

Obstetric rapid sequence induction: A national survey of current practice

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Introduction

Anaesthetic practice for obstetric rapid sequence induction (RSI) shows great variation. Earlier surveys show widespread use of the “classical” agents thiopentone and suxamethonium, with NAP6 reporting suxamethonium use in over 90% of obstetric RSIs. Concern regarding awareness, highlighted by the DREAMY study¹, along with the changing landscape of agents used in other emergency anaesthetic scenarios, has prompted re-evaluation of traditional techniques. Increasing use of rocuronium, propofol and total intravenous anaesthesia (TIVA) suggest that obstetric RSI practice may be evolving. This survey aimed to provide an updated analysis of current obstetric RSI practice among Obstetric Anaesthetists’ Association (OAA) members in the UK and Republic of Ireland.

Results

There were 281 responses from 2371 members; 20 responses from clinicians working outside the UK and Ireland were excluded. 78% of respondents were consultants. Use of a departmental Obstetric RSI protocol was reported by 43%. Where protocols existed, rocuronium was specified in 78% and propofol in 82%. Personal first-line preference favoured rocuronium(69%) and propofol(92%). Many highlighted limited availability of thiopentone. Ketamine was commonly selected for haemodynamically unstable patients. Regular TIVA use was uncommon(9%). Gentle mask ventilation during apnoea was used by 48%. Opioid use varied: 38% always used opioids, 4% never, and the remainder selectively. Alfentanil was preferred(76%). Cricoid pressure was routinely used by 79%, but many would release early if airway view was compromised. High-flow nasal oxygen was not routinely used by the majority. Nitrous oxide was used for maintenance by 50%, with falling use often attributed to lack of access.

Discussion

This survey shows a definite shift from the classical obstetric RSI. Propofol and rocuronium predominate in departmental protocols and individual practice, reflecting evolving evidence, concern regarding awareness, improved reversal options, and drug availability. The results show a preference for individualised decision-making dependent on clinical scenario and operator preference. Increased use of gentle mask ventilation and selective opioid administration indicate prioritisation of oxygenation, haemodynamic control and awareness prevention over rigid adherence to a traditional RSI. Cricoid pressure remains widely used but applied pragmatically. TIVA use is low, but this may change given its increasing popularity.

¹ Odor, P.M., Bampoe, S., Moonesinghe, S.R., Andrade, J., Pandit, J.J., Lucas, D.N. and Pan-London Perioperative Audit and Research Network (PLAN), for the DREAMY Investigators Group (2021), General anaesthetic and airway management practice for obstetric surgery in England: a prospective, multicentre observational study*. *Anaesthesia*, 76: 460-471. <https://doi.org/10.1111/anae.15250>