1. Historical Perspective  
Thoralf Schollmeyer, Kurt Semm(†), Manfred Schollmeyer, Liselotte Mettler  

2. Instruments and Equipment for Laparoscopic Surgery  
Liselotte Mettler  
- Instruments 12  
- Energy Systems for Operative Laparoscopy 18  
- Articulated Instruments 24  
- Single Port Endoscopic Entry 25  

3. Current Laparoscopic Training Models  
Andreas Hackethal, Julia Ionesi-Pasacica, Hans-Rudolf Tinneberg  
- Pelvitraining and Video Training 29  
- Virtual Reality Training 30  

4. Current Training Models In Hysteroscopy  
Flemming Bjerrum  
- Theoretical Curriculum 33  
- Training Models 33  
- What to Consider before Performing Real Procedures? 34  
- Assessment/Certification 34  

5. Peritoneal Access  
Liselotte Mettler, Bruno Van Herendael, Andrea Tinelli, Antonio Malvasi, Artin Ternamian  
- Endoscopic Threaded Imaging Port 37  
- Gynecological Laparoscopy and Imaging 40  

6. Risk Management in Gynecologic Endoscopy  
Artin Ternamian  
- Definitions 59  
- Commitment to Risk Management 61  
- Risk Assessment 68  
- Tips and Tricks 68  
- Photo and Video Consent Form 69  

7. Descriptive and Functional Anatomy of the Female Pelvis  
Bruno Van Herendael, Michel Degueldre, Jean Vandromme, Benedikt Tas  
- The Anterior Compartment 73  
- The Mid Compartment 75  
- The Posterior Compartment 77  

8. Female Pelvis Innervation and Vascularization in Laparoscopy  
Andrea Tinelli, Roberta Montefrancesco, Giovanni Alemanno, Antonio Malvasi  
- Laparoscopy in Extraperitoneal Spaces 83  
- Vascularization and the Lymphatic System in Laparoscopy 83  
- Female Pelvic Nervous System 86  

9. Suturing and Ligature Techniques at Laparoscopy  
Liselotte Mettler, Goentje Peters, Tamer Seckin, Bruno Van Herendael, Ibrahim Alkatout  
- Hemostasis by Loop Ligatures 91  
- Hemostasis by Endoligature or Endosuture and Extracorporeal Knotting 91  
- Hemostasis by Endosuture with Intracorporeal Knotting 92  
- Hemostasis by Suture and Tying Knot with Half Hitch 95  
- Needles and Sutures 95  
- Tips and Tricks 100  

10. General Surgery Conditions and Techniques for Gyne-Endoscopic Surgeons  
John E Morrison  
- Abdominal and Pelvic Wall 102  
- Umbilical Hernias 102  
- Incisional Hernias 103  
- When and How? 104  
- Procedure 104  
- Special Considerations 105  
- Inguinal Hernias 106  
- Special Considerations 107  
- Internal Hernias 108  
- Visceral Pathologies 108  
- Colon 108  
- Appendix 109  
- Small Bowel 110
11. Pneumoperitoneum
Douglas E Ott
- Desiccation Effects 117
- Tips and Tricks of the Trade 121

12. Benign Ovarian Tumors
Saeed Alborzi, Bahareh Hamedi
- Preoperative Evaluation 125
- Surgical Approach 126
- Suturing in Ovarian Surgery 132
- Tips and Tricks 134

13. Ectopic Pregnancy
Ibrahim Alkatout
- Step 1 138
- Step 2 140
- Step 3 145
- Step 4 145
- Step 5 147
- Step 6 148
- Step 7 149
- Step 8 149
- Step 9 149

Surgical Technique for Nontubal Ectopic Pregnancy 150
- Step 10 150
- Step 11 153
- Step 12 153
- Step 13 154
- Step 14 154
- Step 15 155
- Step 16 155

General Operative Steps after Removal of the Ectopic Pregnancy 155
- Step 17 155
- Step 18 155
- Step 19 155
- Step 20 156
- Tips of the Experts 157

14. Endoscopic Surgery in Pregnancy
Wael Sammnr, Liselotte Mettler
- Indications for Laparoscopic Surgery during Pregnancy 159
- Tips and Tricks 162

15. Extragenital Findings in Gynecological Laparoscopy
Ibrahim Alkatout, Friederike Egberts, Manfred Schollmeyer, Liselotte Mettler
- Step 1 165
- Step 2 165
- Step 3 165
- Step 4 166
- Step 5 170
- Step 6 170
- Step 7 172
- Step 8 172
- Step 9 172
- Step 10 180
- Step 11 184
- Tips of the Experts 184

16. Tubal Surgery
Sanjay Patel
- Types of Tubal Surgery 186
- Hysteroscopic Tubal Cannulation 186
- Laparoscopic Tubal Microsurgery 187
- Equipment and Instruments 187
- Selection of Cases 188
- Intraoperative Evaluation 189
- Surgical Technique 190
- Types of Anastomosis 191
- Author’s Experience 195
- Laparoscopic Salpingo-Ovariolysis and Fimbrioplasty 195
- Tips and Tricks 196

17. Tubal Torsion: The Diagnostic Dilemma
Ibrahim Alkatout, Thoraif Schollmeyer, Ivo Meinhold-Heerlein, Liselotte Mettler
- Operative Steps 200
- Summary and Complications 203
- Tips and Tricks 204

18. Endometriosis
Mauricio Simões Abrão, Sergio Podgaec, Luciano Gibran
- General Considerations 206
- Surgical Techniques 208

19. Rectal Endometriosis—Diagnostic Procedure and Therapeutic Concepts
J Marek Doniec, Mathias Löhner
- What Kind of Preoperative Diagnostics? 219
- How to Manage Rectal Endometriosis? 220

20. Adhesiolysis and Prophylaxis of Adhesions
Hans-Rudolf Tinneberg, Andreas Hackethal
- Background 223
- Handling of Adhesions 223
- Outlook 226
21. Fibroids

Ornella Sizzi, Alfonso Rossetti, Alessandro Loddo

- Preoperative Preparation 227
- Patient Positioning in the Operating Theater 227
- Standard Positioning and Placement of Trocars 228
- Alternative Positioning and Placement of Trocars 228
- Instruments 228
- Operating Steps 228
- Postoperative Care 233
- Complications 233
- Results and Outcome 234
- Tips and Tricks of the Trade 235

22. Pelvic Floor Defects Surgery

Michael L Sprague, J Stephen Rich, Cy Liu

- Anatomy 238
- Preoperative Evaluation 238
- Uterosacral Ligament Suspension 239
- Laparoscopic Sacral Colpopexy 241
- Complete Pelvic Floor Reconstruction with Mesh 242
- Tips and Tricks of the Trade 245

23. Total Laparoscopic Hysterectomy

Thoralf Schollmeyer, Mohamed Elessawy

- Teaching Yesterday and Today 246
- How to Learn Laparoscopic Hysterectomy? 247
- Tips and Tricks for the Total Laparoscopic Hysterectomy 254

24. Technique of Routine Total Laparoscopic Hysterectomy with a Dissection of Uterine Vessels at Internal Iliac Level and Using a Uterine Manipulator

Bernd Holthaus, Susanne Denny

- Preparation 256
- Trocars, Instruments and Start 256
- Opening of Pelvic Side Wall 256
- Identification and Dissection of Uterine Vessels at Internal Iliac Level 256
- With or Without Bilateral Salpingo-Oophorectomy 257
- Dissection of Parametria and Sacrouterine Ligaments 258
- Removal of Uterus 258
- Results 258
- Tips and Tricks 260

25. Hysterectomies—Laparoscopic Subtotal Hysterectomy

Bernd Bojahr

- Surgical Procedure 261
- Complications 270

26. Laparoscopic Combined Hysterectomy Using The “Change Over Technique” for Very Large Uterine Myomata

Garri Tchartchian

- Laparoscopic Combined Hysterectomy (For Uterus Over 1,000 Grams) 274
- Surgical Procedure 275
- Complications 277
- Summary 277
- Tips and Tricks 277

27. Laparoscopic Pectopexy

Karl Günter Noé

- A New Technique in Prolapse Surgery 279
- Procedures 279
- Equipment 283
- Tips and Tricks 284

28. Strategies to Prevent Vault Descent at the Time of Hysterectomy

Bruno Van Herendael

- Technique 285

29. Oncologic Surgery on the Ovary

Ivo Meinhold-Heerlein

- Summary 290
- Laparoscopy for Ovarian Malignancies: Prophylactic Operations 291
- Laparoscopy for Ovarian Malignancies: Borderline Tumors 291
- Laparoscopy for Ovarian Malignancies: Early Stage Invasive Tumors 292
- Laparoscopy for Ovarian Malignancies: Advanced Stage Invasive Tumors 293
- Indication and Preoperative Work-Up 293
- Laparoscopic Procedures 294
- Tips and Tricks 297
30. Oncologic Surgery on the Uterus 300
Riddhi Desai, Amit Galagali, Seema Puntambekar, Geetanjali Agarwal, Shailesh Puntambekar
- Laparoscopic Radical Hysterectomy 300
- Laparoscopic Nerve Sparing Radical Hysterectomy 304
- Anterior Exenteration 305
- Robotic Radical Hysterectomy 311
- Single Incision Laparoscopic Radical Hysterectomy 313

31. Robot Assisted Surgery in Gynecology 316
Kubilay Ertan, Alexander di Liberto
- Propaedeutics/Definition/Intent of Robot-Assisted Surgeries/Target 316
- Development/Technology of the da Vinci® System 317
- Advantages and Disadvantages of the da Vinci® System 321
- Training/Learning Curve/Building a Team 322
- Preparation/Patient Positioning/Covering/Communication 325
- Selection of Instruments/Uterine Manipulation/Use of the Fourth Arm 327
- Fundamental Operation Sequence (Single Fundamental Operating Room Steps, Chart of Operating Room Times) 330
- Trocar Placement (Principles/Possibilities)/Docking Maneuver/Docking Possibilities 331
- Patient Selection/Selection Criteria (Initial Phase, Advanced Stage, etc.) 333
- Range of Robot-Assisted Gynecologic Procedures 334
- Specifics with Intraoperative Complications or Complication Management 335
- Aspects of Patient Information/Specifics of Anesthesiology 337
- Economic Factors/Marketing 338
- Further Developments/Future Models 339
- Significance of Robotic Systems within Minimally Invasive Surgery 339
- Tips and Tricks 340
- Video Register 342

32. Diagnostic Hysteroscopy and Office Hysteroscopy 346
Lotte Clevin
- Instruments and Equipments 346
- Preparations 347
- Tips and Tricks 353

33. Operative Hysteroscopy 357
Thomas Römer
- Indications for Operative Hysteroscopy 357
- Instrumentation and Technical Equipment 357
- Technique and Procedure of Operative Hysteroscopy 357
- Staff Requirements 357
- Surgical Interventions 358
- Summary 363

Index 365
CHAPTERS WITH DVD CONTENTS

DVD-1

Chapter 4. Current Training Models in Hysteroscopy—Flemming Bjerrum
Video 1: Demonstration of an endometrial resection performed in a pig heart
Video 2: Demonstration of a myoma resection simulation on the HystSim
Video 3: Demonstration of bleeding and fluid management on the HystSim

Chapter 10. General Surgery Conditions and Techniques for Gyne-Endoscopic Surgeons—John E Morrison
Video 1: Inguinal floor with direct hernia
Video 2: Femoral hernia
Video 3: Ligation of appendix base
Video 4: Transection of appendix base

Chapter 12. Benign Ovarian Tumors—Saeed Alborzi, Bahareh Hamedi
Video 1: Laparoscopic ovarian cystectomy
Video 2: Laparoscopic resection of ovarian endometrioma and release of adhesions

Chapter 18. Endometriosis—Mauricio Simões Abrão, Sergio Podgaec, Luciano Gibran
Video 1: Surgical treatment—Infiltrating endometriosis
  • Rectosigmoid
  • Ileum
  • Vermiform appendix
  • Ovary
  • Uterosacral ligaments
Video 2: Surgical treatment—Infiltrating endometriosis
  • Bladder

DVD-2

Chapter 21. Fibroids—Ornella Sizzi, Alfonso Rossetti, Alessandro Loddo
Video 1: Myomectomy 1
Video 2: Myomectomy 2
Video 3: Uterine fibroid
Video 4: Intraligamentous myoma

DVD-3

Video 1: Uterosacral ligament uterine suspension
Video 2: Total pelvic floor reconstruction with mesh

Chapter 23. Total Laparoscopic Hysterectomy—Thoralf Schollmeyer, Mohamed Elessawy
Video 1: Laparoscopic subtotal hysterectomy (LASH) and Laparoscopic total hysterectomy (LTH)
Video 2: Total laparoscopic hysterectomy (TLH)

DVD-4

Chapter 27. Laparoscopic Pectopexy—Karl Günter Noé
Video 1: How to do Noé pectopexy
Chapter 29. Oncologic Surgery on the Ovary—Ivo Meinhold-Heerlein
Video 1: Fallopian tube carcinoma
Video 2: Ovarian tumor

Chapter 31. Robot Assisted Surgery in Gynecology—Kubilay Ertan, Alexander di Liberto
Video 1: Simple hysterectomy—complex case
Video 2: Radical hysterectomy