rather than in an operating theatre with access to fluoroscopy or CT.

There are 159 such injection procedures described. Some will be familiar (intraarticular injection of the shoulder, occipital nerve block, suprascapular nerve block) but most very unfamiliar (stylohyoid process injection, Injection technique for Anconeus Syndrome, sesamoid joint injection of the hand).

Of the 159 procedures described, I estimate that in my practice I have performed, or imagine I would ever need to perform, less than a dozen. Of the familiar procedures such as injection of the sacroiliac and sacro-coccygeal joint or the trigeminal nerve, the reader is presented with an injection technique based on surface anatomy and the use of anatomical landmarks. I would argue that the use of image guidance for procedures like this is mandatory.

In terms of the content then, for a sports medicine physician or perhaps a rheumatologist, this would be a useful reference book. Many of the conditions described would no doubt be found in any sports injury clinic where injections of local anaesthetic and steroid may help an acute injury. As a reference for the pain physician, I fear only a fraction of this book would be of value.

I do not wish to be too disparaging—if outpatient-based joint and muscle injections (and the occasional nerve block) are part of your regular practice or you intend them to be, then there is much to admire here.

The book is clearly laid out and divided into eight anatomic sections. Each procedure is described in terms of the indications and clinical considerations, clinically relevant anatomy, technique, and side-effects and complications. Most procedures have an accompanying ‘clinical pearl’.

Waldman writes with his usual clarity and if all you wanted from this book was an excellent overview of some common and not so common musculoskeletal pain conditions then you would need look no further.

X-ray and MRI scan images where applicable are used to accompany the text and the plentiful illustrations are nothing short of beautiful.

This is the third edition of the book and now includes, where relevant but often a little too briefly described, ultrasound-guided injection techniques.

Some of the sections, particularly those where a muscular injection technique is described might have benefited from some judicious editing. When describing a particular condition, large swathes of text (the description of myofascial pain and trigger points—some 500 words) are repeated verbatim. This is also apparent when reading some of the ‘Side Effects and Complications’ sections and because of this, the statements are nonsensical. For example, the description of an injection to the triceps and biceps muscle is followed by a warning that ‘the proximity of the spinal cord and exiting cervical nerve roots makes it imperative that this procedure be carried out only by those well versed in regional anatomy’ and that ‘given the proximity of the brain and brainstem, ataxia caused by vascular uptake of local anaesthetic is not an uncommon occurrence’. A minor irritation in an otherwise excellently written book.

So, well written, well laid out, and beautifully illustrated. Does the Atlas of Pain Management Injection Techniques deserve to take pride of place on your reference bookshelf? Will it be one of your procedural ‘bibles’?

Sadly, and for the jobbing interventional pain physician, I do not think so. Save your money and buy his other book.

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This textbook is true to its name. It describes physics that apply to anaesthesia. This is a very wide brief, but the book copes with this very well in a relatively small package. The size of the book inevitably means that there are a few areas that could be more fully dealt with as described below, but overall it is a very effective text. The initial chapters cover the basic physics of atoms, simple mechanics, energy and power, temperature and heat, waves, and pressure. These are all easily understandable with an appropriate level of simple supporting equations and explanation. Definitions are highlighted in summary boxes, although sometimes these are expressed in terms that are perhaps too simple, but generally are very helpful. Diagrams such as the series showing work done by a ventilator vs work done in the lung are a useful sequence.

Considering waves, the differences between sound and electromagnetic waves are well described, together with an interesting section summarizing harmonic series and Fourier analysis. Worked examples are helpful, for example, delivery of pressure from different sized syringes with the same force applied to the plunger. The chapter goes on to describe the applications of pressure to valves and measuring devices in anaesthesia and usefully the implications of siphon effects.

Humidity, flows, and their measurement are well dealt with, together with the effects we see in different systems such as Venturi and Coanda. The properties of gases and the related gas laws are summarized. Osmosis and areas regarding, isotonic, hypertonic, and hypotonic solutions could have usefully been expanded or better defined. The book deals with measuring gases and vapours, including the Clark, Sanz, and Severinghaus electrodes, then goes on to delivering vapours via vaporizers, summarizing the principles involved, medical gas supplies including cylinder design, and the behaviour of gases that liquefy in a cylinder. This is followed by breathing systems including the Mapleson classification and CO₂ removal. Unfortunately, modes of ventilation were a disappointing section, which perhaps was not strictly relevant to this text, although the physics of flow in, for example, high-frequency oscillation might be more in keeping with the ethos of the book. Basics of electricity were well covered, as
were electromagnetism and alternating current, including some good basic science and although pacing and defibrilla-
tion and electrical safety are covered, how to deal with pacing and diathermy is not covered so clearly. The process and hazards of magnetic resonance imaging are well explained. The book concludes with some interesting sections on mathematical concepts and statistics.

Each chapter contains a summary section at the end, followed by single best answer questions and multiple choice questions.

Overall, this is an effective textbook that takes the physics first and applies it to anaesthesia. It is all the better for putting the physics first and promoting understanding before dealing with the key pieces of equipment. However, the crunch question is whether I would buy and recommend this textbook to improve my knowledge of the physics related to anaesthesia. The answer is definitely yes. This is a good book, which deserves to develop over future years.

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