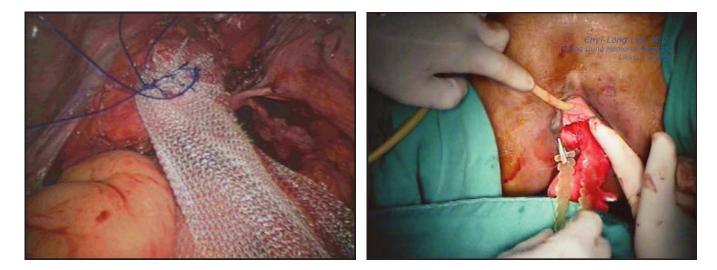
Laparoscopic Management of Prolapse and Stress Urinary Incontinence





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- 9 Hi McCall Culdoplasty Harry Reich
- **10. Sacrospinous Ligament Fixation** *VP Paily*
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- **12. Lateral Suspension for Pelvic Floor Repair** *JB Dubisson*
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- **14. Mesh Repair in Significant Uterovaginal Prolapse** *Nutan Jain*
- **15. Laparoscopic Uterosacral Uterine Suspension (LUSUS)** *CY Liu*
- **16.** Laparoscopic Site Specific Repair of Vault Prolapse (Without Use of Mesh) Nutan Jain
- **17. Rectocele Repair** *Marie Paraiso*
- **18. Practical Cystoscopy for Gynecologist** *Raja M Maheshwari*
- **19.** Newer Concepts in Vaginal Procedures in Reconstructive Surgery *Robert O Shea*

Laparoscopic Management of Prolapse and Stress Urinary Incontinence

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Laparoscopic Management of Prolapse and Stress Urinary Incontinence

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This book is dedicated

to

My dear brothers Mukul and Manoj.

Manoj has been affectionate and a dear friend. He has always encouraged my academic pursuits. Mukul in his lifetime, challenged me to better myself each time. His dynamic ideas inspire me even today.

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Foreword

It is indeed an honor for me to write this foreword for *Laparoscopic Management* of *Prolapse and Stress Urinary Incontinence*. I believe that this book will be most rewarding and a must reading for those with interest in this subject to read and refer to for a longtime to come. The international authors are writing about all sorts of tricks for the laparoscopic and vaginal surgeon to be able to accomplish his/her goals. Vaginal approaches to avoid abdominal incisions are included. The books edited by Nutan Jain over the past few years are special and have made many contributions to the training of skilled endoscopists worldwide. We know this by looking at the surgeons from all around the world who have contributed to this book.



When I trained, most prolapse and stress urinary incontinence operations were done through the vagina. Still, there were many advocates for major abdominal incision procedures for these indications until recently. This is hard to believe.

Abdominal urogynecological and pelvic support operations were the preferred method of treatment based on training and remuneration. Laparoscopic and vaginal procedures are better. Why are there so few laparoscopic operations done today? It is a major problem! Gynecologists today are not trained to do laparoscopic surgery. **Unfortunately they are not trained to do vaginal surgery, either!** This poses an ethical dilemma. Are we offering the best choices to our patients?

Laparoscopic operations before 1986 were done with the operating surgeon visualizing the operative field with one eye with minimal assistance. Camran Nezhat popularized videolaparoscopy in 1985-1986. In 1988 no one except me was thinking about doing hysterectomy by laparoscopy. C Liu mastered curved needle suturing techniques in 1990 and immediately thereafter developed the laparoscopic Burch procedure. The ability to suture, popularized by Kurt Semm and Lilo Mettler, still defines the advanced laparoscopic surgeon. Today, the TOT procedure done vaginally is considered a major advance. But we still don t know the long-term effects of these mesh operations! Techniques both with and without mesh to prevent and correct pelvic floor disfunction are discussed in this book.

Please realize that publication of laparoscopic gynecological operations was very difficult until the mid 90s as few of the pioneers were in academic positions. Laparoscopic hysterectomy was unpublishable before 1988. Many papers of substance on laparoscopic surgery in the early 90s were in a journal that never got Index Medicus acceptance: **Gynecological Endoscopy**.

Nutan Jain has been a star during the development of advanced laparoscopic surgery. Her passion for laparoscopic surgery helped its development and assimilation around the world.

She has done much to develop minimally invasive surgery, but we have a long way to go. I look forward with great pleasure to reading the complete version of this volume.

Harry Reich MD FACOG Wyoming Valley Health Care System Wilkes-Barre, PA Advanced Laparoscopic Surgeons 245 North Memorial Highway Shavertown, PA USA

Foreword

In recent years, the concepts and surgical techniques for the treatment of female stress urinary incontinence and pelvic organ prolapse have undergone rapid advances. The current treatment of female stress urinary incontinence has been revolutionized by the introduction of tension-free vaginal tape; and pelvic organ prolapse surgery has been impacted by advances in operative laparoscopy. This tremendous progress in laparoscopic surgery is largely credited to two phenomena:

1. Increased sophistication in the development of light-weight-chip video cameras which permit clear magnification of the female pelvic floor structures. The deep pelvis and various fascial planes, which were difficult to see in traditional procedures, can now be viewed in minute detail through the laparoscope.



2. Refined operative skills, particularly in the areas of laparoscopic dissection, suturing and knot tying. With the pelvic floor anatomy now clear on high resolution two-dimensional or even three-dimensional viewing monitors, the gynecologist is able to develop greater proficiency in reconstructing female pelvic floor defects.

To help the gynecologist to gain familiarity with up-to-date laparoscopic, minimally invasive surgery in the field of urogynecology, Dr Nutan Jain has produced this outstanding textbook, *Laparoscopic Management of Prolapse and Stress Urinary Incontinence*, with a group of distinguished international contributors in presenting their expertise in surgical approaches to pelvic floor defects. As the population ages, disorders of the pelvic floor are encountered with increasing frequency, making this textbook a welcome addition to reference libraries of all gynecologists interested in staying abreast in the field of minimally invasive management of female organ prolapse and stress urinary incontinence.

CY Liu MD FACOG Director Chattanooga Women s Laser Center and Manhattan Women s Laser Center USA

Preface

As the world's population is growing, a busy gynecologist is seeing more and more patients on account of prolapse and SUI. Surgical options have been there since long but now the awareness of minimal access route amongst masses is seeing a surge of newer treatment options. No longer women want to stay on with physically mutilating disease and symptomatology which hampers their quality of life. Neither do they want big abdominal incisions with longer hospital stay and longer recuperation. They wish easier, minimally invasive options which give them palliation from anatomical and functional derangement. This book is designed to achieve this goal by propagating laparoscopic management of pelvic organ prolapse and newer vaginal approaches amongst gynecologist for the treatment of SUI and prolapse.

This book has been crafted keeping in mind the need of every endoscopist. A group of dedicated endoscopic surgeons and urologists have toiled together to compile this atlas cum textbook which covers each and every aspect of minimally invasive management of prolapse and SUI. Not only has the text been written by world's leading experts, the surgical techniques too are shown through high quality pictures from actual surgeries. To further expedite the reading, learning and understanding, most chapters have been provided with an audio narrated procedural DVD-ROM which shows all minimally invasive applications of prolapse repair and SUI.

The introduction emphasizes to the reader the core basic principles of laparoscopic management and how better delineation of support anatomy as visualized by the laparoscopic route been instrumental in bringing out superior repair deep in the pelvis. Since knowledge of anatomical landmarks and pelvic support structures are the hallmark for successful outcome of pelvic floor repair laparoscopic anatomy and pelvic support anatomy have been detailed in two chapters with the help of illustrations and surgical pictures of various anatomical spaces and important support structures in prolapse repair.

Grading of prolapse has always been a dilemma, so to bring at rest subjective and objective differences in gradation of prolapse the ICS (International Continence Society) has brought about new quantification system the POPQ test. Full chapter has been devoted to clearly explain the very new concept in a lucid manner with help of DVD. This promises to bring universality in measuring and treating various grades of prolapse.

Before any surgery for SUI, the preoperative evaluation by history, examination and urodynamic studies is essential and the foundation of good postoperative success. This issue is dealt in exquisite details.

All of us realize the might of good suturing skills. Aiming to improve suturing skills three chapters have been dedicated to Extracorporeal, Intracorporeal and Sliding Weston Knots. With DVD backup these chapters fulfil the desired goal of learning suturing as suturing is most essential component of prolapse repair.

We have devoted three chapters on management of SUI from world pioneers on TVT, the new transobturator slings (TOT) and an innovative trocar-assisted sling surgery, TASS. They are designed to apprise the reader of exact techniques pitfalls and results. Even with the advent of various sling procedures, Laparoscopic, Burch and Paravaginal repair remains a highly acclaimed surgery with longest follow-up, so we have devoted a full chapter to discuss the minute details.

Prevention is better than cure, keeping this in mind we have devoted a chapter to avoid posthysterectomy vault prolapse by employing HiMcall Culdoplasty as a routine. We have discussed the role of mesh, types of mesh, when to use, how to use to best advantage and short and long-term complications with use of mesh. With this background of anatomy, suturing and mesh dynamics we have several chapters highlighting various surgeries directed to surgical correction of pelvic organ prolapse. To highlight different modalities of surgical options we have the world's most renowned pioneers to highlight their innovative techniques. All chapters carry the format of simple language with emphasis on surgical technique depiction with series

XVi Laparoscopic Management of Prolapse and SUI

of photographs and audio narrated DVD. An average practitioner will find surgical options for all types of patients, young, elderly, wanting further child bearing, wanting to use mesh or not. Several different techniques have been described from which the reader can choose the one best suited for his or her own patient. No one surgical technique is applicable in all clinical situations so the reader can combine various techniques described by the pioneers, keeping his, her suturing capabilities and demands of clinical situations. Our endeavour has been to collectively give in one single textbook all, minimally invasive treatment options as practised today worldwide.

Keeping up with advancement in vaginal surgery we have included two chapters on reparative vaginal surgery, the old and new the time tested sacrospinous ligament suspension and the newer mesh augmented repair as popular today have all made way in this book.

Genitourinary fistulae though declining still are occasionally encountered and laparoscopic management has been discussed. Hope some of the readers would be able to convert their treatment approach when faced with these fistulae. Since all prolapse and SUI surgeries would need a cystoscopy during and after the procedure a chapter has been included to go in the core basic technique of cystoscopy for an average gyneendoscopic surgeon. Interstitial cystitis a cause of painful bladder with urgency, frequency is often encountered and creates a dilemma in final diagnosis of SUI. It remains largely undiagnosed with no definite treatment options. So we have a chapter discussing all these issues.

In a way in this book we have dealt with all aspects of urogyneology and prolapse repair pertaining to our day to day practice. Soon laparoscopic management of prolapse will be as accepted as Laparoscopic Hysterectomy today. Gradually critics will be fewer and aspirants for learning to treat will be more. Hope our vision of giving the very best to the readers is fulfilled and this atlas with its richness of text, references, high quality color photographs, further supported by audio narrated DVD-ROMs seems to provide all. I was fascinated with laparoscopic management of pelvic floor disorders and bringing out an atlas cum textbook on this subject is the culmination of my cherished dream. Hope the readers enjoy going through it.

Nutan Jain

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It has been such a pleasure planning, working, executing and finally bringing out this textbook cum Atlas, titled, *Laparoscopic Management of Prolapse and Stress Urinary Incontinence*. Right from inception to the final completion, it has been a great learning experience. Though science knows no boundaries, interacting and working with so many renowned endoscopic surgeons from around the globe has been an immemorable experience. It gave enormous insight into human behavior, differences in ethnic, linguistic and cultural practices, but the one thing that remained common was their commitment to Endoscopic Surgery. The keen desire to promote and propagate safe practices of Endoscopic Surgery was the common platform they shared, which brought them together. It was my endeavor to bring forth a book containing the best possible expertise from around the world on *Laparoscopic Management of Prolapse and Stress Urinary Incontinence*.

I express my heartfelt gratitude to all contributing authors, pioneers in their specific fields who despite their busy schedules put in their best efforts to compile chapters of immense scientific value. Their valuable suggestions, constructive criticism and words of encouragement during the compilation of the book went a long way in keeping me motivated towards this task. Their valuable contributions collectively has taken the shape of a fine textbook and atlas which will enlighten gynecologists and general surgeons practicing urogynecology and pelvic organ prolapse. I take this opportunity to express my sincere gratitude to all my teachers, who taught me, nurtured my skills and enabled me to work for the cause of Endoscopic Surgery.

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I am greatly thankful to all the doctors of my city who encouraged my academic pursuits. Practising in a small city I learnt the value of learning from seniors and giving one s best to juniors. It is their continued support, which has been instrumental in bringing out this book.

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In the end, I would like to thank all my patients who have posed faith in me and the newer modality of *Laparoscopic Management of Prolapse and Stress Urinary Incontinence*. If I can assure safe propagation of advanced endoscopic surgery for prolapse repair and SUI by means of this atlas. It will be the culmination of my dream to make the world a better place to live for the unfortunate sufferers of pelvic organ prolapse and SUI.

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