Procedural Sedation and Analgesia (PSA), an alternative to general anaesthesia for surgical procedures outside the hospital environment

We are in the midst of a dynamic time for sedation practice as this is probably the fastest growing area in anaesthesia care. According to all sedation guidelines, including the 2015 SASA guidelines on PSA, we can administer PSA outside the hospital in a medical or dental surgery, in the office, a facility, or in sedation clinics. This versatility makes PSA an attractive option for us.

PSA outside the hospital environment involves a multitude of providers, and non-anaesthesiologists will be and are part of this group. The choice of which provider delivers this care and the techniques and drugs used, is usually specific to each institution/country and is largely dependent on the availability of trained providers.

In developing countries we face different challenges. There are not enough anaesthesiologists and other healthcare providers available to provide anaesthesia services for all in-hospital procedures. PSA then becomes a very attractive option for certain surgical interventions as it can be used outside the hospital.

One needs to realize that the concept of “sedation” outside the operating theatre presents challenges. Training is necessary, accreditation of sedation providers should become mandatory, and we need practice inspection where procedures are done outside a hospital setting. The problem is how do we bring this all together?

The 2015 SASA Guidelines on Procedural Sedation and Analgesia present sedation providers with guidance to safe sedation practice. All the documentation and guidelines for safe practice for sedation practitioners and healthcare funders are available.

The evolution and revolution of safe sedation practice will bring challenges. Sedation practice continues to change in terms of sedation providers, who can do it, and how to do it; maybe our biggest challenge is the issue of anaesthesiologists and non-anaesthesiologists as sedation providers.

Important challenges in future will be the drugs we use, which ones, how do we administer them, are they safe for use outside the operating theatre, and the biggest issue of all, who can administer which drug?

There is still resistance from some Anaesthesia Societies and Departments of Anaesthesia on who should be allowed to give “general anaesthetic” agents like propofol and ketamine, which are in common use in sedation practice. Some anaesthesiologists still believe the “Pandora” box should be closed; propofol is for use just by anaesthesiologists. One wonders, is this challenge really important with the shortage of anaesthesiologists and other healthcare providers we have, and our commitment to sedation training not only in South Africa but worldwide. There is enough evidence available that non-anaesthesiologists trained in sedation can safely administer PSA.

However, accredited university training in specific sedation techniques barely exists in Africa, and is currently only available in Cape Town. This is a serious challenge to safe sedation practice.

Sedation services will become more popular as an alternative to general anaesthesia for certain procedures outside the operating theatre. More publications/research are available that show that PSA is a safe option for procedures...
outside the hospital environment. In a recent 500 case study (in press) on patient satisfaction after sedation, 94% of patients indicate that they would prefer sedation to general anaesthesia; only 2% wanted general anaesthesia as an option. The low side-effect profile e.g. low incidence of nausea and vomiting, pain, and cost-effectiveness of PSA make it an attractive option for the future.

How are we going to bring this all together so that sedation will become a safe option for procedures outside the operating room? The obvious answer to this question is that nobody should be involved in providing paediatric/adult sedation, including anaesthesiologists, without training.

Recent guidelines by the Academy of Medical Royal Colleges in the UK (2013) state clearly, “safety will be optimised only if sedation practitioners use defined methods of sedation for which they have received formal training”. This includes everyone involved in sedation practice.

In South Africa the SASA guidelines on PSA (2015) state, “relevant qualifications and ongoing training remain the foundation of safe sedation practice”. It is recommended that sedation practitioners have a primary, registered, medical qualification, full registration with the HPCSA (Health Professional Council), formal training in standard and advanced sedation techniques, provide evidence of regular and recent sedation-related CPD activity, have a logbook reflecting cases where sedation was done as well as the technique used, comply with SASA recommendations for safe sedation practice, and have evidence available of updated qualifications in airway certification.

Sedation practitioners should only use the specific sedation techniques for which they have received formal training, to optimize patient safety. Operator-sedationists should only use simple or standard sedation techniques and should not administer combinations of drugs.

Currently both anaesthesiologists and non-anaesthesiologists are involved in sedation practice in our country and worldwide for a wide variety of procedures outside the hospital environment e.g. endoscopic procedures that include gastroscopies, colonoscopies, and bronchoscopies, egg retrievals, dentistry, minor surgical procedures, plastic procedures, and orthopaedic operations. Sedation for interventional radiology is a fast growing field. Laser therapy for lesions in small children is often done under PSA.

As far as current guidelines are concerned the SASA guidelines are seen as the guidance to safe sedation practice. These guidelines are for use by all medical practitioners and their teams.

What then about the future? Sedation services will become more popular as an alternative for general anaesthesia for certain procedures outside the operating theatre. This is a worldwide trend.

For clinical governance, accreditation of sedation services and practice inspections are suggested in the SASA guidelines. All practitioners involved in sedation practice must keep a logbook of cases performed under sedation, and are required to document and report adverse incidents and accidents.

The drivers of sedation practice in the future will be the private healthcare sector, public service, medical insurance, and patients. We often forget about patient satisfaction. In studies done by us, patients consistently rate sedation as a better option than general anaesthesia for certain procedures outside the operating theatre; the low side-effect profile, cost effectiveness, and quick recovery characteristics play a significant role in their choice.

As sedation trainers we have responded to the demand for sedation provision with sedation training and CPD activities. We have empowered healthcare professionals to become safe sedation providers.

A series of commentaries on this important clinical technique is planned for inclusion in the 2017 SADA Journals.