



RA-UK guidelines for supervision of patients during peripheral regional anaesthesia

1. Introduction

RA-UK has been asked by members to advise on the requirements for the presence of an anaesthetist throughout regional anaesthesia (RA) procedures.

In order to maximize the significant advantages of RA for patients, many RA-UK members are utilising the “block room” concept to deliver RA to as many patients as possible. The business case for block rooms depends on list efficiency and the ability to provide RA to more than one patient at a time. To achieve this goal, many anaesthetic departments have established local protocols to allow the supervision and monitoring of “blocked” patients to be delegated to competent health care workers. Some anaesthetists are providing a second regional anaesthetic in the anaesthetic room for the next patient, in very close proximity to the first patient.

RA-UK are not aware of any serious clinical incidents arising, but just because a practice is widely adopted, this does not necessarily make it acceptable. Locally developed protocols for supervision of RA vary significantly, and while some may promote acceptable standards of safety, many conflict directly with the more generalized AAGBI[1] and RCoA[2] guidelines.

There is therefore a need for more specific guidance in order to preserve safety standards, whilst also promoting wider access to the benefits of RA.

2. Discussion

The current guidelines from the AAGBI state that: “An anaesthetist of appropriate experience must be present throughout general anaesthesia, including any period of cardiopulmonary bypass. Using clinical skills and monitoring equipment, the anaesthetist must care for the patient continuously. The same standards must apply when an anaesthetist is responsible for a local/regional anaesthetic or sedative technique for an operative procedure”¹. The RCoA makes similar recommendations and also states that “one anaesthetist cannot provide direct care for more than one patient receiving general or regional anaesthesia, or sedation” [2].

However, RA-UK considers that many awake patients having limb surgery with RA do not require the same level of supervision as patients receiving general anaesthesia.

This is supported by the fact that anaesthetists already delegate responsibility of patient monitoring and supervision routinely to competent health care workers in several similar circumstances and this is widely accepted to be safe practice:

1. In the obstetric unit, a single anaesthetist often places more than one epidural and delegates immediate supervision and monitoring to a midwife. Multiple continuous epidural infusions are frequently in place simultaneously, whilst the anaesthetist is in theatre anaesthetising patients for caesarean sections.
2. In the intensive care unit, critically ill intubated patients are left in the care of ICU nurses, while the anaesthetist attends cardiac arrests and unconscious patients elsewhere in the hospital.
3. Recovery room (PACU) nurses take responsibility for monitoring anaesthetised patients as they recover, while the anaesthetist induces anaesthesia for the next patient.
4. Other examples of delegated responsibility can be found in the ophthalmology theatre, endoscopy suite, cardiac catheter units and dental clinics. This is accepted practice, where clear protocols and guidelines have been established.

RA technique has changed dramatically over the last decade. Ultrasound-guided regional anaesthesia (UGRA) has improved the success rates and the quality of blocks, whilst reducing the incidence of acute complications. Safer local anaesthetics have been widely introduced. The dose of local anaesthetic required for successful RA is lower and the incidence of local anaesthetic systemic toxicity (LAST) has reduced by 65% (1 in 6000)[\[3\]](#). The recognition and treatment of LAST has improved with the introduction of “Intralipid TM” and the associated AAGBI guidance[\[4\]](#).

3. Proposal

RA-UK considers that, in certain well-defined circumstances, an anaesthetist is not required to be present throughout surgery with peripheral regional anaesthesia.

The patient can then be supervised and monitored by a suitably competent health care worker who has been specifically trained in patient monitoring, competency being defined according to the AAGBI requirements for PACU (recovery) nursing[\[5\]](#). Appropriately trained health care workers could include, other doctors, Operating Department Practitioners (ODP's), intensive care nurses, midwives, PACU (recovery) nurses, and physician assistants in anaesthesia (PA(A)s).

Criteria:

1. Full patient monitoring (BP, pulse oximetry and ECG) must be maintained throughout the whole patient journey as previously defined in AAGBI and RCoA guidelines [\[1\]](#),[\[2\]](#).
2. The block must be peripheral. Neuraxial blocks are excluded from these proposals.
3. The block must be appropriately tested and proven to be effective.
4. The surgeon must receive a specific handover, including dose limits on any additional LA administration. The surgeon must be content to start surgery in the absence of the anaesthetist and be ready to inject additional local anaesthetic if required.
5. An anaesthetist must be immediately available for at least the first 15 minutes after block administration.

6. The anaesthetist must have competent assistance (as defined above) in the block area, sufficient to maintain the safety of other patients attended, should the anaesthetist be called back to theatre.
7. The patient must be conscious and communicating effectively when responsibility is handed over to anyone other than an anaesthetist. If sedation or analgesia is required in the operating theatre, then an anaesthetist must return to administer this and must be present until the patient is again conscious and communicating effectively.
8. The anaesthetist must be immediately contactable (verbal communication) and able to return to theatre and attend the patient within 2 minutes [5].
9. The anaesthetist must make appropriate arrangements to perform the WHO checklist (time out) and to rapidly treat unexpected surgical or tourniquet pain.
10. Patients in the “beach chair” / “deck chair” operating position are excluded from these proposals. RA-UK consider that the significant risk of bradycardia and/or hypotension in this position requires the continuous presence of an anaesthetist.
11. The patient must be physiologically stable and be unlikely to become physiologically unstable because of co-morbidity.
12. Patients must give fully informed consent for RA without sedation and be given the opportunity to choose other anaesthetic options.

RA-UK believes that these are safe, pragmatic and practical proposals that will enable the modern practice of regional anaesthesia to thrive and deliver an efficient service for the benefit of patients, hospital trusts, surgeons and anaesthetists.

[1] <http://www.aagbi.org/sites/default/files/standardsofmonitoring07.pdf>

[2] http://www.rcoa.ac.uk/system/files/GPAS-2014-03-INTRAOP_1.pdf

[3] [Sites, Barrington and Davis; Using an international clinical registry of regional anesthesia to identify targets for quality improvement. RAPM vol 39,number 6, 2014](#)

[4] http://www.aagbi.org/sites/default/files/la_toxicity_2010_0.pdf

[5] http://www.aagbi.org/sites/default/files/immediate_post-anaesthesia_recovery_2013.pdf