**Appendix 1**

Society for Obstetric Anesthesia and Perinatology Members’ Survey of Post-Cesarean Delivery Analgesia Practices and Respiratory Monitoring Following Neuraxial Opioid Use

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| Question/ Number of Member Responses | Response  |
| Describe the institution where you provide obstetric anesthesia services. Academic/UniversityPrivate/ CommunityMilitary/VAOther | N=339251 (74)81 (23.9)2 (0.6)5 (1.5) |
| Approximately how many deliveries are there in your unit per year? <500500-15001500-29993000-5000>5000Don’t Know | N=3395 (1.5)26 (7.7)92 (27.1)119 (35.1)95 (28)2 (0.6) |
| Approximately what is the cesarean delivery rate at your hospital? <25%25-3031-3536-40>40Don’t Know | N=33934 (10)110 (32.5)109 (32.1)54 (15.9)22 (6.5)10 (3) |
| How many years (since completing residency) have you been practicing anesthesia? <55-15>15 | N=33971 (20.9)101 (29.8)167 (49.3) |
| If no contraindications, do you routinely add intrathecal morphine to your local anesthetic solution when doing spinal anesthesia for cesarean deliveries in healthy parturient? YesNo | N=339309 (91.1)30 (8.9) |
| If not, why not?Hospital PolicyInability to MonitorDrug not AvailableOther | 5 (17.2)13 (44.8)3 (10.3)16 (55.2) |
| What dose of intrathecal morphine do you usually use? 0.05 mg0.1 mg0.15 mg0.2 mg0.25 mg0.3 mgOther | N=3082 (0.65)66 (21.4)140 (45.5)66 (21.4)14 (4.6)9 (2.9)11 (3.6) |
| How many hours do you routinely monitor for respiratory depression after cesarean delivery in healthy patients (without comorbidities or risk factors for respiratory depression) who receive intrathecal morphine? <1212-24>24Do not monitor | N=29329 (9.9)228 (77.8)20 (6.8)16 (5.5) |
| What modalities are routinely utilized to monitor for respiratory depression in healthy patients (without comorbidities or risk factors for respiratory depression) who receive intrathecal morphine for cesarean delivery? (Mark all that apply) Respiratory rateSedation scorePulse oximetryCapnographyDo not monitorOther | N=293267 (91.1)180 (61.4)122 (41.6)5 (1.7)16 (5.5)6 (2) |
| How frequently are healthy patients (without comorbidities or risk factors for respiratory depression) who receive intrathecal morphine assessed to detect respiratory depression after cesarean delivery? ContinuousIntermittently q1hIntermittently q2hIntermittently q1h for 12 h; q2h for 12-24hIntermittently q1h for 12 h; q3-4 for 12-24hIntermittently only when asleepDo not checkOther | N=29311 (3.75)43 (14.7)31 (10.6)112 (38.2)60 (20.5)6 (2)4 (1.4)26 (8.9) |
| In women with comorbidities and/or risks factors for respiratory depression (e.g., morbid obesity, obstructive sleep apnea, opioid abuse ) undergoing cesarean delivery do you: (Mark all that apply) No additional monitoring compared to healthy parturientsApply pulse oximetreyHypervigilance monitoring location (e.g., ICU, telemetry unit)Avoid Intrathecal morphineReduce the dose of Intrathecal morphineApply capnographyIncrease duration of monitoringUse continuous instead of intermittent monitoringIncrease the frequency of assessmentsOther | N=293104 (35.5)103 (35.2)84 (28.7)41 (14)20 (6.8)24 (8.2)34 (11.6)61 (20.8)42 (14.3)23 (7.9) |
| Do you follow the American Society of Anesthesiologists (ASA) guidelines for respiratory depression monitoring after neuraxial opioids? YesNoDo not use Intrathecal morphineNot aware of the ASA Guidelines | N= 318203 (63.8)56 (17.6)13 (4)46 (14.5) |
| For healthy patients (without comorbidities or risk factors for respiratory depression) receiving intrathecal morphine for cesarean delivery, do you consider the ASA guidelines for respiratory depression monitoring (i.e., clinical assessments ± oximetry/capnography intermittently every hour for 0-12 hours and then every 2 hours for 12-24 hours) to be: Too stringentToo lenientJust rightOther | N=318114 (35.9)15 (4.7)176 (55.4)13 (4) |
| Why too stringent? (Mark all that apply)Too frequent assessmentToo long duration of monitoringOnly need to monitor the patient when asleepOther | N=11483 (72.8)33 (29)21 (18.4)16 (14) |
| Why too lenient? (Mark all that apply)More frequent assessments neededLonger duration monitoring neededMonitoring should be continuousPulse oximetry should be requiredCapnography should be requiredOther | N=158 (53.3)1 (6.7)8 (53.3)3 (20)1 (6.7)2 (13.3) |
| Provide your opinion on this statement: ignoring ASA and other institutional guidelines, healthy patients (without comorbidities or risk factors for respiratory depression) receiving ≤0.05 mg intrathecal morphine for cesarean deliveries do NOT require specific monitoring for respiratory depression beyond routine postoperative monitoring.Strongly agreeAgreeNeutralDisagreeStrongly disagree | N=30950 (16.2)96 (31)62 (20)84 (27.2)17 (5.5) |
| Provide your opinion on this statement: ignoring ASA and other institutional guidelines, healthy patients (without comorbidities or risk factors for respiratory depression) receiving ≤0.15 mg intrathecal morphine for cesarean deliveries require assessments for respiratory depression every 3 hours for 12 hours?Strongly AgreeAgreeNeutralDisagreeStrongly Disagree | N=30931 (10)91 (29.5)62 (20.1)107 (34.6)18 (5.8) |
| If disagree/strongly disagree, assessments for respiratory depression should occur:Intermittently every 1hIntermittently every 2hIntermittently every 4hIntermittently every 6hOther:  | N=12467 (54)34 (27.4)9 (7.3)3 (2.4)11 (9) |
| Assessments for respiratory depression should occur:For 1h postoperativelyFor 2h postoperativelyFor 4h postoperativelyFor 6h postoperativelyOther | N=1249 (7.3)7 (5.7)3 (2.4)27 (21.8)78 (62.9) |
| In your opinion (without needing to follow your institutional practices), what monitoring modalities would you routinely utilize to detect respiratory depression in healthy patients (without comorbidity or risk factors for respiratory depression) receiving ≤0.15 mg intrathecal morphine for cesarean delivery? (Mark all that apply)Respiratory rateSedation scorePulse oximetryCapnographyDo not use intrathecal morphineOther | N=302263 (87)203 (67.2)137 (45.4)49 (16.2)4 (1.3)9 (3) |
| Does your institution routinely prescribe intravenous and/or oral opioids for breakthrough pain to be administered as needed in women who have received intrathecal morphine?YesNoDon’t use intrathecal morphineOther | N=302215 (71.2)62 (20.5)11 (3.6)14 (4.6) |
| Are additional assessments or monitoring for respiratory depression required after as needed opioids (IV, IM, or oral) administration?YesNoOther | N=21445 (21)160 (74.8)9 (4.2) |