Contents

1. The History of Vaginal Hysterectomy **1**

Christopher Sutton

- The Early History of Abdominal Hysterectomy 1
- The Incidence of Different Types of Hysterectomy 5
- The Development of Gynecological Surgery in the 20th Century 5

2. Vaginal Hysterectomy: Indications and Contraindications **9**

Sudeshna Ray, Anju Rani Hajari (Sengar), David J Quinlan

- Associated Conditions in which Vaginal Route of Hysterectomy has been Evidenced to be Safe and Beneficial to Patient 14
- Relative Contraindications 16
- Contraindications 17

3. Preoperative Assessment **20**

Shilpa Shekhar Bhojraj, Shirish S Sheth

- By a Gynecologist 20
- By an Anesthesiologist 23

4. Access to Vesicouterine and Rectouterine Pouches **31**

Shirish S Sheth

- Access to Vesicouterine Peritoneum/Anterior Pouch 31
- Access to Vesicouterine Peritoneum via Pouch of Douglas 33
- Special Situations 34
- Access to the Posterior Cul-De-Sac/Pouch of Douglas 44
- Special Situations 46

5. Vaginal Hysterectomy for Genital Prolapse **51**

Premanand Pai Dhungat, Varsha N Pai Dhungat, Nitin Pai Dhungat

- Anatomy and Physiology 51
- Classification of Prolapse 51
- Indications of Prolapse Surgery with Vaginal Hysterectomy 52
- Complications 55

6. Anterior, Posterior, and Apical Vaginal Reconstruction with and without Bolsters **56**

Nicklaus Trent Rice, Carl W Zimmerman

- The Vaginal Apex—the Keystone 57
- Methods of Vaginal Apex Repair 57
- Anterior and Posterior Vaginal Wall Methods of Repair 59
- Time and Place for Bolsters 60

7. The Nulliparous Patient **63**

Shirish S Sheth

- Why Prefer Laparoscopic Assistance or Abdominal Hysterectomy in the Nullipara? 64
- Classification 67
- Prerequisites for VH 67
- Trial VH 68
- Prophylactic Oophorectomy 68

8. Uterine Fibroids **72**

Shirish S Sheth, Mukesh R Rathi

- Contraindications to Hysterectomy 72
- Indications for Hysterectomy 72
- Fibroids with Adenomyosis 81
- Medical Debulking 81
- Other Modalities of Management of Fibroids 82
- Uterine Sarcoma 83

9. Uterine Debulking at Vaginal Hysterectomy **90**

Marco A Pelosi II, Marco A Pelosi III

- Historical Aspects 90
- Indications for Morcellation 91
- Contraindications to Morcellation 91
- Preoperative Considerations 93
- Surgical Considerations 99

Minilaparotomy Rescue System for Completion of Inefficient or Failed Vaginal Hysterectomy 103

- Minilaparotomy Technique for the Completion of the Vaginal Hysterectomy 105

10. Hysterectomy after Previous Abdominopelvic Surgery **110**

Shirish S Sheth, Vyomesh M Shah

- Previous Abdominopelvic Surgery 110
- Cesarean Delivery (C-Section) in Past 111
- Examination under Anesthesia 111
- Technical Guidelines to Overcome Problems at VH 113
- Use of Laparoscopy in Assisting Vaginal Surgery 113
- Total Laparoscopic Hysterectomy: Is it an Advantage or a “Show”? 114

11. Trial Vaginal Hysterectomy and Trial Vaginal Route **116**

Neerja Goel, Shalini Rajaram, Sandhya Jain, Smita Singh

- Trial Vaginal Hysterectomy 117
- Trial Vaginal Route 119

12. Contraindicated Abdominal Route **123**

Shirish S Sheth

- Contraindications to the Abdominal Route for Hysterectomy 123
- Relative Contraindications/Preferred Avoidance of the Abdominal Route for Hysterectomy 124
- Special Situations 126

13. Oophorectomy at the Time of Benign Hysterectomy 129
Sherif A El-Nashar, Javier F Magrina, Emanuel C Trabuco
- Ovarian Function after Menopause 129
- Potential Benefits of Oophorectomy 130
- Risks of Prophylactic Oophorectomy in Low-Risk Women Having Hysterectomy for Benign Indications 132

14. Concomitant Salpingo-Oophorectomy at Vaginal Hysterectomy 137
Shirish S Sheth
- Prophylactic Salpingo-Oophorectomy 138
- Prophylactic Salpingo-Oophorectomy at Hysterectomy 139
- Operative Technique 140
- Alternatives 143
- Difficult Situations 144
- Intraoperative 145

15. Adnexal Pathology at Vaginal Hysterectomy 150
Shirish S Sheth
- Possible Adnexal Surgery at VH 151
- Prerequisites for VH with Adnexectomy via Vaginal Route 154
- Contraindications to Concomitant Adnexectomy at VH 154
- Preoperative Assessment 154
- Disadvantages of Laparoscopic Adnexectomy or Cystectomy 157
- Why the Vaginal Approach 158
- Difficulty in Concomitant Vaginal Adnexectomy 158
- Role of Frozen Section 158
- When to Abandon the Vaginal Route 158
- When to Switch over to Laparoscopic Assistance 159
- When to Perform Laparotomy 159

16. Subtotal Vaginal Hysterectomy 163
Tariq Miskry, Adam Magos
- Total versus Subtotal Hysterectomy 163
- Rationale for the Vaginal Approach 165
- Basis for Subtotal Vaginal Hysterectomy 166
- Technique of Vaginal Subtotal Hysterectomy 166
- Results of Surgery 169

17. The Difficult Vaginal Hysterectomy 172
S Robert Kovac
- How to Determine that Preoperative Assessment of Extrauterine Disease Extends beyond the Confines of the Uterus Matches the Postoperative Findings 175
- Use of Guidelines to Determine the Route of Hysterectomy 176

18. Hybrid Approach for Difficult Vaginal Hysterectomy 180
Wu Shun Felix Wong, TC Eric Lee
- The Hybrid Approach 180
- Laparoscopic Hybrid Approach for Difficult Vaginal Hysterectomy 181

- Minilaparotomy Hybrid Approach for Difficult Vaginal Hysterectomy 184
- Hybrid Approach with a Combination of Both Laparoscopy and Minilaparotomy in Difficult Vaginal Hysterectomy 186

19. Hysterectomy on High-Risk Women **190**

Kurush P Paghdiwalla, Shirish S Sheth

- Preoperative Evaluation 190
- Medical, Drug, and Previous Anesthetic History 190
- Physical Examination 191
- Investigations 191
- Coexisting Medical Conditions 192
- Neurological 193

20. Simplified Technique of Vaginal Hysterectomy **198**

Marco A Pelosi II, Marco A Pelosi III

- Rationale 198
- Surgical Technique 198

21. Is Vaginal Hysterectomy a Day Care Procedure? **207**

Kurush P Paghdiwalla

- Can Vaginal Hysterectomy be Adopted as an Outpatient Procedure? 207

22. Malignancy Related to Vaginal Hysterectomy and Laparoscopically Assisted Vaginal Hysterectomy **210**

John M Monaghan

- Malignant Histology Found after Treatment 210
- Squamous or Adenocarcinoma of the Cervix 210
- True Invasive Cancer 211
- Atypical Hyperplasias of the Endometrium 211
- Stage I Grade I Disease 212
- Stage I Grade III Disease 212
- Tissue Types 214
- Choriocarcinoma 214
- Medicolegal Implications 214

23. Vaginal Hysterectomy for Carcinoma of the Endometrium **216**

Vanna Zanagnolo, Javier F Magrina

- Vaginal Hysterectomy for the Treatment of Endometrial Cancer 218

24. Newer Perspectives **225**

Shirish S Sheth

- Clinical and Sonographic Signs for the Dense Uterocervical Adhesions with Lower Abdominal Wall 225
- Super Flexion Position 227
- Genital Malignancy 228
- Surgical Technique to Access Vesicouterine Peritoneum (VUP) in Women with History of Two or More C Deliveries (Sections) in Past 229
- Posterior Uterocervical Broad Ligament Space—A Surgical Space to Access Obliterated Posterior Cul-De-Sac at VH and Perform Concomitant Salpingo-Oophorectomy for

Ovarian Endometriosis 229
- Oophorectomy or Salpingo-Oophorectomy? 229
- Concomitant Adnexectomy for Benign Pathology at VH 230
- Broad Ligament Fibroid 231
- Following Though "Old Perspectives" Can Prove New and Helpful to New Gynecological Surgeons 231
- Vaginal Assisted Laparoscopic Hysterectomy (VALH) 232
- Robotic 232
- Mesh 232
- For Vaginal Surgeons 233

25. Associated Urethral Sphincter Incompetence 235

Arjunan Tamilselvi, Ajay Rane, Jay Iyer

- Physiology 235
- Pathophysiology 235
- Diagnostic Evaluation 236
- Conservative Management of SUI 236
- Surgical Management 236
- Burch Colposuspension 237
- Laparoscopic Colposuspension 237
- Marshall–Marchetti–Krantz (Retropubic Urethropexy) (MMK) Procedure 237
- Needle Suspension Procedures 237
- Anterior Repair with Kelly Plication 237
- Bulking Agents 238
- Sling Procedures 238
- Pubovaginal Slings 238
- Mid-urethral Slings 238
- Single Incision Mini-Slings 239
- Artificial Urinary Sphincter 240
- SUI and Hysterectomy for Nonprolapse Indications 240
- Concomitant SUI and POP 240

26. Associated Nongynecological Surgery 243

Tehemton E Udwadia, Shirish S Sheth

- Anesthesia 244
- Advantages of Combined Procedures 244
- Issues of Safety 245
- Surgical Procedures that can be Combined with VH 245
- Postoperative Management 246

27. Place of Sacrospinous Colpopexy at Vaginal Hysterectomy 248

Mohamed A Hefni

- History 248
- Anatomical Considerations 248
- Anatomy of the Pelvic Floor 248
- Vaginal Axis 250
- Patient Evaluation 253
- Vaginal Sacrospinous Colpopexy 253
- Complications and their Management 255

- Learning the Technique of Sacrospinous Fixation 256
- Results and Outcome of Sacrospinous Colpopexy 256
- One of the Author's Studies 256
- Results 257

28. Hysterectomy and Sexuality 260

Farah Lone, Ranee Thakar

- Evidence-based Review of Effects of Hysterectomy on Sexual Response 261
- Management of Patient with Sexual Dysfunction after Hysterectomy 262

29. Vaginal Hysterectomy versus Transcervical Resection of the Endometrium 265

Torie Comeaux Plowden, Christopher M Tarnay, Alan H DeCherney

- Evolution of Transcervical Resection of the Endometrium 265
- Historical Developments 265
- Randomized Controlled Trials 267
- Second-Generation Ablation Techniques 269
- Psychiatric and Sexual Sequelae 269
- Cost 269
- Complication Rates 270

30. Vaginal or Abdominal Hysterectomy? 273

Shirish S Sheth

- Contraindications 274
- Indications 274
- Abnormal Uterine Bleeding without Pelvic Pathology 275
- Adenomyosis 275
- Fibroids 276
- Indications for Abdominal Hysterectomy 277
- Submucous Myomatous Polyp 277
- Endometriosis 278
- Adnexal Mass 278
- Carcinoma in situ of Cervix 279
- Postmenopausal Bleeding 279
- Endometrial Cancer 279
- Associated Conditions and Situations 280
- Previous Cesarean Section or Myomectomy Requiring Hysterectomy 280
- Uterocervical Displacement Following Adhesions after Cesarean Section (Cervicofundal Sign) 280
- Previous Vaginal Surgery 281
- Nulliparity 281
- Obesity 281
- Role of Ultrasonography 281
- Debulking: When? 282
- Examination Under Anesthesia 283
- Findings under Anesthesia that Favor the Vaginal Route 283
- Use of Ligasure 284
- Salpingo-Oophorectomy at Hysterectomy 284
- Subtotal Hysterectomy 284

- Role of Laparoscopic Evaluation 286
- Ureteral, Bladder, and other Injuries 286
- Morbidity and Mortality 286
- Mortality 287
- Why the Vaginal and not Abdominal Route? 288

31. Vaginal Hysterectomy versus Laparoscopic Hysterectomy 294

Vakkanal Paily, Shirish S Sheth

- Which Route for Hysterectomy 295
- Position of Patient 295
- Surgeon's Comfort 295
- Steps to Increase Visibility Deep Inside Vagina 295
- Modification of Instruments 296
- Change in Technique 296
- Oophorectomy 296
- Removing Fibroids or Large Size Uterus 296
- Special Situations 297
- Salient Points in the Technique of Nondescent VH 298
- When is Laparoscopic Assistance Needed? 299
- Nulliparity 300
- History of Pelvic Surgery in Past 300
- Uterine Fibroids 300
- Benign Adnexal Pathology 301
- When to Have Laparoscopic Assistance or Laparoscopic Hysterectomy 301
- Indications for Abdominal Hysterectomy 301
- Role of Laparoscopic Evaluation 302

32. Complications, Morbidity, and Mortality of Vaginal Hysterectomy 304

Shirish S Sheth, Vinita Salvi

- Infection 305
- Hemorrhage 305
- Bladder and Ureter Injuries 307
- Bowel Injury 308
- Nerve Injuries 309
- Fimbrial Prolapse and Granulation Tissue 309
- Late Sequelae 311
- Morbidity 312
- Mortality Risk 314

33. Cosmetogynecology 320

Marco A Pelosi III, Marco A Pelosi II

- History 320
- Terminology 321
- Cosmetic Rationale and Unique Considerations 322
- Nonsurgical Cosmetogynecology 322
- Ablation of Vulvar Varicosities 322
- Thermal Resurfacing of Vaginal Epithelium 322
- Surgical Cosmetogynecology 323

- Mons Pubis 323
- Labia Majora 324
- Labia Minora 327
- Hymenoplasty 330
- Vaginoplasty 330
- Thighplasty 331
- Vulvovaginal Reconstruction Post-Thighplasty 333

34. Choosing the Correct Hysterectomy Technique **337**

Howard W Jones III

- Indications for the Hysterectomy 338
- Outcomes, Complications, and Technical Factors 339
- Surgeon Factors 341
- Patient Factors 341
- Financial Considerations 342

Index *345*