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## Preface

We are now ready to publish the third edition of *Complications of Regional Anesthesia* which was first published 17 years ago. The title remains the same but we have added the subtitle, *Principles of Safe Practice in Local and Regional Anesthesia*, to stress the relatively new emphasis and importance on safety and prevention and to broaden our horizons to include some discussion about the practice and the administration of not just **Regional** but also **Local Anesthesia**.

We have made some significant changes to the book which we hope you approve. First of all this is a much more comprehensive edition going from 24 to 35 chapters, and we have also divided the book into seven separate parts based mostly on logic. In the opening part entitled **General** considerations, we started out with a chapter on the History of Regional Anesthesia which seemed like a good place to start. We also addressed the issue of Safety of Regional Anesthesia. It is difficult to discuss much about regional and local anesthesia without mentioning toxicity of local anesthetics which has been a problem with regional and local anesthesia since its inception more than 130 years ago, and we finished up that section with a good discussion of Outcomes comparing Regional and General Anesthesia. In the second part we addressed **Special** considerations, which includes a chapter on Mechanisms of Nerve injury, Infection, Catheter techniques, and the whole issue of regional anesthesia in the presence of neurologic disease and how to evaluate neurologic injury following regional anesthesia. We then dedicated several chapters to **Specific** blocks involving anatomic regions of the body specifically addressing safety and management of adverse events. We dedicated the next part to specific **Patient Populations**—the young, the old, the pregnant, obese, and those suffering from chronic pain. The next part is new territory for us and is entitled **Special Environments**. We invited a group of practitioners, mostly surgeons, who frequently use local anesthetics in their practices, to share their expertise and experiences with us. Among this group of specialists are dentists, ophthalmologists, emergency room physicians, orthopedists, and plastic surgeons. We have a lot to learn by sharing our experiences using local and regional anesthesia with specialists outside our own discipline and they from us. We dedicated a part to **Morbidity Studies** and this part includes writers from across the world adding an **International** flavor, as we are sometimes accused of being too insular in North America. We dedicated the final part to **Medical Legal Aspects** of Local and Regional Anesthesia, which we must realistically face in the modern world of this twenty-first century.

Labat, in the 1920s, was the first fully trained specialist in Regional Anesthesia, and he influenced the leaders of this new emerging specialty of anesthesiology to use regional anesthesia in their practices. Most anesthesiologists at that time opted for general anesthesia because of its predictability. Tremendous advances have been made in Regional Anesthesia in the past 30 or 40 years, so much so that most anesthesiologists in the modern era have become interested in regional anesthesia again because there is far more predictability in the practice of regional anesthesia than ever before. We can now actually see what we are doing instead of blindly seeking neural targets, based on our knowledge of anatomy. Most anesthesiologists fully appreciate the enormous benefits of regional anesthesia to patients especially in the post-operative period but also long term. However, despite good practice, we encounter problems

and unforeseen circumstances, so practitioners must be fully aware of the many pitfalls and complications associated with the practice of regional anesthesia even though we have made enormous advances in recent years.

This edition is much more comprehensive than our previous efforts and more inclusive and there are more pages, tables, diagrams, and colored illustrations. This text is also comprehensively referenced. As in previous editions, there is some repetition and that is inevitable. However, it is refreshing to compare anesthesia practitioners' experiences from around the world and from outside our own discipline. Local Anesthetic Systemic Toxicity (LAST) is a very common theme among all who practice Local and Regional Anesthesia, and we have learned a lot about prevention and treatment of this malady in the past 30 years. Fortunately most of the complications we have discussed are rare and all too often we appear to shoulder the blame for injuries that we did not cause in the first place.

Our main emphasis is on safety and prevention of injury in the practice of local and regional anesthesia, and we have called upon a great variety of experts from around the world to share their experiences with us. We hope you appreciate the changes we have and as always we welcome your critique and recommendations for improvement.

There is one other important change I have made in this edition and that is I have invited my colleague and friend from the Department of Anesthesiology and Pain Medicine from the University of Alberta to co-edit this edition of the text with me. He has contributed enormously to our knowledge of local and regional anesthesia in the past two decades and helped a great deal with this latest version.

Edmonton, AB, Canada  
Stanford, CA, USA

Brendan T. Finucane  
Ban C.H. Tsui

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Finucane, B.; Tsui, B.C.H. (Eds.)

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