Atlas of Difficult Gynecological Surgery

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For
Guddu,
The only reason why I must keep trying,
My father, ***Sri. SK Podder,*** *and my wife,* ***Dr. Ruma Banerjee,***
For their unconditional love and for believing that I can do it
Reddy Bhai for making the photographs look better
And finally…….
Jyothi Madam, my coauthor and friend,
who encouraged me at every step

Preface

Why This Book?

The answer to this question, I suppose, cannot be given in one sentence. The purpose of writing this book is—.

I will try and answer this question a bit obliquely and hopefully eloquently. The health sector in our country is fast changing and so is the disease profile of most specialties. Gone are the days when a budding gynecologist could get an appointment order as a medical officer in a district hospital or as a faculty in a medical college soon after completing his or her residency or start his or her practice and hope to become a busy practitioner in about 3 years time. The concept of working under a senior consultant as an apprentice/clinical assistant does not exist in most parts of the country. Today vacancies are difficult to come by, and the logistics of starting one's own clinic in a decent locality with the present rental costs is not feasible for most beginners. In other words, the opportunities for higher training which have always been limited are getting even more difficult to get.

Also, the kind of cases we usually encounter in daily practice is changing. For many women, the first attempt at conception is probably their last. Many couples today are delaying having their first (and probably their only) child. An obstetrician-gynecologist has to remember that their patient may probably never conceive again, for obvious reasons like infertility (the present pregnancy itself being conceived through assisted reproduction), older age at conception, presence of leiomyoma, endometriosis, etc. This is one of the reasons why caesarean deliveries have increased. Rising caesarean section rate is not entirely wrong, but this has brought about many challenges. The management of second delivery, should there be one, and the management of gynecological conditions that may arise subsequently in women with a history of caesarean delivery have its own problems and challenges.

Rare conditions are no longer rare. It is just that their incidence is lower compared to the more common conditions. A practicing gynecologist is bound to encounter "rare conditions," a good couple of times during his/her career. Rude shocks on the operating table are common, and every operating gynecologist will experience them quite a few times in his/her career. Finding a malignant ovarian tumor or dense adhesions with complete distortion of the anatomy after opening the abdomen for what was thought to be a routine case of leiomyoma is no longer a rare case scenario.

So what should the operating gynecologist do in such cases? Is it possible to close the case and reschedule it later with adequate preparation and an experienced colleague to assist in all situations? This would certainly be a prudent thing to do if there is no complication like bleeding, but is it always possible? What about the gynecologist's credibility? Nobody would like to have too many "open and close surgery" in their list of surgeries performed. Or should one proceed with the surgery, even if one cannot find an experienced colleague to come over and assist? What if it is just not possible to comprehend what the pathology is, or where the surgical landmarks and the vital structures are located?

And another important development is that our society, maybe for justified reasons, looks at the medical fraternity with a certain degree of suspicion and disdain. People are not able to appreciate the fact that a great degree of skill is required to perform even minor procedures. It is not a mean achievement to perform surgical dissection close to vital organs like the ureter or the iliac vessels in a living being. And to acquire the skill and confidence to perform surgeries of this level, one has to put in many years of hard work. One has to go through the long learning curve, and one has to experience "complications"—for without this, one hasn't really seen or learnt anything.

For the reasons stated above, it is necessary for a doctor to be competent and efficient in all aspects—be it communication skills or surgical skills or decision-making, because litigation can happen even when the outcome is very good—much better than what is normally expected for the given case because it is suboptimal in the eyes of the patient. Very often, all what a doctor can do is say a few comforting words and provide a clean comfortable place so that the patients can breathe their last in peace and the family members are spared the agony of seeing their loved ones in pain.

Having said the above facts, let me come back to the basic question. Why this book? What is the need?

Well, we doctors in our daily grind forget that learning cannot be confined to our days in a medical college and attending training workshops. Learning is a continuous process. There was a time when a resident had to assist several cases as a second assistant before graduating to the position of the first assistant. The seniors would reward a resident who worked hard and managed cases well by allowing the resident to scrub in for a case. Teaching rounds were "real" teaching rounds, where the daily progress of each patient was discussed. The reasons for doing or not doing a particular investigation or procedure were discussed and debated. Unfortunately, critical evaluation of the self and of the system is on decline.

There is a lot of emphasis on "evidence-based medicine" today. But many a times, we need to follow what can be called the "best practices," especially in a low-resource setting where options are limited. Surgical "skill" and "technique" are not synonymous with evidence-based medicine. Skill and technique are things which have to be learnt, developed, and perfected over time. Constant evaluation of one's methods is a must for improvement, and this should not be confused with evidence-based medicine for or against a particular drug, or a particular kind of patient management. Can evidence-

based medicine be quoted when the results are shockingly bad? Very often, the result speaks for itself.

For example, if there is traumatic PPH following vaginal delivery resulting in unacceptable morbidity for both the mother and the baby, can one justify the outcome by saying that there was no indication for LSCS? When we go through the medical literature, we will find that there are many schools of thought and rarely can there be one fixed protocol that everyone subscribes to. Every authority has had a unique experience, and there will always be a slight variation from one authority to another.

This book is essentially a compilation of some common sense facts; most of them are well-documented in all standard textbooks and are time-tested techniques, along with a few observations made by the author which should work for others as well. Beginners may not understand completely the description given in textbooks, even after they have read it a couple of times. It is only when one sees a senior gynecologist demonstrate a particular surgery live and explain the individual steps that one understands what the textbook description actually means. Demonstrating a surgery or a dissection technique is not the same as merely performing a surgery. It means patiently explaining the steps, allowing the surgical assistant to touch and feel the tissues and comprehend what is being done.

The techniques described in this book might appear very basic and in fact "child's play" to urologists, gastroenterological surgeons, and oncosurgeons. But considering that residents in obstetrics and gynecology get (and rightfully so!) a far greater exposure in obstetrics than gynecology, many gynecologists will find the techniques described in this book very useful and a bit of a revelation. The book has been written keeping in mind the Indian residency system—where every state, every region, and every university is different and there is a considerable variation in the residency pattern institution to institution.

And as a word of caution, nothing should be tried out like a recipe from a cookery book. It is necessary to have a good team while operating especially if it is expected to be a difficult case. This book is not a manual for all the surgical procedures described in obstetrics and gynecology till date. For this purpose, there are plenty of well-shot videos with excellent explanation available on the Internet and in private circulation which show how certain surgical procedures should be performed. This book, on the other hand, is strictly confined to the techniques which a gynecologist can follow when encountered with a sudden unexpected situation on the operating table. It is about the surgical dissection and some practical tips that are useful in optimizing the outcomes. For this reason, all the photographs in the book are of open surgery, since a beginner must first be able to perform a particular surgery and must be capable of identifying all vital structures in the operating field by the open method before attempting the same laparoscopically. This is not a book which tries to explain the etiology and pathogenesis, the medical management, the preoperative assessment, or the postoperative care of the various obstetric and gynecological conditions. It has been prepared with the intention to convince beginners the importance of good and careful dissection, the disasters that can happen due to ignorance and due to bad techniques, and,

most importantly, that even the most complicated surgery can be successfully accomplished if one follows the "cardinal" rules. As stated earlier, this is not a self- help book, from which beginners can directly start operating on difficult cases. It is a book that hopes to make beginners understand *what*, *how much*, *how to*, and *in which manner* they should begin to improve their surgical skills and techniques.

Note: The word "obstetrician" has been used with respect to conditions pertaining to labor and delivery. The word "gynecologist" has been used with respect to other conditions described in the book. The doctors pursuing a career in "obstetrics and gynecology" are "obstetrician-gynecologists"—some of them end up practicing either of the two disciplines, some others a variable combination of both, and some specialize further in infertility, fetal medicine, etc.

Patna, India — Anirudha Rohit Podder
Bangalore, Karnataka, India — Jyothi G Seshadri

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About the Authors

Anirudha Rohit Podder graduated from Bangalore Medical College, Bangalore, and completed his MS at Grant Medical College, Mumbai. He then trained as a gynec-oncologist at Gujarat Cancer and Research Institute (GCRI). Presently, he is working as a Consultant Gynaec-Oncologist at Mahavir Cancer Sansthan, Patna. Gynecological oncology and complicated gynecological surgeries are his areas of interest. He is a life member of the Karnataka State Chapter of Association of Gynaecologic Oncologists of India (KSC-AGOI) and has served as its joint secretary in the past. He has published articles in some of India's most prominent peer-reviewed journals.

Jyothi G Seshadri graduated from Bangalore Medical College, Bangalore, and completed her MD at Mysore Medical College, Mysore. She also holds a degree in Medical Law (PGDMLE) from the prestigious National Law School of India University. Presently, she is working as a professor at the Department of Obstetrics and Gynecology, Ramaiah Medical College, Bangalore. Passionate about preventive oncology, she pioneered the cervical cancer vaccination program at Ramaiah Medical College. She is a member of the BSOG and has served as its honorary secretary in the past. In addition, she has several publications in peer-reviewed journals to her credit.

Abbreviations

APTT	Activated partial thromboplastin time
CBC	Complete blood count
CPD	Cephalopelvic disproportion
D&C	Dilatation and curettage
DIC	Disseminated intravascular coagulation
DTA	Deep transverse arrest
DUB	Dysfunctional uterine bleeding
DVT	Deep vein thrombosis
ET	Endometrial thickness
FFP	Fresh frozen plasma
FHR	Fetal heart rate
GA	General anesthesia
GI	Gastrointestinal
ICU	Intensive care unit
IM	Intramuscular
IUD	Intrauterine contraceptive death
IV	Intravenous
IVF	In vitro fertilization
LSCS	Lower segment caesarean section
OT	Operating theatre
PCOD	Polycystic ovarian disease
PCV	Packed cell volume
PID	Pelvic inflammatory disease
PIH	Pregnancy-induced hypertension
PPH	Postpartum hemorrhage
PT	Prothrombin time
TOLAC	Trail of labor after caesarean
VBAC	Vaginal birth after caesarean
WBC	White blood cell

Part I

Introduction