74%), epidural 9(18%), general anaesthesia (GA) 3 (6%), GA+ Epidural 1(2%). All patients who had neuraxial anaesthesia received intrathecal/epidural opioids, all patients who had GA received morphine PCA postoperatively, while none received trunk blocks. All patients received 4 hourly monitoring on the postnatal ward despite 10 (20%) having risk factors for respiratory depression. Time for first mobilization was not documented. Side effects experienced included Itching 7(14%), nausea & vomiting 3 (6%), respiratory depression 0 (0%), while 2 (4%) patients were discharged home on opioids. Median pain scores (interquartile range, IQR) were 0(0-3) at 24 hours and 0(0-2) at 48 hours.

Discussion

Perioperative analgesia practices largely follow NICE guidelines in our institution, although patients at risk of respiratory depression do not receive recommended levels of monitoring post-operatively.

An audit reviewing epidural placement in patients with scoliosis

Author(s): Z. Laila¹, S. Hannon¹, I. Browne¹

Author(s) Affiliations: Department of Anaesthesia, National Maternity Hospital, Holles street, Dublin 2.

3. Department of Anaesthesia, NMH.

Abstract

Aims

The aim of this review was to assess the outcomes of epidural placement in all patients with scoliosis over the past 3 years in our hospital.

Methods

We conducted a retrospective chart analysis of all patients who had a documented history of scoliosis who received an epidural over the last three years using the electronic data base MN-CMS.

Results

38 patients were identified. 12 patients (31.57%) had difficulty with siting the epidural and required >1 attempt (ranging from 2 (50%), 3 (41.66%), 6 (8.33%)). 1 (2.63%) patient had surgical correction of scoliosis and required 2 attempts at insertion. No epidurals needed to be re-sited, however 7 (18.42%) patients required an epidural top for patchy block.

Discussion

Scoliosis refers to lateral curvature of the spine, vertebral body rotation, and angulation of the rib. Altered anatomy in scoliosis may make neuraxial procedures difficult and resulting in inadequate analgesia or anesthesia¹. Success rates for epidural and spinal anaesthesia in uncorrected scoliosis are almost comparable to those without spinal deformity, however the procedure may take longer and may require more attempts² which is consistent with our data and can be used to reassure patients attending our hospital.

1. <https://resources.wfsahq.org/atotw/neuraxial-anesthesia-for-scoliosis-and-previous-spinal-surgery-in-pregnancy/>
2. Chan EW, Gannon SR, Shannon CN, Martus JE, Mencio GA, Bonfield CM. The impact of curve severity on obstetric complications and regional anesthesia utilization in pregnant patients with adolescent idiopathic scoliosis: a preliminary analysis. *Neurosurgical Focus*. 2017 Oct 1;43(4):E4.



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Small Things Like These are Important

Author(s): Dr A. Tahir

Author(s) Affiliations: Department of Anaesthesiology, Portiuncula University Hospital, Ballinasloe, Co. Galway.

1. Affiliation of First Author
2. Dr D. Shahwar, Dr N. Shayob, Dr V. Sudhir, Dr. Á Ní Chonchubhair.

Abstract

Presentation

35yr old woman, Gravida 2, Para 1. One previous Caesarean Section. 10 years previously, she developed an epidural haematoma following a thoracic epidural. Temporary paresis lasting months had occurred. Neuraxial anaesthesia was not advised for this pregnancy.

At night, an emergency Caesarean Section (Category 2) was called. Consultant Anaesthesiologist was contacted, as general anaesthesia was planned. Patient's last meal was 4.5 hours previously.

Diagnosis

During induction of anaesthesia, the patient vomited, leading to aspiration. Anaesthesiology team turned the patient, suctioned the airway and intubated. Surgery proceeded and a healthy baby was delivered. Therapeutic bronchoscopy was performed intraoperatively as aspiration had occurred. Patient was extubated at end of surgery and admitted to ICU on humidified oxygen. Over the next 48 hours she developed severe ARDS secondary to aspiration pneumonitis.

Treatment

60 hours after surgery, patient required intubation and ventilation. Advice was sought from tertiary hospital ICU and ECMO centre. Improvement occurred over 10 days and patient was discharged home after 23 days.

Discussion

In high risk cases, only oral fluids are allowed in labour.

Premedication prior to Caesarean Section should include antacids and anti-emetics.

Scheduling high-risk cases during regular hours and communication between relevant teams is essential for optimal management.

Audit on the current anaesthetic practice for epidural anaesthesia in labour in a Model 3 hospital

Author(s): C. Murray, M. Krupova

Author(s) Affiliations: Department, Hospital, Location.

1. Department of Anaesthesiology, Cavan General Hospital, Cavan, Ireland
2. Department of Anaesthesiology, Cavan General Hospital, Cavan, Ireland

Abstract

Aims

To explore current epidural anaesthesia practice for labour analgesia, including conversion to surgical anaesthesia for Caesarean section.

Methods

All anaesthetists were surveyed regarding epidural placement technique, equipment, top-up, conversion to surgical anaesthesia, and medication choice. The data was collected, basic descriptive statistical analysis performed, and results presented to the department.

Results

6 consultants and 8 NCHDs were included. Epidural was more common (57%) than combined-spinal epidural. Mean length of catheter in epidural space was 5.7cm. Bupivacaine, either 0.125% or 0.25%, was favoured (57%) for the test dose, with 0.25% bupivacaine + 50-100mcg fentanyl favoured (50%) for the establishing dose. Top-ups were most commonly (71%) 5-10mls bupivacaine, either 0.125% or 0.25%. Conversion to surgical anaesthesia was most frequently (57%) 2% lidocaine + 0.5% bupivacaine in 1:1 mixture.

Discussion

There is little consensus in the literature regarding the optimal epidural regimen. Different combinations and concentrations of drugs are known to have varying effects. This study shows that our departmental practice mirrors that of the wider anaesthetic community in that there is little consensus. With our transition to a PIEB/PCEA model, we anticipate a more standardised approach that may enhance quality of care. Post implementation reaudit will determine if there has been convergence of anaesthetic practice and improved patient outcomes.

Elective Caesarean Section with Epidermolysis Bullosa Simplex

Author(s): J. Connaughton^a, M. Blajeva^a, N. Healy^a

Author(s) Affiliations:

^aDepartment of Perioperative Medicine, The Coombe Hospital, Dublin.

Abstract

Presentation

We present the case of a parturient with epidermolysis bullosa (EB) simplex, who presented to our anaesthetic pre-operative assessment clinic at 34+5 weeks gestation for operative planning and optimisation for an elective caesarean section due to a breech presentation.

Diagnosis

EB simplex is the most common variant of EB and occurs from defects in proteins keratin 5 and keratin 14. Minor mechanical trauma such as handling or dressing adhesives lead to cleavage within the basal layer of keratinocytes in the epidermis, resulting in severe blistering. Our patient was diagnosed with EB simplex in childhood and was mainly affected by palmoplantar and oral mucosal blistering. She had a strong family history of EB, with several family members affected, thus there was concern for foetal inheritance.

Treatment

Following pre-operative assessment and MDT co-ordination we were able to plan and alter our intra-operative management to minimise further morbidity associated with new EB blistering and infection. Monitoring equipment was altered to reduce skin trauma. Specific EB licensed adhesive dressings were used in place of traditional ones.

Discuss

EB poses multiple anaesthesia considerations, including extra-cutaneous disease and potential for difficult airway management. Our case demonstrates thorough preoperative assessment and coordination to ensure a safe perioperative journey and optimal outcomes for mother and baby.

Is it OK if I eat this Mars Bar?

Authors: Dr Andrei Mihaescu, Dr Zahoor Ahmad, Dr Jawad Hannan, Dr Áine Ní Chonchubhair.

Authors Affiliations: Department of Anaesthesiology, Portiuncula University Hospital, Ballinasloe, Co. Galway.

Abstract

We aimed to evaluate the awareness and adherence of anaesthesiologists, obstetricians, midwives and theatre nurses to fasting guidelines for women undergoing elective Caesarean Section and for women in labour.

47 staff completed a 6 question questionnaire regarding knowledge of our hospital's fasting guidelines.

Results

Fasting prior to elective Caesarean Section:

- 91% correctly answered either 2 hour fast from clear fluid with small sips allowed or a 2 hour fast from clear fluid.
- 57% correctly answered a 6 hour fast from food (light meal).

In relation to labour, hospital guidelines state that once labour is established, the patient should fast from food. Clear fluids are allowed.

Fasting in established labour, low risk pregnancy:

- 45% correctly stated clear fluids only allowed
- 45% stated snacks and drinks allowed
- 10% stated no fasting necessary.

Fasting in established labour, high risk of requiring obstetric intervention

- 85% correctly answered clear fluids only allowed
- 15% allowed snacks and fluids.

52% correctly stated isotonic glucose drink was the recommended oral fluid in labour.

Discussion

Knowledge of the fasting guidelines prior to elective Caesarean Section was good. Fasting during labour is controversial, with recent trends allowing a less restrictive regimen. Ongoing education is necessary. Guidelines require continual modification.

An audit of High Dependency Unit admission documentation in the Rotunda hospital

Author(s): S. F. Zaidi, T. Drew, H. Tawfik

Author(s) Affiliations: Department of Anaesthesia, The Rotunda Hospital, Dublin.

Abstract

Aims

To determine the current standard of High Dependency Unit admission documentation in the Rotunda Hospital

Methods

Population: Maternal & Gynaecology

Total Sample size: n=100 (50+50)

Audit Method: Retrospective chart review of HDU documentation before and after implementation of HDU template

Tool used: Data entry Enter 1 = Yes, 0 = No, n=Not applicable

Standard Criteria: 10 Questions for compliance against number of incoming patients

Statistical test: Mann–Whitney U test

Results

Pre-implementation: Compliance in most categories was between **30%** and **100%**, with some records missing critical information.

Post-implementation: **100%** compliance ($p < 0.05$) in seven of out of the ten data components, indicating that the new HDU template successfully standardized documentation and improved quality across all areas.

Discussion

Structured data entry has increased compliance in automating parts of the care process and provides reliable measure of quality improvement. Standardised documentation is needed to eliminate variability in patients care.

General anaesthesia for Caesarean Section

Author(s): A. Impiumi, S. Pears, P. Popivanov

Author(s) Affiliations: Department, Hospital, Location.

4. Department of Anaesthesia, The Coombe Hospital, Dublin
5. Department of Anaesthesia, The Coombe Hospital, Dublin
6. Department of Anaesthesia, The Coombe Hospital, Dublin

Abstract

Aims

Identify the percentage of Caesarean Sections (CS) performed under general anaesthesia (GA) by category and compare with the Royal College of Anaesthetists (RCOA) recommendations¹.

Methods

The data was collected prospectively between February and June 2024 and included all CS performed during that period.

Results

A total of 848 CS were performed during this period.

446 (53%) CS were category 4. Seven (1.56%) of them were performed under GA: 4 (0.9%) due to contraindications to neuraxial anaesthesia, 3 (0.67%) due to failed neuraxial anaesthesia

358 (42%) CS were category 2 or category 3. Fourteen (3.91%) of them were performed under GA: 3 (0.83%) due to contraindication to neuraxial anaesthesia, 10 (2.79%) due to failed neuraxial anaesthesia and 1 (0.27%) case was converted due to prolonged surgery.

44 (5%) CS were category 1. Twenty-two (50%) of them were performed under GA: 19 (43%) due to lack of time to perform neuraxial anaesthesia or to wait for it to work, in 2 (4.6%) cases the epidural in situ wasn't working and in 1 (2.3%) case there was a contraindication to neuraxial technique.

Discussion

The percentage of CS for each category done under GA is compliant with the standards recommended by the RCoA.

1. Purva M, Kinsella SM. Caesarean section anaesthesia: technique and failure rate. In: Cheresheva M, Johnston C, Colvin JR, Peden CJ, editors. Raising the Standards: RCoA quality improvement compendium. London: The Royal College of Anaesthetists; 2020. p. 254-255

Current preferences and awareness within department of anaesthesia regarding siting and management of intrathecal catheter in obstetric patients.

Author(s): A. Naz, J. Hashmi

Author(s) Affiliations: Department of Anaesthesia, Our Lady of Lourdes Hospital, Drogheda.

1. NCHD at Department of Anaesthesia, Our Lady of Lourdes Hospital, Drogheda.
2. Consultant Anaesthetist Department of Anaesthesia, Our Lady of Lourdes Hospital, Drogheda.

Aims

The primary objective of this audit is to identify the current preferences and awareness within department of anaesthesia regarding siting and management of intrathecal catheter in obstetric patients.

Methods

A cross sectional questionnaire-based survey among consultant and non-consultant anesthetist was conducted. A Google form was used and response was directly downloaded. The audit included a sample of 40 anaesthesia providers from anaesthesia department. Participation was voluntary. Data was analysed using descriptive statistics.

Results

We received 73.3 % response. 69.7% responder were non-consultants, while 30.3% were consultants.

Regarding the preferred approach after an ADP in a patient without an anticipated difficult epidural, 57.6% of respondents preferred to resite the epidural catheter, 18.2% favored intrathecal catheter placement. In cases where an ADP occurred in patients with anticipated difficult epidurals, 12.1% preferred to resite the epidural catheter, 60.6% opted for intrathecal catheter placement.

Lastly, a significant majority of respondents (93.9%) expressed a desire to have a protocol for the management of intrathecal catheter placement in such patients.

Discussion

This audit highlights the variability in current practices and preferences for managing accidental dural puncture (ADP) during obstetric epidural procedures within an Anaesthesia department.

In our survey 93.9% of respondents expressed a desire for a standardized protocol to manage intrathecal catheter management if opted after ADP. The department is now working on developing a policy Currently its under review by drugs and therapeutic committee.

Re-Audit the Incidences of Anaemia in Parturient Undergoing Elective Caesarean Section

Author(s): S. Elmahgoub, R. Wilson, R. Ali, M. Kamran, T. Tan.

Author(s) Affiliations: (For all authors) Department of Obstetric Anaesthesia, Coombe Women and Infant's Hospital, Dublin, Ireland.

Abstract

Aims

To assess the incidence of anaemia in women undergoing elective Caesarean sections (ELCS) and evaluate the effectiveness of a protocol introduced after a 2021 audit. This protocol implemented routine haemoglobin checks at 28 weeks gestation to reduce perioperative anaemia.

Methods

A retrospective review of 1,399 parturient who underwent ELCS between January and December 2022 was conducted. Anaemia was classified by WHO standards (Hb <11g/dL) and British Committee for Standards in Haematology guidelines (Hb <10.5g/dL). Postoperative anaemia was defined as Hb <10g/dL. Data were compared to findings from a 2021 audit involved 1,579 parturient.

Results

In 2022, 277 (19.7%) of patients met the WHO criteria for anaemia, 141 (10.3%) met the British standard, and 441 (31.5%) exhibited postoperative anaemia. Compared to 2021 rates 252 (15.95%), 130 (8.2%), and 407 (25.77%), respectively, there was an increase in anaemia incidences across all categories.

Discussion

The findings indicate; that protocol did not effectively reduce anaemia rates, suggesting limitations in early screening alone to prevent perioperative anaemia. This increase may reflect gaps in follow-up care or supplementation adherence. Future strategies could include more frequent Hb monitoring, enhanced iron supplementation protocols, and education on dietary iron intake. A multidisciplinary approach may improve adherence and reduce maternal anaemia risks.

Outcomes after Elective Caesarean Section according to ERAS Standards

Author(s): R. Ní Dhomhnaill, A. Impiumi, R. ffrench-O'Carroll

Author(s) Affiliations: Department, Hospital, Location.

7. Department of Anaesthesia, NMH, Dublin
8. Department of Anaesthesia, NMH, Dublin
9. Department of Anaesthesia, NMH, Dublin

Abstract

Aims

Enhanced Recovery after Surgery (ERAS) is a multidisciplinary evidence-based approach for improving care in surgical patients (1). We aimed to assess outcomes after elective caesarean section (CS) according to ERAS standards (2).

Methods

With approval from the hospital audit committee, we conducted a retrospective chart analysis of 51 elective CS cases during August 2024 using the electronic health record MNCMS.

Results

The median day of discharge was post-operative day 3. Preoperatively, the average fasting time for solids was 14.49h. 51 (100%) were screened for anaemia, with 4 (50%) of those anaemic receiving treatment. Intraoperatively, 51 (100%) patients had neuraxial anaesthesia with intrathecal fentanyl and morphine and received antiemetics. 44 (86%) received antimicrobials pre-incision and a vasopressor infusion. In 9 (17.6%) cases the systolic blood pressure was maintained within 90% of baseline. While all patients received active warming, 5 (9.8%) experienced hypothermia. Postoperatively, 51 (100%) patients received VTE prophylaxis, and regular NSAIDs and 50 (98%) received regular paracetamol. No patient mobilized within 8h of neuraxial anaesthesia, 2 (3.9%) had their urinary catheter removed before 12h, and 2 (3.9%) ate within 6h of surgery.

Discussion

Our audit identified strengths and areas for improvement in ERAS compliance, providing a foundation for its implementation in our hospital.

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An audit of thromboprophylaxis administration and documentation of motor recovery after central neuraxial blockade for emergency lower segment caesarean section following introduction of the RE-MOVE initiative

Author(s): C. Murphy¹, T. Banon¹, S. Sadiq², R. Kearsley², A. Miglani²

Author(s) Affiliations:

10. Specialist Anaesthesiology Trainee, The Rotunda Hospital, Dublin, Ireland

11. Consultant Anaesthesiologist, The Rotunda Hospital, Dublin, Ireland

Abstract

Aims

This audit aimed to evaluate the documentation of motor recovery and the administration of prophylactic anticoagulants following central neuraxial blocks (CNBs) in patients undergoing emergency lower segment caesarean section (eLSCS).

Methods

A retrospective audit was conducted on 100 patients who underwent eLSCS with CNBs between March-May 2024 at The Rotunda Hospital. After a two-month staff education period and introduction of the RE-MOVE (REcovery after spinal anaesthetic, MOve your legs from the bed, VEnous thromboembolism protection) wristband, a re-audit was conducted.

Results

Documentation of straight leg raise (SLR) assessment at 4-hours improved from 7% to 23% post-intervention. Postoperative anticoagulant prescription compliance (within 4-6 hours) improved from 52% to 78% with administration compliance rising from 19% to 31%.

Discussion

CNBs are commonly used in obstetrics for analgesia and anaesthesia, but not without risks. Early detection of serious complications is essential. In 2020, the Association of Anaesthetists and Obstetric Anaesthetists' Association recommended SLR assessment at 4-hours post-CNB¹. Although the risk of vertebral canal haematoma (VCH) post-CNB is low, 7 out of 8 cases of VCH mentioned in the third National audit project occurred in patients on anticoagulants². The RE-MOVE initiative not only empowered patients and improved documentation and prescribing compliance, but also enhanced patient safety by preventing the administration of anticoagulants before motor recovery.

References

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2. Wildsmith T, Scott N, Cook TM. Vertebral canal haematoma. In: 3rd National Audit Project of the Royal College of Anaesthetists: Major Complications of Central Neuraxial Block in the United Kingdom. 2009: 55–62. <https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/NAP3%20report.pdf> (accessed 15/10/2024).

Beyond Pain Relief: Assessing Maternal Satisfaction After Epidural Analgesia at Mayo University Hospital

Author(s): Dr. Muhammad Ahmad Khan, Dr. Ahsan Altaf, Dr. Adil Sher

Author(s) Affiliations: Mayo University Hospital, Castlebar, Mayo

- 1.SHO, Department of Anaesthesiology, MUH.
- 2.SAT SHO, Department of Anaesthesiology, MUH.
3. Consultant Anaesthetist, Department of Anaesthesiology, MUH.

Abstract

Aims

Epidural analgesia is widely regarded as an effective method for managing labour pain. This audit aimed to assess maternal satisfaction with epidural analgesia at MUH, following the AAGBI guidelines. Secondary objectives included evaluating the timeliness of the procedure, communication during the consent process, side effect management, and overall maternal experience.

Methods

[Redacted content]

Methods

This audit was conducted over a two-week period with standardised questionnaire was used to gather feedback on maternal satisfaction to ensure compliance with AAGBI guidelines. Key points included pain relief effectiveness, timeliness of epidural administration, quality of communication, and side effect management.

Results

85% of women reported adequate pain relief. 80% received the epidural within 15 minutes of their request.70% of patients felt well informed about the procedure and side

effects. However, 15% experienced side effects, with 10% expressing dissatisfaction regarding side effect management.

Over 80% of respondents expressed overall satisfaction with their experience

Discussion

While most women were satisfied with the pain relief provided, improvements are necessary in communicating potential risks and managing side effects. Delays in the procedure were also noted as a key area for improvement to enhance overall maternal satisfaction.

Bilateral subdural hygromas following accidental dural puncture: Is it as rare as we think?

Author(s): R McCarthy, D Burke, J Burton

Author(s) Affiliations: Department of Anaesthesiology, Our Lady of Lourdes Hospital, Drogheda.

Abstract

Presentation

A 30-year-old parturient reported a headache 20 hours following accidental dural puncture during labour epidural insertion. It was positional, mild-moderate in severity with no focal neurological signs.

Postpartum, she developed hypertension and was diagnosed with pre-eclampsia. A week later, the headache became severe. She developed a left 6th cranial nerve palsy, with diplopia exacerbated on left lateral gaze and a failure of complete abduction of the left orbit. Her blood pressure was 140/90mmHg.

Diagnosis

A post-dural puncture headache (PDPH) was the most likely diagnosis. Differential diagnosis included primary headache, PET, ICH, CVST and PRES. CT-Brain revealed bilateral fronto-parietal subdural hygromas (SH) without evidence of raised ICP. Neurology and neurosurgery were consulted and no contraindications to an epidural blood patch (EBP) were identified.

Treatment

Eight days following dural puncture, an EBP was performed. The headache immediately resolved. The 6th cranial nerve palsy resolved within a week of EBP. Neurology arranged an MRI-Brain to further assess for causes of localising neurology and a demonstratable CSF leak.

Discuss

There is a role for neuroimaging in select cases of PDPH prior to EBP intervention; those with localising neurological signs or atypical symptoms.

SH is a rare complication of dural puncture¹ and may progress to subdural haematomas if left untreated. Timely EBP can result in resolution of SHs^{1,2}.

References

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When Does an Epidural Blood Patch Become an Epidural Hematoma?

Author(s): X. Spahillari¹, L. Murphy¹, N. Barrett¹, T. Feeley¹

Author(s) Affiliations: 1. Department of Anaesthesia, Intensive Care and Pain Medicine, University Hospital Limerick, Limerick

Abstract

Presentation

A 36 year old woman, who had previously undergone an epidural placement for labour analgesia, presented with frontal headache and other symptoms consistent with post-dural-tap puncture headache (PDPH). At 36h post-dural-tap, the patient underwent an epidural blood patch (EBP) at L3/L4 with a volume of 25ml of blood. Despite significant improvement of symptoms initially, neck stiffness reoccurred, and 47h after the first EBP, the patient underwent a second blood patch at L2/L3 with a volume of 20 ml. Four days post procedure the patient returned with new onset back pain and leg weakness.

Diagnosis

An MRI lumbar spine was done which excluded the presence of an epidural hematoma but showed a disc bulge at L5/S1 with nerve compression.

Treatment

The patient was reassured and discharged home. She was followed up over the phone a week later where she reported her symptoms had resolved.

Discuss

There is yet to be found a consensus regarding the optimal volume of blood to be injected during an EBP, but our case report shows that despite the significant volume of blood injected within a short period of time, imaging showed no evidence of epidural hematoma four days after the procedure.

Stop the Bleed: NovoSeven to the Rescue!

Author(s): M. Blajeva, J. Goh, J. Finlay

Author(s) Affiliations: Department, Hospital, Location.

1. Department of Anaesthesia and Perioperative Medicine, The Coombe Hospital, Dublin
2. Department of Anaesthesia and Perioperative Medicine, The Coombe Hospital, Dublin
3. Department of Anaesthesia and Perioperative Medicine, The Coombe Hospital, Dublin

Abstract

Presentation

A 37 year old with a history of platelet dysfunction presented for induction of labour. She had a previous SVD without excessive bleeding. She suffered a uterine rupture in labour and underwent an emergency caesarean hysterectomy under general anaesthetic. This was associated with a massive haemorrhage, refractory to standard treatments.

Diagnosis

The patient had a known diagnosis of autosomal dominant thrombocytopenia and was under the care of haematology at the National Coagulation Centre. An MDT plan was in place for the management of labour and haemorrhage

Treatment

Tranexamic acid was given in labour. The intraoperative haemorrhage was managed with desmopressin, uterotonics, red cell concentrate, fibrinogen and platelets. The patient underwent an emergency hysterectomy for continued blood loss. Under haematology guidance NovoSeven was administered.

Discuss

NovoSeven, dosed at 90 mcg/kg, is a novel and effective addition to the management of peripartum haemorrhage when other uterotonics have been insufficient to achieve haemostasis.

A collaborative multidisciplinary approach to nursing education in obstetric critical care

Authors: D. McMahon^{1,2}, P. Watters², N. Naidoo¹, N. Higgins¹

Authors Affiliations:

1. Department of Anaesthesia, National Maternity Hospital, Holles St, Dublin.
2. Department of Anaesthesia & Critical Care, St James's Hospital, Dublin.

Aims

Specialist obstetric hospitals frequently care for patients who are critically unwell. There is an expectation that nursing and midwifery staff can deliver this care and HSE guidelines mandate that they have appropriate critical care competencies to achieve this¹. We aimed to design and implement an education programme on the care of the critically ill patient for nurses and midwives working in a specialist obstetric hospital providing an opportunity to acquire and maintain necessary competencies¹.

Methods

A critical care study day was arranged which nurses and midwives were invited to attend. An education programme was designed combining lecture content and interactive small group workshops delivered by facilitators from anaesthesia, obstetric, medical and nursing backgrounds. A survey of attendees was completed to assess the impact of the study day.

Results

There were 32 participants at the study day. Feedback was obtained from 29 (91%) attendees demonstrating unanimously that the course content was useful and improved knowledge specific to obstetric critical care with strong potential for clinical application.

Discussion

An interactive study day delivered by a multidisciplinary faculty was an effective means to teach and maintain competencies for nurses and midwives delivering care to critically ill obstetric patients.

References:

1. Health Service Executive: Clinical Strategy & Programmes Division: Obstetric & Gynaecology, Anaesthetic and Critical Care Programmes. Guidelines for the Critically Ill Woman in Obstetrics. Dublin: 2014. Available from:

<https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/guidelines-for-the-critically-ill-woman-in-obstetrics.pdf>

VTE Prophylaxis post Caesarean Section in the Coombe University Hospital

Author(s): S. Al Mukhaizeem¹, J Connaughton¹, J Coady¹, W Ahmed¹, P Duddy², S Ishtiaq¹

Author(s) Affiliations:

1. Department of Anaesthesiology, Coombe University Hospital, Dublin
2. Department of Pharmacy, Coombe University Hospital, Dublin

Abstract

Aims

Ensure all patients undergoing Caesarean section receive appropriate post-operative VTE prophylaxis

Methods

Retrospective chart analysis of all patients undergoing a Caesarean section between 09/09/24 –18/09/24. Local hospital guidelines were used to determine appropriateness of prophylactic dose.

Results

40 patients were included (n=40). 100% (n=40) were prescribed post-op pharmacological VTE prophylaxis. Of these, 92.5% (n=37) of doses were appropriate.

Discussion

Dosing errors had been made in 7.5% (n=3) of cases. These were all underdosing of patients whose booking weight was marginally (1 - 2.6 kg) higher than the guideline's cutoff point.

Royal College of Obstetrics & Gynaecology (RCOG) 2015 VTE prophylaxis guidelines (1) state "All women should undergo a documented assessment of risk factors for VTE in early pregnancy or prepregnancy." 97.5% (n=39) of cases had no antenatal VTE risk stratification completed.

These findings will be presented at our Anaesthesiology department's next audit conference. We will also collaborate with our Obstetrician colleagues to ensure that all patients have a

VTE risk stratification completed at their booking visit. A re-audit will be performed in 6 months.

References:

1. Royal College of Obstetrics and Gynaecology. Reducing the Risk of Venous Thromboembolism during Pregnancy and the Puerperium, Green-top Guideline No. 37a. 2015 April.

An audit and quality improvement project on labour epidural re-siting

Authors: B. Mulholland, J. Coady, S. Pears, N. Healy, S. Smith.

Authors Affiliations:

12. Department of Anaesthesiology, The Coombe Hospital, Dublin.

Abstract

Aims

The primary aim was to determine labour epidural re-site rate at our maternity unit. The secondary aim was to assess the incidence of failed epidural top-up for c-section, where general anaesthesia (GA) was subsequently required.

Methods

This prospective audit was conducted over a 1 month period. Cases of re-sited epidurals were recorded prospectively and overall rate was calculated. We separately examined all cases of emergency c-sections performed under GA to identify how many were due to failed epidural top-up.

Results

4% (n=10) of labour epidurals were re-sited, while 20% (n=1) of emergency c-sections under GA involved a failed epidural top-up.

Discussion

The RCoA recommends re-site rates below 15%⁽¹⁾, and epidural failure rate is quoted at ~13%⁽²⁾. Inadequate re-site rates could increase the risk of failed epidural top-up for emergency c-sections, increasing likelihood of conversion to GA. This audit represents the first phase of a QI project aimed at promptly identifying and troubleshooting sub-optimal epidurals, improving the quality of labour analgesia and reducing the incidence of failed epidural conversion for emergency c-section. A standardized pathway will be introduced for troubleshooting sub-optimal epidurals, and through high fidelity simulation, education will be provided in effective management of emergency scenarios, when presented with a sub-optimal epidural.

References

1. Royal College of Anaesthetists. *Anaesthetic audit recipe book*. 3rd ed. London: Royal College of Anaesthetists; 2012. p. 248.

2. Pan PH, Bogard TD, Owen MD. Incidence and characteristics of failures in obstetric neuraxial analgesia and anesthesia: a retrospective analysis of 19,259 deliveries. *Int J Obstet Anesth*. 2004;13(4):227–33.

Anaesthetic Preoperative Clinic Referral Rates – KPI Audits

Author(s): S PEARS, J COADY, B MULHOLLAND, F KEATING, P POPIVANOV

Author(s) Affiliations: Anaesthesia and Perioperative Medicine Department, Coombe Hospital, Dublin (all authors)

Abstract

Aims

Preoperative assessment has been shown to reduce patient morbidity, mortality, length of stay, readmission and cancellation rates^{1,2}. This audit aimed to determine the rate at which elective obstetrics and gynaecology patients were being appropriately referred to the perioperative anaesthesia clinic at the Coombe Hospital.

Methods

We performed a concurrent chart analysis on all patients who were listed for elective procedures during three distinct 28-day periods in July 2023, March 2024 and September 2024.

Results

We found that in July 2023 91% of patients were being appropriately referred to the preoperative clinic. However, this referral rate fell to 78% (215 of 274 patients) and 84% (202 of 241) in March and September 2024 respectively. Furthermore, 81% (244 of 302) and 89% (232 of 260) of patients were reviewed before the day of their procedure in March and September 2024 respectively.

Discussion

To more closely align with national and international best practice³, a higher proportion of patients due for elective surgical procedures must be referred and subsequently attend the preoperative assessment clinic. Quality improvement projects in this area should focus on educating surgical teams, optimising theatre scheduling systems and developing an electronic referral pathway within the upcoming Electronic Patients Record (EPR).

References:

1. Zambouri A. Preoperative evaluation and preparation for anesthesia and surgery. Hippokratia. 2007 Jan;11(1):13-21. PMID: 19582171; PMCID: PMC2464262.

2. Kristoffersen EW, Opsal A, Tveit TO, et al. Effectiveness of pre-anaesthetic assessment clinic: a systematic review of randomised and non-randomised prospective controlled studies. *BMJ Open*. 2022;12. doi: 10.1136/bmjopen-2021-054206.
3. Health Service Executive. Model of Care for Pre-Assessment Services. Dublin: Health Service Executive; 2020. Available from: <https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/model-of-care-for-preassessment-services.pdf>

An audit to assess the volume of elective surgeries performed out-of-hours in a stand-alone maternity hospital.

Author(s): Hilary Leeson, Emer Scanlon, Nikki Higgins

Author(s) Affiliations: Department of Anaesthesiology, National Maternity Hospital, Dublin.

Abstract

Aims

The primary aim of this audit was to examine the volume of elective obstetric and gynaecology surgeries commenced between 6pm and 8am in a stand-alone maternity hospital.

Methods

This audit was performed using retrospective patient data collection provided by the audit department in the National Maternity Hospital. The audit examined all elective surgeries commenced after 6pm from 1st January 2024 to 31st August 2024.

Results

1.25% of all elective surgeries were commenced after 18:00 corresponding to a total of **24** cases. **2.66%** of elective caesarean sections were commenced after 18:00, corresponding to a total of **20** cases. Only **0.34%** of elective gynaecological surgeries were commenced after 18:00, corresponding to a total of **4** cases.

Discussion

This audit demonstrates that only a small percentage of elective surgeries are commenced out-of-hours in our stand-alone maternity hospital. However, research suggests that morbidity and mortality are higher with evening/night-time elective surgery when compared with daytime surgery due to diurnal rhythms of patient physiology as well as surgical team performance.¹ This is a patient safety issue which needs to be addressed and may be improved by increasing the number of theatres running each day.

References:

1. Meewisse AJ, Gribnau A, Thiessen SE, Stenvers DJ, Hermanides J, van Zuylen ML. Effect of time of day on outcomes in elective surgery: a systematic review. *Anaesthesia*. 2024 Aug 7.

Audit of Anaesthetist Response Times to Epidural Analgesia Requests on the Labour Ward

Author(s): Hilary Leeson, Róisín Ní Dhomhnaill, Siaghal MacColgáin

Author(s) Affiliations: Department of Anaesthesiology, National Maternity Hospital, Dublin.

Abstract

Aims

According to the Association of Anaesthetists of Great Britain and Ireland/Obstetric Anaesthetists' Association guidelines, the time between informing an anaesthetist that a woman is requesting epidural analgesia and them attending the patient should not normally exceed 30 minutes.¹ We completed an audit to assess our compliance with this standard.

Methods

Retrospective review of the electronic patient record over a one-week period in September 2024 was completed. All women receiving epidural analgesia on the labour ward were included. Data on the time of request for epidural analgesia and the time that the anaesthetist attended was collected.

Results

78 patients received epidural analgesia over the one-week period. Only 18 patients (23%) had complete documentation with both the time of epidural request and anaesthetist attendance being documented. Of these 18 patients, 15 patients (83%) received their epidural within 30 minutes of request. 2 patients (11%) waited between 30 minutes and 1 hour and 1 patient (6%) waited greater than 1 hour.

Discussion

Where documentation was complete there were high rates of compliance with the standard that following request for epidural analgesia, the anaesthetist should attend within 30 minutes. Unfortunately documentation was poor, we will aim to improve this prior to completing the audit cycle.

References:

1. OAA/AAGBI. Guidelines for Obstetric Anaesthetic Services 2013. London: Obstetric Anaesthetists' Association and Association of Anaesthetists of Great Britain and Ireland; 2013.



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Compliance of Documentation of Pre-Anaesthetic Assessment for Emergency Cases at the tertiary maternity hospital

Author(s): A. Afridi¹, F. Afridi², M. Kumar¹, M. Akhtar¹, N. Higgins¹

Author(s) Affiliations: Department, Hospital, Location.

13. Department of Anaesthesiology, National Maternity Hospital Holles St, Dublin

14. Department of Obstetrics and Gynaecology, MTI Khyber Teaching Hospital, Peshawar

Abstract

Introduction

Pre-anaesthetic assessment (PAA) and documentation are crucial for patient safety, particularly in emergency cases. Comprehensive evaluation of medical, surgical, and anaesthetic history aids in creating a tailored anaesthesia plan. In emergencies, real-time PAA documentation can be challenging, but it remains essential for medicolegal purposes.

Aims

This quality improvement project aimed to raise awareness among non-consultant hospital doctors (NCHDs) about the importance of documenting PAA for emergency cases performed outside regular hours.

Methods

Data were retrospectively collected from the MNCMS system, reviewing charts of emergency surgeries conducted between 5:00 PM and 8:00 AM on weekdays and during weekends. An educational intervention was implemented for anaesthesia NCHDs.

Results

The initial audit revealed that 57% of charts contained PAA documentation for emergency cases. Following the intervention a marked improvement was observed. Out of 89 patients who underwent emergency procedures outside regular hours, 74 (83%) had complete PAA documentation, while 15 (17%) lacked it.

Discussion

Our project significantly improved PAA documentation in out-of-hours emergency cases. Continued emphasis on timely documentation is essential. Where real-time documentation is not feasible, prompt retrospective notes should be recorded. This educational intervention will now be included in the biannual NCHD induction program.

References

1. Schnoor, J., Kupfer, A., & Wrigge, H. (2013). Asymmetry in patient-related information disrupts pre-anesthetic patient briefing. BMC Anesthesiology. <https://link.springer.com/article/10.1186/1471-2253-13-29>

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Intraoperative cell salvage and its role in patient blood management in the obstetric population

Author(s): A. Afridi¹, F. Afridi², A. Lennon¹, J. Saltori¹, Nikki Higgins¹

Author(s) Affiliations: Department, Hospital, Location.

1. Department of Anaesthesiology, National Maternity Hospital Holles St, Dublin
2. Department of Obstetrics and Gynaecology, MTI Khyber Teaching Hospital, Peshawar

Abstract

Aims

Allogeneic blood transfusion, while frequently essential, is costly, limited, and has risks. Cell salvage is a valuable tool in patient blood management. We examined use of intraoperative cell salvage (IOCS) in at-risk patients for obstetric haemorrhage such as those with abnormally invasive placentas and other risk factors..

Methods

Data was collected from cell salvage records and the electronic patient records from 2021–2024. Variables included bowl size, swab wash, estimated blood loss (EBL), blood volume collected, haematocrit (HCT%) of cell salvaged blood, patient's haemoglobin and allogeneic blood transfusions given.

Results

80 cases were analysed. 15% (12) placenta accreta, 2.5% (2) placenta percreta, and 81.25% (65) patients for LSCS with obstetric haemorrhage risk factors or contraindications to receiving allogeneic blood. Reasons for collected blood not being transfused included low volume 66.6% (30), low HCT 20% (9), contamination 4.4% (2) and clinician refusal 8.8% (4). Consumables for IOCS cost €120 per procedure vs €339 per red cell concentrate (RCC) unit plus €1.53 for blood giving set. Blood was transfused in 34 cases (42.5%), with a median returned volume of 181.5 ml.

Discussion

IOCS avoided allogeneic blood transfusion in 79.4% (27) of cases. Savings were €220 per RCC unit that was avoided being transfused. We recorded no adverse events. This highlights IOCS as a safe and cost effective method for treating obstetric haemorrhage at our hospital.

Intra-operative pain during Caesarean Delivery in a tertiary maternity hospital

Author(s): A. Afridi¹, F. Afridi², H.Z Malik¹, R. McMorrow¹, R. Ffrench- O'Carroll¹

Author(s) Affiliations: Department, Hospital, Location.

15. Department of Anaesthesiology, National Maternity Hospital Holles St, Dublin

16. Department of Obstetrics and Gynaecology, MTI Khyber Teaching Hospital, Peshawar

Abstract

Aims

Intra-operative pain during Caesarean delivery (PDCD) can cause maternal discomfort leading to successful litigation against obstetric anaesthesiologists, PTSD, and may require conversion to general anaesthesia (GA) (1). The aim of this audit was to evaluate the incidence of PDCD, which is measured annually in our institution.

Methods

Data were collected from electronic patient records between Jan to Dec 2023. We assessed PDCD incidence, GA conversion rates, block characteristics and patient follow up.

Results

Of 2,434 CD patients (1,149 elective, 1,285 emergency), 57 (2.3%) experienced PDCD. The mean age was 32.93 years, with a mean BMI of 27.05. 34 patients had spinal anaesthesia (6 required GA), and 25 had epidural anaesthesia (8 required GA). Categories of CD within the PDCD cohort: Category 1 had 1 patient (1.75%), Category 2: 36 patients (63.16%), and Category 3: 20 patients (35.09%). 43 (75.4%) patients had a T5 block or above. 56 (98.2%) patients received in-patient follow up and 16 (28%) received outpatient follow up.

Discussion

The PDCD rate of 2.3% is like the 2022 incidence of 2.1% for our institution (2) and remains low compared to international standards (3).

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3. Pain during caesarean delivery: what gets measured, gets managed RSS Ciara Luke, Lorcan O' Carroll, Robert Ffrench O' Carroll and Roger McMarrow *International Journal of Obstetric Anesthesia*, 2025-02-01, Volume 61, Article 104281, Copyright © 2024 Elsevier Ltd.

Obstetric high dependency unit admissions in a maternity hospital

Author(s): E. Scanlon, M. Fakhri, N. Higgins

Author(s) Affiliations:

1. Department of Anaesthesiology, National Maternity Hospital, Dublin.

Abstract

Aims

The primary aim of this audit was to examine the number of admissions to the HDU in a stand-alone maternity hospital. The secondary aim was to examine the reason for admission, average age of patients admitted and the percentage of HDU admissions which required transfer to an intensive care unit.

Methods

Booking forms for the HDU were retrieved from the admissions folder for the 12 month period October 2023 to September 2024. Patient details were gathered from these booking forms and then interrogated from the online electronic health record. This data was tabulated and analysed.

Results

6,734 obstetric patients delivered over a 12 month period. 174 (2.6%) of these women required HDU admission. Of these, 7 (3.9%) of these women required readmission to HDU. 3 (1.7%) of these women required transfer to an ICU. Haemorrhage was the diagnosis on admission for 84 (48.6%) of admissions to HDU, and pre-eclampsia for 48 (28%). The average age of patients admitted to HDU was 35.8 years.

Discussion

This audit demonstrates that a small percentage of obstetric patients require HDU admission. The majority of HDU admissions were in women who had experienced significant haemorrhage.

IV Ferric Carboxymaltose administration for severe anaemia following postpartum haemorrhage

Author(s): S. Hannon¹, Z. Laila¹, I. Browne¹, J. Fitzgerald², K. Sherlock³

Author(s) Affiliations: National Maternity Hospital, Holles Street, Dublin 2.

1. Department of Anaesthesia, NMH.
2. Department of Haematology, NMH.
3. Theatre and Recovery Department, NMH.

Abstract

Aims:

To assess the use of intravenous ferric carboxymaltose (FCM) pre-discharge of patients with significant postpartum anaemia (Hb <8.0g/dl) following a postpartum haemorrhage. Our hospital guidelines recommend IV FCM for those with a Haemoglobin <8.0g/dl.

Methods:

A retrospective chart analysis of patients with a PPH >1.5L over a six-month period was carried out using the electronic data-base MN-CMS.

Results:

80 patients were identified, 23 (28.75%) had a discharge haemoglobin of <8.0g/dl. Of those, just 3 (13.04%) had received IV FCM pre-discharge. 17 (73.9%) had oral iron prescribed and 3 (13.04%) had no oral or IV iron discussed or prescribed.

Discussion:

Postpartum anaemia has profound implications for maternal health, infant care, mental well-being, and long-term recovery. Compared to oral iron, IV iron is more costly, however it leads to a faster increase in haemoglobin, better iron store replenishment, and greater symptom improvementⁱ. This audit will inform a QI project to promote timely administration aiming to improve postpartum recovery.

References:

1. Sultan, P., Bampoe, S., Shah, R., Guo, N., Estes, J., Stave, C., . . . Butwick, A. J. (2019). Oral vs intravenous iron therapy for postpartum anemia: a systematic review and meta-analysis. *American journal of obstetrics and gynecology*, 221(1), 19-29.e13. doi:10.1016/j.ajog.2018.12.016



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An audit on postpartum neuropathies

Author(s): S. Hannon¹, Z. Laila¹, I. Browne¹.

Author(s) Affiliations:

1. Department of Anaesthesia, National Maternity Hospital, Holles Street, Dublin 2.

Abstract

Aims

A prospective audit to identify women reporting postpartum neuropathies following spontaneous vaginal delivery, assisted or caesarean delivery who received neuraxial anaesthesia.

Methods

Ethics approval was obtained from the NMH ethics committee. A prospective audit over a 2-month period identified patients with deficits following neuraxial anaesthesia. Data collected included type of regional technique, documented difficulty, SVD vs assisted delivery, BMI and duration of second stage.

Results

1,055 patients received neuraxial anaesthesia. 19 (1.8%) patients reported neuropathies. 11 (57.89%) had sensory deficits, 2 (10.52%) had motor deficits and 6 (31.57%) had both sensory and motor deficits. 14 (73.68%) were identified on the daily post neuraxial ward round, 3 (15.78%) were referred by obstetricians and 2 (10.52%) by midwifery staff. For those with a vaginal delivery, the second stage varied from 6 -100 minutes. All patients were reviewed by anaesthesia following discharge and reported improvement to full resolution in symptoms.

Discussion

There is a temporal association between neuraxial techniques and obstetric neuropathies, despite being mostly due to the mechanics of labour and deliveryⁱⁱ. Care pathways should have a multidisciplinary approach with obstetric, physiotherapy and anaesthesia input for optimal management.

References:

1. Boyce H, Laat F. Post-natal neurological problems. *Contin Educ Anaesth Crit Care Pain.* 2013;13(2):63-66. doi:10.1093/bjaceaccp/mks057



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