December 2023 | Issue 14

ESRA Updates

Sina Grape (Anaesthetist & Intensive Care Physician, Switzerland)

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«I find it incredibly fascinating to be an anaesthetist in the 21st century.»

ESRA UPDATES journal club invites leading experts in (regional) anesthesia to select one (or more) article(s) which for him/her were/are important, interesting or changed his/her clinical practice. This choice can be a general big randomized study but can also be very personal. For this edition our choice went to Sina Grape, MD, MBA.

Dr Sina Grape did her training in Geneva and Lausanne. At this moment she is head of the department of anesthesia in Sion, Switserland, and is also a consultant in the department of Anesthesia of Lausanne, Switzerland. She is member of the board of directors of the Swiss Society of Anesthesia. Their top areas of expertise are Acute Pain, Chronic Pain, Umbilical Hernia, Mastectomy, and Knee Replacement.

The last few decades have brought about enormous changes to our profession, both in clinical practice and in research. I find it incredibly fascinating to be an anaesthetist in the 21st century, and it was a truly difficult task to select just three articles that made a change to my practice.

One of the core competencies of every anaesthetist is airway management. Many of our predecessors were very skilled inventors – let's just think about the McIntosh intubating blade or the Guedel cannula. In more recent times, I think that a true paradigm shift occurred with the introduction of high flow heated and humidified nasal oxygen. Patel and colleagues published one of the first high quality descriptions of this technique in 2015. In 25 patients with known difficult airways – 9 of which had acute airway compromise – oxygenation was maintained with high flow humidified oxygen and a simple jaw thrust manoeuver. The availability of high flow oxygen changed the management of difficult intubations in my daily practice. Today the indications of high flow oxygenation have expanded and the technique has extensively been used during the covid pandemic.

Another article which reinforced my preference for regional anaesthesia is by Aitken et al, 2016. It explored the effect of regional versus local anaesthesia on patients' outcome after arteriovenous fistula creation. In this observer-blinded trial 126 patients were randomised to receive either local anaesthesia directly to the surgical site or an ultrasound-guided brachial plexus block. The authors found that the brachial plexus block significantly improved primary patency rates for arteriovenous fistulae, both in the immediate postoperative period and 3 months after surgery. I find this study important because it proves how anaesthetic methods may influence patients' outcome.

A recent article I found very interesting was published this year by Warner et al. and shaped my perception of anaemia. Anaemia is very common in our elderly or multimorbid patients and is also a very common sequela of surgery. In their investigation the authors explore the association between anaemia and hospital readmissions in patients undergoing major surgery. In two large cohorts with over 32'000 patients the authors show that greater severity of anaemia at hospital discharge was significantly associated with unanticipated readmissions a 30 days postoperatively. This association remained true irrespective of pre-operative anaemia severity, surgery types, transfusion status and duration of postoperative ICU stay, and thus suggests that anaemia itself is an important risk factor for readmission. These findings should prompt us all to think over our role as perioperative care physicians and how we can improve the management of anaemia in a multidisciplinary team throughout the perioperative period.

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Sina Grape, MD, MBA
Head of Department of Anaesthesia
Valais Hospital
Sion, Switzerland
&
Department of Anaesthesia
Lausanne University Hospital
Lausanne, Switzerland