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being comparable for having a 'well' baby as defined by the Apgar score, the time taken for the mother to hold her baby actually increased as the urgency of the CS decreased. This delay contrasts with maternal experience at vaginal delivery where skin-to-skin is more likely to be initiated immediately after birth. Further work should examine the barriers which lead to delayed skin-to-skin contact for well women and their healthy, term babies during CS. Such barriers may include midwives feeling less ownership of their patient, and delivery in theatre, where there is time pressure on midwives to complete paperwork, placental checks and immediate neonatal care (weighing and baby labels) before leaving the operating theatre.

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doi:10.1016/j.ijoa.2021.103047

### P.50 Factors affecting patient reported satisfaction with epidural analgesia during labour in Mayo University Hospital (MUH) and University Hospital Galway (UHG)

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**Introduction:** Epidural analgesia (EA) is the gold standard for labour analgesia. The literature suggests a higher failure rate with EA among maternity patients compared with general surgical patients.<sup>1</sup> We evaluated the quality of EA among maternity patients in UHG and MUH and factors that affect patient satisfaction.

**Methods:** After ethical approval, data were collected from 200 women who received labour epidurals in UHG and MUH between the 3 August 2020 and 15 December 2020. Women quantified their pain score 45 min after insertion of the epidural. Patient satisfaction was also recorded at follow-up visit the next day. Successful analgesia was defined as a 45-min pain score  $\leq 3$ , no evidence of accidental dural puncture or re-sitting and a post satisfaction rating of satisfied/very satisfied. Results were compared against Royal College of Anaesthetists' (RCOA) standards of best practice. Data were analysed to see what factors affected patient reported satisfaction.

**Results:** The mean body mass index was  $27 \pm 5.4$  kg/m<sup>2</sup>. 49.3% (n = 99) of the women were nulliparous while 2% (n = 4) were  $\geq$  para 5. 79% of the women fulfilled the criteria for successful analgesia (RCOA  $\geq 88\%$ ). 87% of woman reported being satisfied or very satisfied with their analgesia at follow up visit (RCOA  $\geq 98\%$ ). 80% of woman had a pain score of  $\leq 3$ , 45 min after insertion (RCOA  $\geq 88\%$ ), while 3.7% recorded a pain score of 9/10 45 min after insertion. There was a strong negative correlation between pain score at 45 min and patient satisfaction at follow up visit (correlation coefficient  $-0.642$ ) There was no statistically significant correlation between BMI, cervical dilation and patient satisfaction. There was a negative correlation between parity and patient satisfaction (correlation coefficient  $-0.256$ ). There was no significant difference between the results found in MUH (model 3 hospital) and UHG (model 4 hospital).

**Discussion:** These results failed to meet the standards of best practice proposed by the RCOA. Reasons for this should be explored. The American College of Obstetricians and Gynecologists summarises the importance of labour analgesia in the following statement: 'labour

results in severe pain for many women. There is no other circumstance where it is considered acceptable for a person to experience untreated severe pain, amenable to safe intervention, while under a physician's care.' Compared with other methods, EA provides superior analgesia in labour. However, our results show it is not always associated with maternal satisfaction. This study showed no correlation between BMI/cervical dilation and patient satisfaction. A negative correlation between parity and patient satisfaction was noted, this association has been suggested in other studies.<sup>2</sup> Larger studies are needed to identify modifiable risk factors which affect patient satisfaction.

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doi:10.1016/j.ijoa.2021.103048

### P.51 What a difference a year makes! Anaesthesia for category 1 caesarean section during the COVID-19 pandemic

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**Introduction:** During the COVID-19 (SARS-CoV-2) global pandemic in 2020, the risk of viral transmission during aerosol generating procedures including tracheal intubation, led to new recommendations from national bodies regarding anaesthesia. The use of personal protective equipment (PPE) was introduced and use of regional (RA) rather than general anaesthesia (GA) was advocated in obstetrics<sup>1</sup> and elsewhere. At a trust level we aimed to perform RA for caesarean section (CS) where possible and planned for early obstetric decision making in order to potentially reduce urgency. Obstetric and anaesthetic consultant presence was increased to facilitate this. We conducted a service evaluation to assess the impact of this change in practice for category 1 CS, particularly upon mode and timing of anaesthesia.

**Methods:** We compared a 2-month period during the COVID-19 pandemic (1 April 2020-31 May 2020) with the same time period one year prior. We identified all women who had category 1 CS and reviewed the mode of anaesthesia, time from decision to arrival in theatre (transfer time), time from arrival to being ready for surgery to start (anaesthetic time), and Apgar scores.

**Results:** The number of category 1 CS during the 2-month pandemic period was 24 out of a total of 399 CS (6%) compared with 18/337 (5.3%) pre-pandemic. There was a significant increase in the use of RA for category 1 CS during the pandemic compared to prior (83% vs. 39%  $P = 0.004$ ). This included 5 epidural top-ups during COVID-19, compared with none prior. Before the pandemic, median [IQR] anaesthetic time was longer for women having RA than GA (22 [17–29] vs. 9 [7–12] min,  $P = 0.003$ ). However during the pandemic period when compared to the previous year, there was a significant increase in time taken to perform GA (median [IQR] 14.5 [11–15] min,  $P = 0.03$ ) and a significant reduction in time taken to perform RA (median [IQR] 14 [10–19.5] min,  $P = 0.02$ ). Transfer time was unchanged compared to pre-pandemic (median 7.5 vs. 7.0 min). The 5 min Apgar score for RA was unchanged between the two time periods (median 10 for both) but the median Apgar score for GA was lower during the pandemic (7 vs. 9) although not significant.

**Discussion:** Despite proposed early decision making, we did not observe a reduction in category 1 CS rate during the COVID-19 pandemic. Use of RA for category 1 CS increased significantly during the

pandemic with spinal anaesthesia used most commonly alongside an increase in epidural top-ups. We observed a 'levelling out' of the anaesthetic time for RA (possibly shortened due to increased consultant presence) vs. GA (likely lengthened due to new procedures including donning PPE). The resulting lack of time difference between techniques during the pandemic supports the increased use of RA, as do the favourable Apgar scores for RA cases. The trend towards lower Apgar scores in the COVID GA group may reflect a more compromised group, due to the higher threshold for performing GA.

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doi:10.1016/j.ijoa.2021.103049

### P.52 Quantity and type of social distractions in obstetric anaesthesia

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**Introduction:** Distractions are commonplace in the clinical environment with positive, negative, and at times serious implications for patient safety. Previous studies identifying and classifying distracting events have predominantly focused on non-obstetric theatres<sup>1</sup> or on noise specifically.<sup>2</sup>**Methods:** 49 anaesthetic procedures were observed in various settings (theatres, delivery units) for emergency and elective cases at two hospitals over 5 weeks. Procedures included 3 epidurals, 8 combined spinal-epidurals and 38 spinals. A contextual inquiry method was used to gain information on how distractions impact procedures in real-time, with perspective from the anaesthetist captured before, after, and during the procedure. Using a structured observation matrix, observations were conducted at two levels of granularity: impact of team and patient behaviours on individual procedural steps; and impact on procedure as a whole. In addition, 10 interviews were held to expand on data and identify coping strategies mitigating effects of distractions.

**Results:** Distractions were most often from theatre team members, particularly relating to noise or people entering or leaving. There were 16 instances of team members negatively influencing a procedure. Team members facilitated procedures in 187 instances. Distractions had more severe consequences, including increased number of attempts and prolonged procedures. Quality of team assistance was a key determinant in modulating the impact of distractions. Minimal support in patient reassurance and positioning, and inattention to anaesthetist's comfort divided the anaesthetist's attention. In contrast, clear division of labour, and anticipation of anaesthetist's and patient's needs minimised disturbance. Anaesthetist's strategies to mitigate distractions included explicitly asking for quiet, learning to ignore distractions, having a highly methodical workspace organisation, and acute awareness of their competence. Anaesthetist's experience, temperament, familiarity with the team, and urgency of situation contributed to their approach and resilience to distractions. Other theatre members also displayed strategies to minimise distractions and offset their effects.

**Discussion:** By unravelling drivers of distractions and existing neutralising strategies, we identified both targets for modification and expertise to optimise the system in which anaesthetists work. Our findings corroborate previous findings relating to distractions in theatre,<sup>1</sup>

and during epidural procedures.<sup>2,3</sup> people entering/exiting and conversations were common distractions. Distractions are amplified in obstetrics:<sup>2</sup> obstetric theatre can involve the obstetric team, midwife, patient, relative and paediatric team. It is paramount to strengthen system resilience against these potential distractions to facilitate best clinical outcome.

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doi:10.1016/j.ijoa.2021.103050

### P.53 Introducing NRFit needles for all neuraxial procedures is not associated with an increased incidence of post-dural puncture headache or failed spinal anaesthesia

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**Introduction:** Despite the safety benefits of non-Luer neuraxial connectors, some departments of anaesthesia still seem reluctant to change their needles. This is perhaps due to concerns that using unfamiliar equipment may increase the risk of complications. In 2014, ours was one of the first UK obstetric units to adopt non-Luer connectors (Surety, Vygon UK Ltd) for all neuraxial procedures. When the NRFit ISO was approved, Surety needles could no longer be sourced reliably so NRFit (Pajunk UK Medical Products Ltd) was rapidly adopted and replaced in all obstetric clinical areas in April 2018. These connectors have been used universally to date. We sought to determine whether this change in needles was associated with a change in the incidence of post-dural puncture headache (PDPH) following an epidural or the incidence of failed spinal anaesthesia.

**Methods:** A retrospective analysis of the Microsoft Access database of all obstetric anaesthesia interventions over the two-year period prior to, and the two-year period following the introduction of NRFit needles, was performed. Data were interrogated to determine the incidence of PDPH and failed spinal anaesthesia, before and after the introduction of the NRFit needles. A chi-squared test of independence was performed to determine if there was a statistically significant difference in PDPH and failed spinal between these groups.

**Results:** A total of 6612 women underwent obstetric anaesthetic intervention in the four-year study period. In the pre-NRFit group (n = 3263), 1592 women had an epidural, of whom 4 had a PDPH. In the post-NRFit group (n = 3349), 1511 women had an epidural, of whom 9 had a PDPH. There was no statistically significant difference in the rate of PDPH following an epidural between the two groups ( $P = 0.14$ ). In the pre-NRFit group 1473 women had a spinal of which 4 failed, and in the post NRFit group 1629 had a spinal of which 7 failed. The proportion of failed spinals did not differ significantly between the two groups ( $P = 0.46$ ).

**Discussion:** Changing to NRFit needles for all neuraxial procedures in obstetrics at our hospital was not associated with a significant