In his Foreword to this excellent book, the eminent American anaesthesiologist Dr. E. M. (Manny) Papper describes it as a ‘very unusual and very significant chronicle of the history of the Department of Anaesthesia of Massachusetts General Hospital (MGH)’. Readers will be well aware that the ether dome at MGH witnessed the first successful public demonstration of anaesthesia. Having read a sizeable proportion of this large volume, I would be the first to attest to the veracity of that statement. Indeed, potential purchasers of the book (and I would highly recommend it) will derive much useful information in making their decision by reading Papper’s Foreword.

I was recently at a workshop facilitated by the eminent Canadian historian, Michael Bliss. He has written masterly medical biographies including those of Sir William Osler and the Story of Banting and Best’s discovery of Insulin. The workshop included discussion as to whether medical history should be written by a professional historian or the amateur physician historian. In this book, the Senior Editor is Richard Kitz, Henry Isiah Dorr Distinguished Professor of Anaesthesia and he has chosen the latter approach to record this history. All the authors–story tellers are one time members of the department and have recorded very personal and illuminating views of the developments of their departments and subspecialties over the last 50 years or so. No holds are barred and in many cases this is a ‘warts and all’ account … especially when reference is being made to bull headed and stubborn surgical colleagues!

In reviewing a book of this size, it is only possible to consider a few chapters in detail. Clearly most refer to the giant figure and founder of the modern department, Henry K. ‘Harry’ Beecher with a specific chapter contributed by George Battit. To put him into perspective, Beecher was the first to establish a research laboratory exclusively devoted to anaesthesia. He was the first to apply technology of anaesthesia to the resuscitation of wounded soldiers, which led to the development of the possibility of measuring the subjective effects of drugs, particularly analgesics. He was also an early proponent of the application of ethical principles and human rights, especially to human research. However, he did occasionally get it wrong, as with the infamous Beecher and Todd report of 1954 implicating the toxicity of neuromuscular blockers and their contribution to perioperative morbidity and mortality. This set back the use of neuromuscular blockers in anaesthesia in the USA by many years. It is ironic then that the same department subsequently made such major contributions to this field with the work of such luminaries as Kitz himself, Savarese and Ali. Beecher was certainly a very hard act to follow and his personality invades every chapter in this book.

I begin my review with the chapter, ‘The development of respiratory care’ by Henning Pontopiddan. Respiratory care began at MGH with Beecher’s Department of Oxygen Therapy. Pontopiddan (a Dane) then outlines the considerable Danish contribution to respiratory care. The 1952 Copenhagen Polio epidemic is well known to anaesthetists. The rapid transition from epidemiologists to anaesthetists looking after patients with respiratory failure led to a considerable reduction of mortality. Basic anaesthetic resuscitation principles were applied to these patients and this eventually led to the development of Respiratory Care Units and then intensive care units (ICU), both pioneered by the MGH department in the USA. It is also pertinent to remember that control of ventilation was then based only on predictive nomograms such as that of Radford (also of Harvard) and did not take account of changes in dead space or carbon dioxide production. The story of Myron Laver’s setting up of the first blood gas laboratory at MGH is another reminder of the anaesthetists’ crucial role in intensive care.

The introduction of chest physical (physio) therapy to MGH by a Finnish physiotherapist trained in Bristol, UK was an eye opener. It also led indirectly to the funding of the MGH Chair of Anaesthesia by

*The book may be purchased online by visiting www.etherdome.org/Humbug.html and clicking on the I would like to Purchase ‘This is no Humbug’ caption.
Reginald Jenney, a wealthy patient who seemed to have derived enormous benefit from perioperative ‘physio’! Work was hard and enjoyable, but it was not all plain sailing. This chapter, as do others, also highlights the ‘skirmishes’ and ‘turf battles’ between anaesthesia and other specialities during the formation of the specialized units. For instance, Pontopiddan refers to the surgical services of the 1960s being ‘organized like a gang’ and the difficulties of the early intensivists caring for patients when the referring physicians and surgeons would not allow them to initiate changes in therapy. This still sounds familiar today.

Lowenstein in the chapter ‘A journey of the heart: cardiac anaesthesia’ gives an in depth account of the formation of the MGH Cardiac Anesthesia group and the introduction of all the modalities that we take for granted today, such as electrocardiograms, intra-arterial monitoring, Swan Ganz catheters and so on. Indeed the MGH department pioneered opiate anaesthesia for cardiac surgery and it was amusing to read that the cardiac output measurements for Lowenstein’s original study in the New England Journal of Medicine were made using equipment from the dog laboratory as funding did not allow similar equipment for humans!

The scrupulous attention to detail and the willingness to share information and discuss patients of these early pioneers was extremely illuminating. This also involved close cooperation with other physicians and surgeons and a ‘collegiate’ atmosphere developed over the 1960s and 1970s. This was especially needed for the early days of cardiopulmonary bypass when mortality was extremely high. However, the deteriorating financial position in the 1980s and 1990s led to difficulties in keeping up standards of clinical care as well as research and teaching. In addition it was chilling to read the change of working environment for the anaesthesiologists and nurses as the result of the appointment of a ‘frequently hostile’ Chief of Cardiac Surgery. It is rare to read first hand of the effects on morale, recruitment and retention and missed research opportunities by such an eminent anaesthesiologist. It is required reading for all those with people management responsibilities and indeed for any hospital clinician and manager.

The book does not pull any punches about the development of the department and the problems surrounding the regimes of Beecher and Kitz. Many problems seemed to emanate from the formation of specialized groupings such as the Cardiac Anesthesia Group mentioned above. The determination of the Chief, on the one hand, to keep the anaesthetic department together as a cohesive group vs. the inevitable need to sub-specialize and splinter on the other has, I am sure, echoes for many large departments of anaesthesia today.

Of course, the development of the pain service at MGH is one of the greatest stories and achievements. Dr. McPeek gives an absorbing account of Beecher’s work in Italy during the 2nd World War and the beginnings of research on the subjective measurement and assessment of pain. Mechanisms of anaesthesia are also a significant part of the MGH contribution and Keith Miller’s chapter provides a fascinating insight into the trials and tribulations of the non-clinical researcher and the capricious nature of National Institute of Health funding, especially in the Nixon era. Research seemed to me as much of struggle in the US in those days as in the UK.

The book concludes with a chapter by Warren Zapol, the current Head of Department on The Department in the new millennium.

In all, this is a really fascinating account of the one of the most famous departments of anaesthesia in the world. The only regret is that it is privately published and therefore not as easily obtainable as it should be. It certainly deserves a wide readership.

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S. D. Waldman
ISBN: 0-7216-0108-1; Price £130.00

This is a heavy 618 paged reference source, published 5 years after the first edition, which the author states, has become a ‘must-have resource’ for pain specialists. The second edition of the Atlas includes 22 new chapters featuring the latest techniques in pain management, new magnetic resonance imaging (MRI), computerized tomography (CT) and fluoroscopic images that have been added. The chapters have also been updated to reflect the most contemporary approaches in interventional pain management, e.g.
radiofrequency techniques and the use of smaller, sharper and shorter needles.

The book is divided into eight chapters, each representing an anatomical part of the body: head, neck, shoulder etc. and the final chapter is about advanced interventional pain management techniques. Each chapter works systematically through all possible therapeutic nerve blocks, describing the indications, clinically relevant anatomy, technique, side effects and complications, and clinical pearls. The latter is a short piece after each section giving pragmatic advice on the management of the patient and other treatment options that may be helpful. There are 245 colour illustrations, depicting the relevant anatomy and the needling technique itself, relating this to fluoroscopy, CT and MRI, where necessary. The illustrations are beautifully drawn and give a clear and understandable view of the procedure, which is most helpful, both in performing and teaching the technique.

The text is designed to be used as a reference source for a single procedure, so it is repetitive when reading consecutive chapters. It is extremely useful as an ‘aide-memoir’ when performing a block, although some of the text descriptions are unnecessarily complicated. Indications are clearly stated and alternative possibilities are mentioned, but with no evidence-based outcome measures or assessment of the comparative incidence or severity of complications. For instance, neurolysis of the Gasserian ganglion is described with reference to the possibility of Horner’s syndrome, weakness of muscles of mastication and a 6% incidence of anaesthesia dolorosa, but there are no comparative data for other techniques.

The book is a comprehensive reference source for interventional techniques, describing 112 nerve blocks, as well as subarachnoid neurolytic block, pituitary neuro-adenolysis, discography, epiduroscopy, the insertion of tunelled epidural catheters, percutaneous vertebroplasty, spinal cord stimulation, and implanted reservoirs and infusion pumps. The illustrations are superb, and give a clear three-dimensional view of the anatomy. The techniques are well described and the nerve block techniques could be used by the regional anaesthetist. However, the book should be used with caution when a decision to perform a neurodestructive procedure is to be made, as the author does not extend his remit into a comparison of the available therapeutic measures and the book, therefore, does not represent a balanced therapeutic approach. However, it can be highly recommended as a practical ‘how to do’ manual for interventional pain procedures.

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