



Welcome to ESRA Updates

December 2023 | Issue 14



Editorial (p. 3)

[> Read More](#)



Teaching RA: Success of model “on wheels” in Portugal for particular scenarios (p. 4)

[> Read More](#)



Call for standardisation in the management of regional anaesthesia in Europe (p. 6)

[> Read More](#)



New PROSPECT recommendations about postoperative pain management – median sternotomy and elective craniotomy (p. 8)

[> Read More](#)



ESRA Residents Course 2024: Elevating Expertise in Regional Anesthesia (p. 11)

[> Read More](#)



3rd ESRA Cadaveric Workshop, Witten, Germany (p. 13)

[> Read More](#)



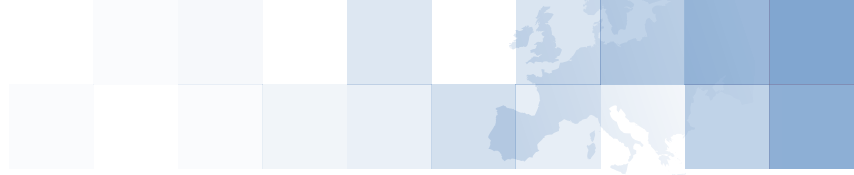
ESRA Updates (p. 16)

[> Read More](#)



Interview with Prof Manoj Karmakar – Carl Koller Winner 2023 (p. 18)

[> Read More](#)



Editorial Team



→ **Editor**
Clara Lobo



→ **Editor**
Peter Merjavy



→ **Co-Editor**
Kris Vermeylen



→ **Co-Editor**
Steve Coppens



→ **Co-Editor**
Nuala Lucas



→ **Co-Editor**
Morne Wolmarans



→ **Co-Editor**
José Aguirre



Editorial



ESRA Major officers



Editorial team



A Festive Tapestry of Knowledge and Joy: Unwrapping the Gifts of 2023 and Anticipating the Delights of 2024

Dear Cherished Members of the European Society of Regional Anaesthesia & Pain Therapy (ESRA),

As the festive lights twinkle and the year draws to a close, the editorial team and ESRA Major Officers extend their heartiest Christmas greetings and wishes for a joyous New Year 2024 to each of you.

Our December 2023 issue twinkles like a magnificently decorated Christmas tree, with each article representing a distinct and precious gift from ESRA to you. These contributions, wrapped in the spirit of innovation and collaboration, embody the core values of ESRA, just as ornaments and lights embody the joy and warmth of the festive season. Each piece, carefully curated and presented, contributes to a tapestry of knowledge and shared wisdom, making our collective celebration of learning and advancement truly special and memorable.

Like a much-anticipated Christmas present, we unwrap the pioneering paper on a [new model for teaching Regional Anaesthesia \(RA\) in Portugal](#). This beacon of educational innovation reflects the spirit of its commitment to education by our esteemed Portuguese colleagues, ensuring that the gift of knowledge continues to spread across, brightening the practice of RA.

In the essence of sharing and reflection, we revisit the insightful [survey conducted by BD](#) in 2021, with ESRA's support. Recently published, this project is like a cherished Christmas card, offering invaluable perspectives and guiding our journey into the future of RA.

Under our tree, you'll find [two groundbreaking publications from PROSPECT](#), shining like stars atop the tree. Their focus on craniotomy and cardiac surgeries (sternotomy) are gifts of knowledge, significantly enhancing our understanding of pain management in these intricate procedures.

With the excitement of children on Christmas morning, we eagerly anticipate the upcoming World Day/Week of Regional Anaesthesia. This global celebration promises to be a festival of learning and sharing, enriching the world of RA. [Check the nearest city to you and join the celebration!](#)

The ESRA Trainees workshop in Porto and the ESRA Innsbruck cadaver workshops in 2024 are like Santa's workshops, buzzing with activity and innovation. These events are our gifts to you, offering unique opportunities to hone skills and learn from the masters of RA.

Prof. Manoj Karmakar's interview is the star atop our festive edition, shining with wisdom and inspiration. Alongside, our Journal Club continues to be a gathering around the fireplace, where ideas and discoveries in RA are shared and celebrated.

As we gather around our festive tables, let's reminisce about the achievements of 2023 and raise a toast to the exciting possibilities of 2024. Your active participation and contributions are the ornaments that adorn our society, and together, we will continue to illuminate the field of Regional Anaesthesia and Pain Therapy.

Warm festive regards,
Editorial team
ESRA Major Officers

Teaching RA: Success of model “on wheels” in Portugal for particular scenarios



Joana Magalhães (Vice-President of CAR/ESRA, Hospital de Guimarães, Portugal) @JoanaMMagalhae



«This mobile approach, supported by advanced technologies and simulation-based training, has the potential to transform the way anaesthesiology teams learn and apply regional anaesthesia techniques.»

The “CAR on wheels” was an idea conceived by a former board of CAR / ESRA (the Portuguese Regional Anaesthesia Society), with the purpose of bringing tailored education on Regional Anaesthesia techniques to the specific needs of a requesting Anaesthesiology Service, anywhere in Portugal. Thus, the main objective was for team of educators bring the knowledge to the site of education, adjusting it to the local specificities encountered and overcoming and reducing the financial impact of the local attendees. So, after a careful evaluation of those specific requirements of the requesting Anesthesiology Department, the education would be refined, adapted, and specific, allowing for a streamlined implementation of the techniques in loco.

This “CAR on wheels” workshop, finally accomplished marked an important milestone in the national field of regional anaesthesia education. This unique initiative took place at the Simulation Centre of the Hospital of Funchal, Madeira, on June 2nd and 3rd, 2023. Designed as a mobile workshop, it aimed to provide comprehensive training on ultrasound-guided regional anaesthesia (UGRA) techniques to the anaesthesiology department of that institution. By overcoming logistical challenges, such as the geographical constraints of an island, this workshop enabled the delivery of valuable education to a niche audience. In this report, we highlight the success and significance of this “CAR on wheels” model, discuss the integration of simulation-based training and artificial intelligence in UGRA, and emphasize the importance of team development in achieving high-performance outcomes.

Mobile Education: Breaking Barriers

The “CAR on wheels” model represents a breakthrough in regional anaesthesia education, offering a mobile approach that transcends the traditional boundaries of anatomy laboratories, setup workshop stations and typical slide presentations. By leveraging modern technologies, including anatomy apps, ultrasound machines, phantoms, and human models, and with the guidance of experienced facilitators, this innovative model has the potential to revolutionize education for anaesthesiology teams. By reaching out to remote locations and addressing specific scenarios where distance poses challenges, this mobile workshop opens new doors to learning and professional development. It enables the dissemination of knowledge and skills, empowering anaesthesiologists to perform safer and proficient peripheral and central nerve blocks with confidence.

Enhancing Learning Through Simulation and Artificial Intelligence

The Simulation Center at the Hospital of Funchal provided an ideal setting for the workshop, offering simulation-based training and access to specific phantoms. The integration of simulation in regional anaesthesia education has proven to be effective in improving procedural skills, namely the training of eye-needle-ultrasound probe coordination, in-plane or out-of-plane techniques, as well as catheter insertion in the immediate post-workshop period. Drawing from Kolb's experiential theory from simulation, this immersive learning experience fosters a deeper understanding of UGRA techniques, while providing ample opportunities for practice and immediate feedback and feed-forward. Additionally, the potential application of artificial intelligence (AI) in UGRA holds promise for boosting safety and anaesthesiologist confidence. AI can assist in the identification of anatomical structures by rearranging the ultrasound image and color-coding potential targets. However, this process should be supervised and involve the presence of, at least, two anaesthesiologists to ensure a safe and accurate learning process.

Team Development: Maximizing Performance

The success of the "CAR on wheels" workshop can be attributed, in part, to the high-performing anaesthesiology department of the Hospital of Funchal. As described by Judith Stein, in the human resources of the MIT website (3), (...) for teams to be high-performing it is essential for them to understand their development as a team." By bypassing the forming and storming stages of team development, the department swiftly progressed to the norming stage, characterized by consensus and a clear understanding of individual roles within the team. This cohesive and well-aligned team was poised to enter the performing stage, where they maximized productivity and focused on their shared mission of providing exceptional patient care. The workshop, facilitated by the CAR/ESRA team and supported by the Simulation Center, further reinforced the principles of team building and provided a platform for knowledge exchange and mutual support. The workshop's immersive nature and the commitment of the entire team facilitated the seamless translation of acquired knowledge into clinical practice, benefiting patients immediately.

The "CAR on wheels" workshop represents an innovative and successful model for regional anaesthesia education, especially in specific scenarios where distance poses a challenge. This mobile approach, supported by advanced technologies and simulation-based training, has the potential to transform the way anaesthesiology teams learn and apply regional anaesthesia techniques. The integration of artificial intelligence further enhances safety and confidence in performing central and peripheral nerve blocks. The accomplishments of the "CAR on wheels" initiative exemplify the determination of CAR/ESRA to overcome logistical barriers and provide excellence in regional anaesthesia education. By embracing this mobile model, anaesthesiologists demonstrate their commitment to continuous improvement and their unwavering dedication to patient care.

Mission accomplished, team!

Aknowledgments

This workshop would not be possible without the valuable contribution of João Moreira, José Miguel Cardoso, and Raquel Fernandes for their exceptional dedication and expertise as integral members of the team. A special note of gratitude also extends to the CAR/ESRA society for their invaluable support in making this workshop a resounding success. Furthermore, a due recognition and heartfelt appreciation to Filipa Rodrigues and the entire anaesthesiology department of Hospital of Funchal, Madeira, for their enthusiastic participation and commitment to advancing regional anaesthesia education. Special thanks are also due to Eugénio Mendonça, Regina Rodrigues, Pedro Ramos, and Maritza Clemente for their valuable contributions and assistance throughout the workshop.

References

1. Bowness JS, El-Boghdady K, Woodworth G, et al; Exploring the utility of assistive artificial intelligence for ultrasound scanning in regional anesthesia; *Regional Anesthesia & Pain Medicine* Published Online First: 28 January 2022. doi: 10.1136/rapm-2021-103368
2. Udani AD, Kim TE, Howard SK, Mariano ER. Simulation in teaching regional anesthesia: current perspectives. *Local Reg Anesth*. 2015 Aug 11; 8:33-43. doi: 10.2147/LRA.S68223. PMID: 26316812; PMCID: PMC4540124.
3. <https://hr.mit.edu/learning-topics/teams/articles/stages-development>.

Call for standardisation in the management of regional anaesthesia in Europe



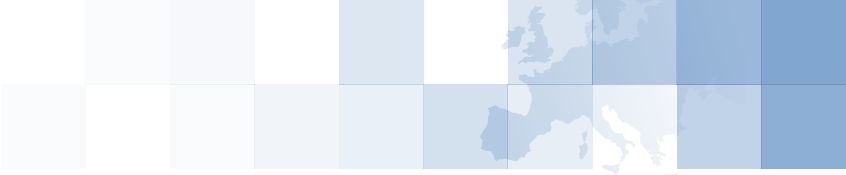
Arjan Konijn (University Medical Centre, Groningen, Netherlands) @akonijn

Thanks to the support from ESRA members, an assessment of regional anaesthesia practices found in 36 European countries has been published (*Eur J Anaesthesiol Intensive Care Med* 2023;2:4(e0026))

Insight was drawn from nearly 800 responses to a survey created by a Faculty of European regional anaesthesia (RA) experts and was disseminated through ESRA and via professional networks. However, 86% of respondents were accessed through the European Society of Regional Anaesthesia & Pain Therapy (ESRA), for whose engagement the authors wish to express their gratitude.

The key findings from the survey include:

- > The use of RA has grown in the past five years, the highest increase was noted in Iberia (Spain/Portugal), Italy, and UK and Ireland (median increase of 50%) compared with the lowest in Germany/Switzerland/Austria (GSA) and Belgium/Netherlands/Luxembourg (Benelux) (22 and 23%). Increases were also related to specific applications with upper and lower limb surgery as well as postoperative pain with reported median increases of 50%.
- > Spinal anaesthesia (single injection) is the most common RA procedure and applies primarily to lower limb surgery (92% of respondents), Caesarean section (72%), and abdominal procedures (71%), while peripheral nerve block single shot is most used for lower and upper limb surgery (87%) and post-operative pain (65%).
- > However there is significant country variation. For example, epidural single injection was the least commonly performed overall, but there were wide variations by country with France reporting 17% usage to 72% in Iberia. Similarly, for PNB continuous infusion with Greece at 32% and Germany/Switzerland/Austria (GSA) at 90%. These variations highlight a lack of consensus as to which procedure is best for which application or potentially a lack of awareness or training of newer procedures.
- > Use of ultrasound when placing regional anaesthesia blocks was consistent across most countries with the highest rate of use in Benelux (99%), GSA (99%), UK and Ireland (98%), Denmark/Norway/Finland/Sweden (Nordic) (97%), Iberia (96%) and France (94%), but a much lower rate of use in Greece (45%).
- > Anaesthetists predominantly monitor RA block efficacy with pain sensitivity (79%) and the ability to sense temperature (68%) being the most common methods of checking for pain relief. Median reported estimated failure rate of regional anaesthesia blocks across all countries was 5%, with highest rates seen for PNB single shot, PNB continuous infusion and interfascial plane block (median 10%).

- 
- > Most respondents reported a high frequency (over 50%) of systematically reporting multiple complication types, most commonly infection, headache, and nerve injury (all up to 69%), but respondents from Italy had notably low levels of reporting (highest 42% for headache) and 33% of all respondents reported that no complications are reported at all. This clearly highlights a lack of consensus as to not just which complications should be tracked but even if complications should be tracked.
 - > Although some countries are following international guidelines such as the ESRA guidelines (e.g. Benelux, Eastern Europe, Greece, Iberia and Italy), others are following more local or national guidelines (e.g. France and UK and Ireland) or their hospital guidelines (e.g. GSA and Nordic Europe).
 - > ISO Standard NRFit™ is in use in several responder countries, with the UK and Ireland the most likely to have implemented (61%). All countries reported the expectation that NRFit would be implemented within the next 5 years, with the sole exception of the Nordics. Most survey respondents said they would welcome more information and, when questioned as to what they perceive to be the major barrier to its implementation, cited financial obstacles.

The study identified the need for European standardisation and consistency in the use of RA, underpinned by three calls to action:

- > To determine European best practice in measuring block efficacy
- > To create a universal template to be capturing and reporting complications
- > To facilitate the adoption of ISO Standard NRFit across Europe, through a programme of education and agreement on clear implementation processes

The full text can be accessed free of charge from the journal at https://journals.lww.com/ejaintensivecare/fulltext/2023/08000/regional_anaesthesia_practices_insights_from_a.5.aspx

New PROSPECT recommendations about postoperative pain management – median sternotomy and elective craniotomy



Clara Lobo (Editor of ESRA Updates; Cleveland Clinic Abu Dhabi, UAE) @claralexlobo



In the pursuit of enhancing patient outcomes and ensuring optimal recovery after [cardiac surgery via median sternotomy](#) (1) and [craniotomy](#) (2), the recent PROSPECT publications bring forth valuable insights into pain management strategies. The recommendations are rooted in rigorous evidence. To know more, please follow the [link](#).

Cardiac Surgery via median sternotomy

The PROSPECT publication emphasizes a paradigm shift towards non-opioid analgesics, acknowledging the efficacy of **paracetamol and NSAIDs** as fundamental postoperative analgesics. The guideline underlines the overall recommendation of NSAIDs as basic analgesics, while cautioning against the use of COX-2 specific inhibitors due to insufficient evidence and safety concerns. This endorsement signifies a significant departure from conventional practices, steering practitioners towards a more nuanced approach in pain management.

Dexmedetomidine and magnesium emerge as promising additions to the postoperative analgesic arsenal. The publication suggests their use, especially in scenarios where basic analgesics are either contraindicated or not administered.

Highlighting the importance of targeted pain relief, the PROSPECT guidelines commend the use of **parasternal blocks and local infiltration**. These interventions showcase a dual benefit of reducing opioid consumption and improving pain scores. This localized precision in analgesic interventions not only contributes to enhanced patient comfort but also aligns with the broader healthcare goals of minimizing opioid-related complications.

While advocating for a reduced reliance on opioids, the guidelines underscore their role as rescue medications. This nuanced approach acknowledges the necessity of opioids in managing acute pain episodes, ensuring that patient discomfort is promptly addressed while avoiding unnecessary opioid exposure.

The document also sheds light on interventions not recommended due to insufficient evidence or safety concerns. The **ESP block**, for instance, finds itself in the former category, signaling the need for further investigation. Conversely, **epidural analgesia** with or without opioids and/or **intrathecal opioids** face cautionary notes, particularly in patients on high doses of anticoagulants, underscoring the imperative for cautious consideration in such cases.

Looking ahead, the guidelines pinpoint areas for future studies, with a focal point on assessing the effects of analgesic interventions for fast-track cardiac surgery. The emphasis lies on interventions that facilitate early tracheal extubation and ambulation, aligning with the evolving landscape of cardiac care that prioritizes swift recovery.

In addition to pharmacological interventions, the publication recognizes the value of non-pharmacological approaches, such as massage therapy and music therapy as effective adjuncts to traditional analgesic strategies. This holistic perspective acknowledges the multifaceted nature of pain management and encourages a comprehensive, patient-centered approach.

The infographic is titled "prospect" with the subtitle "procedure specific postoperative pain management". It features a logo with a red ECG line and four colored circles (red, grey, blue, grey). The main title is "guideline for sternotomy" and the subtitle is "Systematic review and procedure-specific postoperative pain management recommendations". The content is organized into four horizontal sections, each with an icon and a title:

- Systemic (basic) analgesia**: Systemic analgesia should include paracetamol and non-steroidal anti-inflammatory drugs (NSAID) administered pre-operatively or intra-operatively and continued postoperatively, unless contraindicated. (Icon: pill bottle)
- Analgesic adjuncts**: Intra-operative intravenous infusions of magnesium or dexmedetomidine may be considered, especially when basic analgesia is not administered. (Icon: IV drip)
- Regional techniques**: Parasternal block/wound infiltration. (Icon: syringe)
- Non-pharmacological therapies**: Music and massage are recommended as adjuncts. (Icon: musical notes)

At the bottom, it cites: "Timo Maeßen, et al. Eur J Anaesthesiol 2023 Jul 20. doi: 10.1097/EJA.000000000000188"

[Click to enlarge](#)

Pain Management after elective craniotomy

This new review synthesizes key findings, shedding light on effective strategies and areas requiring further exploration considering elective craniotomy under general anesthesia.

According to the latest evidence, a **“basic analgesia regimen”** comprising **paracetamol and NSAIDs or COX-2 inhibitors** proves to be a cornerstone in achieving significant analgesia while concurrently reducing opioid consumption. Importantly, NSAIDs and COX-2 inhibitors, integral components of this regimen, do not pose an increased risk of bleeding or interfere with bone healing. However, caution is advised in patients with renal impairment, where these agents should be used judiciously.

Dexmedetomidine emerges as a promising adjunct for pain relief, though its administration demands careful titration to mitigate potential hemodynamic instability and increased sedation. **Scalp nerve blocks and incisional surgical infiltration**, whether administered pre- or post-surgery, stand out as effective measures in reducing pain scores and opioid use. Both techniques should not be combined, due to the high risk of local anesthetic systemic toxicity (LAST).

Gabapentinoids’ role remains a subject of debate; while they show a mild reduction in opioid consumption, concerns over increased sedation and other side effects warrant reservations for recommending their use.

Systemic opioids should be reserved as rescue analgesics in the postoperative period. **Acupuncture**, suggested as an alternative when basic analgesics are impractical, presents an intriguing avenue for further exploration.

The PROSPECT publication advocates reserving systemic opioids as rescue analgesics in the postoperative period, emphasizing a move towards multimodal approaches that minimize opioid reliance.

Notably, the review recommends the cautious use of i.v. dexamethasone despite the absence of specific evidence. This underscores the need for ongoing research to solidify the role of this intervention in enhancing postoperative pain management.

Identifying interventions not recommended for pain management in craniotomy patients, the publication adds a layer of clarity. Moreover, it underscores the necessity for high-quality studies to delineate the efficacy of recommended approaches within the context of enhanced recovery pathways.

prospect
procedure specific postoperative pain management

Guidelines for craniotomy
Systematic review and procedure-specific postoperative pain management recommendations

- Systemic analgesia**
Paracetamol and NSAIDs should be administered pre-operatively or intra-operatively and continued postoperatively.
- Dexmedetomidine infusion**
Intra-operative dexmedetomidine infusion is recommended. Caution with regard to cardiovascular effects is warranted.
- Scalp locoregional techniques**
Either incision-site infiltration or scalp nerve block is recommended.
- Opioids**

Click to enlarge

In conclusion, the PROSPECT publication serves as a compass guiding healthcare practitioner towards evidence-based and patient-centered postoperative pain management strategies. By endorsing novel approaches and cautioning against certain practices, these guidelines contribute to the continuous refinement of patient care, ultimately steering the field towards improved patient outcomes and enhanced recovery.

For those seeking a deeper understanding, the full text of the PROSPECT publications can be accessed through the provided links in this review or [PROSPECT webpage](#). As we delve into this evolving landscape, the publication serves as a guidepost, steering practitioners toward evidence-based practices while prompting critical inquiry into the intricacies of postoperative pain management.

References

1. Maeßen, T., Korir, N., van de Velde, M., Kennes, J., Pogatzki-Zahn, E., & Joshi, G. P. (2023). Pain management after cardiac surgery via median sternotomy: A systematic review with procedure-specific postoperative pain management (PROSPECT) recommendations. *European Journal of Anaesthesiology*, 40(10), 758–768. <https://doi.org/10.1097/EJA.0000000000001881>
2. Mestdagh, F. P., Lavand'homme, P. M., Pirard, G., Joshi, G. P., Sauter, A. R., & van de Velde, M. (2023). Pain management after elective craniotomy: A systematic review with procedure-specific postoperative pain management (PROSPECT) recommendations. *European Journal of Anaesthesiology*, 40(10), 747–757. <https://doi.org/10.1097/EJA.0000000000001877>

ESRA Residents Course 2024: Elevating Expertise in Regional Anesthesia



Humberto Rebelo (Hospital da Luz, Vila Novade Gaia, Portugal) @RebeloHumberto



Josip Azman (Linköping University Hospital, Sweden)



«We've meticulously refined the program to cater to the diverse needs of both novice and seasoned Anaesthesia Residents and young Anaesthesia specialists.»

Embark on a transformative journey at the 6th edition of the Residents Course, set against the picturesque backdrop of Porto, Portugal in 2024. Building upon the success of previous editions, we've meticulously refined the program to cater to the diverse needs of both novice and seasoned Anaesthesia Residents and young Anaesthesia specialists, ensuring an enriching experience for all.

Key Highlights

Ultrasound Workshop: Immerse yourself in a dynamic one-and-a-half-day workshop focusing on regional anesthesia, covering fundamental and frequently utilized blocks essential for daily practice.

Point of Care Ultrasound Workshop: Explore the realms of airway, gastric, and thoracic ultrasound in a dedicated workshop. Uncover its utility not only in detecting complications of regional anesthesia techniques but also in troubleshooting challenges encountered in everyday anesthetic practice.

Simulation Center Session: Engage in a half-day at the Simulation Center, where participants delve into discussions and hands-on practice of clinical scenarios involving the most common incidents and complications associated with Regional Anesthesia practice. This interactive session provides a unique opportunity to navigate both rare critical scenarios and everyday situations, fostering a deep understanding of diagnosing and managing complications related to regional anesthesia.



The last ESRA Residents & Trainees Workshop took place on 21-22 April 2023 in Porto

What Sets Us Apart:

Inclusive Participation: Attendees are encouraged to actively participate in the scenarios and join the insightful debriefing sessions.

Expert Instructors: Benefit from the guidance of highly experienced ESRA International and national (Portuguese) instructors, well-versed in Ultrasound workshops and Simulation Scenarios. Their expertise ensures an engaging and interactive learning environment, fostering discussions on real-world clinical practices.

Springtime Exploration in Porto:

Beyond the enriching educational experience, discover the allure of Porto during the vibrant Spring season. Immerse yourself in the city's rich history, explore the picturesque Douro River, indulge in wine tasting at the famed O'Porto wine cellars, and experience the city's lively nightlife.

Save the date for an exceptional learning opportunity: April 19-20, 2024. For more details and registration, follow this link: [ESRA Residents Course 2024](#).

Join us in Porto for an unparalleled blend of education, culture, and camaraderie. Elevate your expertise in regional anesthesia at the ESRA Residents Course 2024.



3rd ESRA Cadaveric Workshop, Witten, Germany



Humberto Rebelo (Hospital da Luz, Vila Novade Gaia, Portugal) @RebeloHumberto



Josip Azman (Linköping University Hospital, Sweden)



«Over 96% of the candidates found this workshop useful or extremely useful for their clinical practice. The course fulfilled their educational goals and expected learning outcomes.»

The 3rd ESRA Cadaveric Workshop took place at the Department of Anatomy, University of Witten/Herdecke in Germany on 4th–5th November 2023.

Experienced ESRA instructors and EDRA examiners welcomed participants to this two-day practical workshop in applied regional anaesthesia.

Day 1 was dedicated to applied anatomy for the upper limb, thoracic, and abdominal wall. Anatomical lectures were complemented by a demonstration of ultrasound scanning, providing an overview of all commonly performed techniques in clinical practice. During the interscalene block scanning demonstration, even a common anatomical variation was discovered and explained by the instructor. Candidates had their questions answered on the spot during the demo session. All candidates underwent a short lecture and practical training on needle insertion using in-plane and out-of-plane needle insertion before the actual practical part of the workshop—needling on cadavers and scanning the live models.





Day 2 offered lectures, demonstrations, and scanning/needling practice for lower limb blocks and neuraxial/paravertebral anatomical regions, as well as free scanning practice at the end of the workshop.

I would like to express my sincere gratitude to all esteemed faculty members for their enthusiastic, passionate dedication of their free time to spread knowledge in regional anaesthesia and teach future experts in this dynamic field of anaesthesia.

Over 96% of the candidates found this workshop useful or extremely useful for their clinical practice. The course fulfilled their educational goals and expected learning outcomes. We would like to share a couple of candidates' feedback with our readers:



The Faculty (from top to bottom, left to right): Ivan Kostadinov, Aysu Salviz, Vedran Frkovic, Alexandros Makris, Paul Kessler, Georg Feigl, Peter Merjavý & Event Manager Vivien Penning-Titze



What was the best aspect of this event?

«Being able to gain a deeper understanding of the anatomical relationships and have an opportunity to understand best techniques using cadavers for practice.»

«The combination of lectures, visualisation on anatomical dissections of the same topic as the lecture and practice on a cadaver of the same topic.»

«Such knowledgeable faculty who were able to share their skills with us.»

«The lecturers & instructors were the best aspect. Dr Aysu Salviz's on-the-spot corrections during cadaveric sections and Dr. Paul Kessler's insightful feedbacks while probing on models helped me understand how to best perform a block. Thanks to Dr Alexandros Makris, I feel more confident with the walk down technique. Dr. Peter Merjavý's tips on what to do when encountering a patient with difficult anatomy had given me eureka moments. I found Dr Georg Feigl's explanation of the anatomy very useful, because he has not only showed the structures but also given information about how these structures would look like ultrasonographically, talked about local anaesthetic volumes from anatomical point of view and commented on safety of different approaches of the blocks.»

«Timing on spot, possibility of interventions on cadavers, cadaver anatomy.»

«Highly informative, well organised.»



Thank you to all participants!

ESRA Updates



Sina Grape (Anaesthetist & Intensive Care Physician, Switzerland)



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

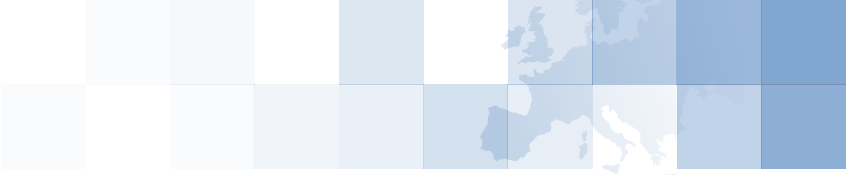
ESRA UPDATES journal club invites leading experts in (regional) anesthesia to select one (or more) article(s) which for him/her were/are important, interesting or changed his/her clinical practice. This choice can be a general big randomized study but can also be very personal. For this edition our choice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



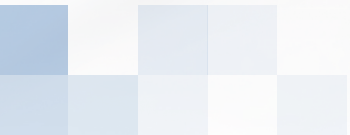
A recent article I found very interesting was published this year by Warner et al. and shaped my perception of anaemia. Anaemia is very common in our elderly or multimorbid patients and is also a very common sequela of surgery. In their investigation the authors explore the association between anaemia 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.

References

1. Patel A, Nouraei SAR. Transnasal Humidified Rapid-Insufflation Ventilatory Exchange (THRIVE): a physiological method of increasing apnoea time in patients with difficult airways. *Anaesthesia* 2015 Mar;70(3):323-9. doi: 10.1111/anae.12923.
2. Aitken E, Jackson A, Kearns R, Steven M, Kinsella J, Clancy M, Macfarlane A. Effect of regional versus local anaesthesia on outcome after arteriovenous fistula creation: a randomised controlled trial. *Lancet* 2016 Sep 10;388(10049):1067-1074. doi: 10.1016/S0140-6736(16)30948-5
3. Warner MA, Hanson AC, Plimier C, Lee C, Liu VX, Richards T, Kor DR, Roubinian NH. Association between anaemia and hospital readmissions in patients undergoing major surgery requiring postoperative intensive care. *Anaesthesia* 2022 Sep 8. doi: 10.1111/anae.15859.

Sina Grape, MD, MBA

Head of Department of Anaesthesia
Valais Hospital
Sion, Switzerland
&
Department of Anaesthesia
Lausanne University Hospital
Lausanne, Switzerland



Interview with Prof Manoj Karmakar – Carl Koller Winner 2023



Nuala Lucas (Co-Editor of ESRA Updates, Norwick Park Hospital, Harrow, UK) @noolslucas



«The list of recipients of the Carl Koller Award is so distinguished - a list of who's in who in regional anaesthesia. So it's a very proud moment for me, but I feel humbled when I see the names on the list.»

ESRA awards the Carl Koller Award annually to individuals in recognition of outstanding lifetime contributions to the field of Regional Anaesthesia and/or Pain Medicine. The 2023 recipient was Professor Manoj Karmakar from the Department of Anaesthesia and Intensive Care of the Chinese University of Hong Kong. Professor Karmakar is internationally recognized for his research in regional anaesthesia in adults and children, and his areas of research interest include thoracic paravertebral block, spinal sonography, ultrasound-guided central neuraxial blocks and local anaesthetic pharmacology. He has pioneered many novel regional anaesthetic techniques and published extensively. His research work has been cited 8680 times (Google Scholar as of 19/12/23), and his H-index is 48. Professor Karmakar recently spoke about his career to Nuala Lucas, ESRA Updates editor.

Nuala: Congratulations on winning the ESRA's Carl Koller Award in 2023. Can you tell us what this recognition means to you and your career in Regional Anaesthesia and Pain Medicine?

Prof Karmakar: I perceive it as at the top of my career achievements, particularly because, as clinicians, we never really work for rewards. When you do your work or research, being recognized and nominated for an award is incredible. I'm honoured and humbled to accept it, particularly being the first Asian doctor to receive the Carl Koller Award. This means a lot to me – I think it's great recognition because a lot of good work has happened in Asia. I'm sure the future holds great things for Asia and Asian anaesthesiologists. To be the first Asian doctor to receive the award also speaks volumes about ESRA for their openness and the recognition that they have offered. The list of recipients of the Carl Koller Award is so distinguished – a list of who's in who in regional anaesthesia. So it's a very proud moment for me, but I feel humbled when I see the names on the list.

Nuala: That's such a nice answer – recognizing our colleagues worldwide working hard to promote good and regional anaesthesia care. You don't need to be humble, Manoj; no one deserves to be on that list more than you. Could you share a couple of highlights from your career? I'm sure there's been many!



Professor Manoj Karmakar receiving the Carl Koller Award at the 6th World Congress on Regional Anaesthesia & Pain Medicine (Paris, September 2023).

Prof Karmakar: It's tough to pinpoint a specific highlight in the career, but I think of late, my work, particularly in the field of spinal sonography, has really been a game changer. We trained in the period when we did everything with touch and feel as landmarks. Spinal sonoanatomy has definitely made a world of difference. My contribution to helping unravel the mysteries of the sonoanatomy of the spine has been remarkable. I can share a moment from that experience; I'd been trying to unravel this for many years before it really happened. It so happened one evening when I was watching television. It suddenly came to my mind that Manfred Greer, you know, Manfred is from Austria. They had put a cervical spine in a water bath, and they had scanned it for their medial branch block study. So it dawned on me that, why don't I just put this old model into the water and scan it, and then I'd be able to define the anatomy. And from there, we're going to take it on. So I think it was about 11 p.m. at night, and my fellow at the time said, "Come on, Michael, wake up because it's time to go and do some work." He said, "Where are we going?" I said, "We're going to the laboratory to go out and do some work." So that really, I believe, was a turning point in my career because from then on, I think we were able to define not only the anatomy but also the musculoskeletal anatomy of the spine. And then, we went on to do real-time epidurals and spinals. And I think the future holds very bright because today, although it is used mostly for, as you know, pre-scanning, I believe the improvement in technology and, more importantly, the improvement in individual skills, particularly dexterity, will see ultrasound become an integral part central nerve blocks as we do for peripheral nerve blocks. So, I would say that's probably the highlight of my recent anaesthesia career today.

Nuala Lucas: That's such a wise answer, Manoj! What initially sparked your interest in regional anaesthesia and pain medicine? Why did you decide to pursue a career in this area? Was it by chance or something else?

Prof Karmakar: You know, you may be aware that I come from India, and I did my early training in anaesthesia in India at a prestigious institute in Pondicherry called the Jawaharlal Institute of Postgraduate Medical Education and Research. While I was doing my training, my professor at the time was Professor PR Kangle, MD. She was, to me, a role model. She did things most people would never even venture to do because she was a specialist in pain medicine. As you can imagine, in the early nineties, there were very few people, not only in India but all across the world, who were doing regional anaesthesia interventions for pain. So I always followed her and saw her doing these things. Obviously, I was training for my basic anaesthesiology, but that was the first kind of introduction that I should think fully about what I should do differently. And when the time is right, I mean to do this part of my repertoire and take regional anaesthesia as one of my career goals. That really initially sparked my interest. It was when I went to the UK and did my fellowship at the Royal College after a short stint in New Zealand.

Stay tuned for the full interview and Prof Karmakar's insights and wisdom. Soon available.