Abstract # 54

The Rapid Sequence Spinal - A Survey of Anesthetic Resident Practice, London, UK

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Introduction: Rapid sequence induction (RSI) of general anesthesia (GA) is the fastest anesthetic in a category-1 cesarean section (C1CS) for fetal distress, but carries maternal risk. Recently, the rapid sequence spinal (RSS) has been seen as a way to avoid GA and it's risk in such cases*. In the UK, anesthetic residents (ARs) provide solo labour ward (LW) cover after hours, and so encounter cases alone, when use of an RSS is possible. We therefore surveyed AR practices for RSS in the C1CS for fetal distress.

Methods: We sent the survey to the 120 ARs in Barts & The London School of Anesthesia who did solo LW on-call.

Results: 95/120 (79%) replied. 66/95 (70%) had done an RSS in a C1CS for fetal distress. Of 66: 73% shortened normal consent; 52% routinely gave maternal oxygen (O2 - half of whom did so only for pre-oxygenation for possible GA, and half for both pre-oxygenation and intra-uterine resus (IUR)); 47% gave sodium citrate routinely; 61% did the RSS with the woman sitting, 39% left lateral; 39% did a full surgical scrub pre-RSS; 61% a quick hand wash and sterile gloves; 21% infiltrated no local anesthetic (LA) to skin; 81% used spinal opioid (fentanyl 84%, diamorphine 16%), 19% no opioid; 30% had one RSS attempt before abandoning it, 70% had two; 45% always used head down tilt post RSS for block assent; 55% wanted a block of T4 to cold before surgery, 30% accepted T7 to cold, 15% accepted loss of straight leg raise; none knew of an RSS unit protocol.

Discussion: The RSS aim in fetal distress is to rapidly and safely achieve a block for CS delivery while optimising fetal oxygenation. Almost half ARs however did not give maternal O2, which can help IUR in such cases. ARs using a lateral position for RSS, were aware of fetal benefit and potentially improved block assent. Those using the sitting position, did so as it was familiar. Results showed AR awareness of speed needed: many shortened consent; limited RSS attempts; used quick hand washes; some infiltrated no LA - quicker, though pain may lead to poor positioning; some used no spinal opioid - quicker, but at expense of post-op analgesia (most however used fentanyl - fast preparation); some used head down tilt post RSS; and accepted blocks lower than normal. Many ARs also prepared for GA during RSS: giving sodium citrate and pre-oxygenating. An RSS can safely avoid risks of GA if done well. Some ARs however did not seem to realise the speed needed: using spinal diamorphine (slow preparation); not shortening consent; doing a full scrub; and only accepting higher blocks. No AR knew of a unit protocol, and as RSS is not widely taught in the UK, practice varied. ARs are the front line in UK LWs but 30% had not even heard of an RSS. Protocols need to be developed and the RSS skill taught to ARs, it could prevent maternal morbidity and mortality.