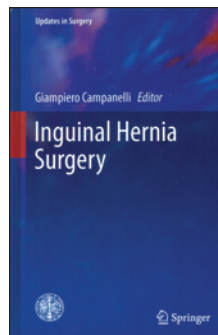


## Book Reviews

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**Inguinal Hernia Surgery.** Giampiero Campanelli. Springer, Italy, 2017. 205pp, price not mentioned. ISBN 978-88-470-3946-9.



The book gives a good overview of the evolution of the repair of hernia during the 20th century. It has 20 chapters and 39 contributors, largely from the USA, the UK, Europe and Singapore. The various aspects of groin hernia are covered in different chapters. The book is simple, interesting and quite entertaining, and simultaneously provides reasonable information on the pros and cons of the various techniques that have evolved over a century.

Each chapter is comprehensive and covers most of the aspects of a particular technique. The chapters start with a brief introduction and some background information on the pioneers of different techniques. Surgical techniques have been described well in all the chapters. These include the preoperative preparation, diagnosis, investigations, anaesthesia and steps of the surgical techniques. Every chapter has been enhanced with figures, mostly coloured, and some black-and-white sketches depicting anatomy and surgical technique. However, in most chapters, the quality of the operative photographs is not as good as one would have expected.

There are important references at the end of each chapter, indicating that the authors have done a comprehensive review of the published work.

Inguinal hernia has been the most common general surgical disease since the advent of recorded history. Numerous techniques to repair it have been described over the past century. However, no single technique can claim to be the 'gold standard' technique of repair even today.

While all tissue repairs were associated with a high rate of recurrence of hernia, Lichtenstein's open mesh repair brought down the recurrence rates significantly. Therefore, Lichtenstein's tension-free hernioplasty, which was described in 1984 and involved the use of a prosthetic polypropylene mesh for groin hernia repair, could be close to being the 'gold standard'. The Lichtenstein's technique has been described in Chapter 1, which is supplemented with coloured sketches. The authors have compared this technique with other mesh-based repairs (Plug and Patch, and Prolene Hernia system) and concluded that Lichtenstein repair was superior to both, and was also cost-effective in randomized controlled trials.

The Trabucco technique—tension-free, suture-less primary inguinal hernia repair—has been discussed in Chapter 2. Unfortunately, the operative photographs lack clarity. Arthur Gilbert has described the Gilbert technique of repair of groin hernia. While it makes for interesting reading, it is not popular at present. The description of the historical perspective is indeed interesting.

It is estimated that worldwide, hernia repairs account for some 2 million surgical cases per year (Chapter 4), with 850 000 of these performed in the USA. No such figures have been given for Europe, China or India. Chapter 4 proposes that inguinal hernias form as a result of an unknown disease process, rather than due to

lifting heavy weights, coughing or a patent processus vaginalis, as is generally believed. In addition, Read proposed that abnormal collagen and smoking were the cause. Chapter 4 by John Murphy on the role of collagen, the myopectineal orifice and finally, the use of implantable mesh is interesting to read. However, there are no figures in Chapter 4.

If we consider the history of hernia repair, recurrences and complications remain a major problem for surgeons and patients. Many improvements have been introduced over recent decades with the objective of reducing discomfort and chronic groin pain after hernia surgery. Chapter 5 describes the '3D Dynamic Anterior Repair: Pro-flor technique' and attributes its advantages largely to the avoidance of sutures. This prosthesis is not popular in India/Asia.

The total open preperitoneal (TOP) technique (Modified Wantz) has been discussed in Chapter 6. Transinguinal preperitoneal (TIPP) repair is easy to learn and perform, according to the published literature—it has been deemed efficient and safe, and is said to result in a low rate of chronic groin pain (Chapter 7). The open new simplified totally extraperitoneal (ONSTEP) technique for groin hernia repair, popularized by two Portuguese surgeons, spread to several European nations by proctoring. Randomized trials have shown that the ONSTEP procedure has certain advantages over the Lichtenstein technique in terms of sexual dysfunction after surgery. Even after thousands of such procedures, not a single patient with severe disabling pain has been reported (Chapter 8). However, most surgeons who follow other techniques have reported similar experiences (personal communication). The Polysoft patch for groin hernia repair has been reviewed in Chapter 9. Chapter 10 describes another type of repair, the Minimal Open PrePeritoneal (MOPP) technique. This technique basically uses the Ugahary principle of preperitoneal space dissection with specialized retractors (Figure 10.1, Chapter 10), through a 3–4-cm-long incision. The main principle of MOPP is to unroll a large mesh far beyond the limits of the myopectineal orifice. Although there are 16 figures in the chapter, all the operative pictures are of poor quality.

Laparoscopic transabdominal preperitoneal (TAPP) repair of groin hernia (Chapter 11) has been reviewed by Jan Kukleta, whose opening remarks are: 'One has to change something sometimes in order to improve.' This chapter is well written, and covers the details of the technique (pneumoperitoneum, dissection, mesh placement, fixation, peritoneal closure, closure of ports) and its advantages. According to the author, TAPP has the widest range of indications, i.e. for primary and recurrent hernias, unilateral and bilateral inguinal and femoral hernias, both among females and males, and in the emergency and elective settings. The author and others believe that the learning curve of TAPP is shorter than that of the total extraperitoneal (TEP) technique. Overall, the description in the chapter is satisfactory and the quality of the operative figures is reasonable.

The TEP approach for laparoscopic groin hernia repair has been reviewed in Chapter 12. Unlike TAPP, there are contraindications to TEP. These include acute abdomen with strangulated and infected gut, respiratory distress, and in children, certain relative contraindications. The authors conclude that on the basis of the evidence available, TEP repair, when performed by experienced surgeons, is associated with reduced postoperative pain and requirement of analgesia. Also, it has fewer complications and low recurrence rates, when compared to open mesh repair; TEP and TAPP have comparable results (Chapter 12).

Robotic TAPP has been adopted by a few centres and surgeons

without full justification (Chapter 13). An entire chapter is devoted to meshes for inguinal hernia repair. These are all flat sheets of polypropylene (PP) mesh, some pre-shaped (BARD 3 D). In my opinion, one should keep it simple as any sheet of PP mesh that is of an adequate size and completely covers the myopectineal orifice does the job. Polyester and fluorinated materials and plug devices are also discussed (Chapter 14), but are not popular in India.

Chapter 15 covers the risk factors for the recurrence of an inguinal hernia, along with the timing of surgery and the surgical approach to recurrent groin hernia. This chapter, which covers all the important aspects, is also well-written.

Today, the postoperative outcome in terms of chronic groin pain after surgery is considered extremely important (Chapter 16). The author does a useful review of the definition of pain, its clinical assessment and the algorithm for its management. There is a separate chapter dealing with 'pubic inguinal pain syndrome (PIPS)', i.e. sportsman's hernia (Chapter 17). Another separate chapter (18) is devoted to a discussion of obscure groin pain in females—'Women—story of hidden hernia'. This is a must-read for all surgeons.

Chapter 19 deals with 'Future perspectives on complications in groin hernia repair'. The authors reiterate the need for basic experimental research and the collection of data from hernia registries. The bottom line is that learning from others is probably the best way to ensure that our patients are safe and our efforts successful.

The last chapter discusses the cost of treatment and reimbursements from healthcare systems. Most of this is in the context of western Europe. However, the cost of care is equally important for all countries and societies. Every surgeon in India, whether in the public or private sector, has to be cost-conscious.

Overall, this book is quite comprehensive. It covers all aspects of groin hernia—its art and its science. The formatting of the different chapters is uniform, which makes it easy to read and more understandable, interesting and informative. Although the subject of groin hernia is not changing rapidly, the frequency of its occurrence among the population makes it an important surgical disease worldwide. Postgraduate students in surgery and practising surgeons will find the book relevant. All types of open and endoscopic techniques have been covered with a reasonably accurate perspective, on the basis of the evidence available. The authors simply describe the various open and endoscopic techniques without attempting to bias the reader in favour of or against any particular technique/repair. They have certainly fulfilled their objective of avoiding personal bias. The book will be relevant for the next 5 years, when it will become necessary to revise it on the basis of a more contemporary body of evidence. The book is useful, readable and worth the price. It is recommended that the quality of the operative pictures be improved in the next edition/reprint. It is also desirable to include authors from South Asia (India) and Asia Pacific (other than Singapore) so that one can have another perspective of the disease, its treatment and the cost. I would also have liked to see a chapter on training, particularly training in endoscopic techniques to enhance the penetration of endoscopic groin hernia repair in all developed and developing countries.

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