**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/University  Private/ Community  Military/VA  Other | N=339  251 (74)  81 (23.9)  2 (0.6)  5 (1.5) |
| Approximately how many deliveries are there in your unit per year?  <500  500-1500  1500-2999  3000-5000  >5000  Don’t Know | N=339  5 (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%  25-30  31-35  36-40  >40  Don’t Know | N=339  34 (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?  <5  5-15  >15 | N=339  71 (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?  Yes  No | N=339  309 (91.1)  30 (8.9) |
| If not, why not?  Hospital Policy  Inability to Monitor  Drug not Available  Other | 5 (17.2)  13 (44.8)  3 (10.3)  16 (55.2) |
| What dose of intrathecal morphine do you usually use?  0.05 mg  0.1 mg  0.15 mg  0.2 mg  0.25 mg  0.3 mg  Other | N=308  2 (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?  <12  12-24  >24  Do not monitor | N=293  29 (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 rate  Sedation score  Pulse oximetry  Capnography  Do not monitor  Other | N=293  267 (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?  Continuous  Intermittently q1h  Intermittently q2h  Intermittently q1h for 12 h; q2h for 12-24h  Intermittently q1h for 12 h; q3-4 for 12-24h  Intermittently only when asleep  Do not check  Other | N=293  11 (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 parturients  Apply pulse oximetrey  Hypervigilance monitoring location (e.g., ICU, telemetry unit)  Avoid Intrathecal morphine  Reduce the dose of Intrathecal morphine  Apply capnography  Increase duration of monitoring  Use continuous instead of intermittent monitoring  Increase the frequency of assessments  Other | N=293  104 (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?  Yes  No  Do not use Intrathecal morphine  Not aware of the ASA Guidelines | N= 318  203 (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 stringent  Too lenient  Just right  Other | N=318  114 (35.9)  15 (4.7)  176 (55.4)  13 (4) |
| Why too stringent? (Mark all that apply)  Too frequent assessment  Too long duration of monitoring  Only need to monitor the patient when asleep  Other | N=114  83 (72.8)  33 (29)  21 (18.4)  16 (14) |
| Why too lenient? (Mark all that apply)  More frequent assessments needed  Longer duration monitoring needed  Monitoring should be continuous  Pulse oximetry should be required  Capnography should be required  Other | N=15  8 (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 agree  Agree  Neutral  Disagree  Strongly disagree | N=309  50 (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 Agree  Agree  Neutral  Disagree  Strongly Disagree | N=309  31 (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 1h  Intermittently every 2h  Intermittently every 4h  Intermittently every 6h  Other: | N=124  67 (54)  34 (27.4)  9 (7.3)  3 (2.4)  11 (9) |
| Assessments for respiratory depression should occur:  For 1h postoperatively  For 2h postoperatively  For 4h postoperatively  For 6h postoperatively  Other | N=124  9 (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 rate  Sedation score  Pulse oximetry  Capnography  Do not use intrathecal morphine  Other | N=302  263 (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?  Yes  No  Don’t use intrathecal morphine  Other | N=302  215 (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?  Yes  No  Other | N=214  45 (21)  160 (74.8)  9 (4.2) |