Abhay Rane · Jeffrey A. Cadeddu Mihir M. Desai · Inderbir S. Gill *Editors*

Scar-Less Surgery

NOTES, Transumbilical, and Others



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This book is dedicated to those minimally invasive surgeons who have always strived to push the proverbial envelope to its limit in order to get the best for our patients. These dedicated kindred souls have often had to brave withering criticism from peer skeptics, but have nevertheless managed to prove their point by maximizing minimally invasive surgery.

Such an effort would not be complete without acknowledging our better halves: those who have always "stood and waited": Ruta, Marlo, Rimple, and Neeti.

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Preface

Natural orifice translumenal endoscopic surgery (NOTES) and laparoendoscopic single-site (LESS) surgery are based on the premise that patients would significantly benefit in terms of recovery time, physical discomfort, pain, and cosmesis by a surgery performed without visible scarring. Over the last five to seven years, there has been a rapid expansion of LESS and NOTES procedures across surgical specialites, with hundreds of procedures reported in the literature ranging from cholecystectomy to radical prostatectomy. To date, there has not been a comprehensive text providing detailed information on the techniques, their limitations, instrumentation requirements, and results. Such a source is necessary to catalog progress to date, provide concise state-of-the-art technical information, and serve as a resource text as clinicians embark on this exciting new frontier.

The initial chapters in this text provide state-of-the-art reviews of the advances in surgical instrumentation that have increased the feasibility of these procedures. Nevertheless, the challenge for LESS and NOTES techniques is whether they can be utilized to improve patient outcomes without significantly increasing surgical cost, operative time, or complications. The balance of the text expertly addresses this issue. One must keep in mind that the benefits of LESS and NOTES procedures are incremental compared to the transition from open surgery to laparoscopy, where it was fairly easy to demonstrate an advantage in morbidity. Convalescence, hospital stay, and pain were consistently better with minimally invasive surgery. Even though it is conceptually obvious, those in practice at the time laparoscopy was introduced will recall that the acceptance of laparoscopy's benefits was neither immediate nor universal. The transition from conventional laparoscopy to LESS is more subtle. Pure NOTES where the access is commonly transoral (transgastric) or transvaginal may have greater advantages in this regard. There is no doubt that LESS and NOTES provide clear advantages in cosmesis. LESS, with its single scar often undetectable in the umbilicus, and NOTES, with its absence of transabdominal incisions, are clearly most appealing to our increasingly sophisticated patients.

viii Preface

LESS and NOTES techniques are gaining momentum as the next frontier in minimally invasive surgery. It is critically important that surgeons maintain their pioneering spirit and evaluate these new approaches. This text serves as the first comprehensive reference for general and urologic surgeons while also highlighting future developments and research needs.

Abhay Rane, M.D. Jeffrey A. Cadeddu, M.D. Mihir M. Desai, M.D. Inderbir S. Gill, M.D.

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