

Contents

Preface	v
Contributors	xix
Introduction	xxv

PART I GENERAL SURGERY

Section I Esophagus

1 Esophagectomy: Right Thoracotomy and Laparotomy with Thoracic Anastomosis	2
<i>Benjamin E. Schneider</i>	
2 Esophagectomy: Right Thoracotomy and Laparotomy with Cervical Anastomosis	6
<i>Benjamin E. Schneider</i>	
3 Esophagogastrectomy	12
<i>Natisha Busick</i>	
4 Transhiatal Esophagectomy	18
<i>Benjamin E. Schneider</i>	
5 Transabdominal Nissen Fundoplication	22
<i>Kevin F. Satsky</i>	
6 Laparoscopic Nissen Fundoplication	26
<i>Kevin F. Satsky</i>	
7 Transthoracic Collis Gastroplasty and Nissen Fundoplication	30
<i>Natisha Busick</i>	
8 Cricopharyngeal Myotomy and Operation for Pharyngoesophageal (Zenker's) Diverticulum	34
<i>Benjamin E. Schneider</i>	
9 Esophagomyotomy for Achalasia and Diffuse Esophageal Spasm	36
<i>Carol E.H. Scott-Conner</i>	
10 Laparoscopic Esophagomyotomy	38
<i>Benjamin E. Schneider</i>	

Section II Stomach and Duodenum

11 Gastrojejunostomy	42
<i>Natisha Busick</i>	

12	Proximal Gastric Vagotomy	46
	<i>Carol E.H. Scott-Conner</i>	
13	Truncal Vagotomy and Pyloroplasty	50
	<i>Carol E.H. Scott-Conner</i>	
14	Partial Gastrectomy with Billroth I Reconstruction	54
	<i>Roy R. Danks</i>	
15	Partial Gastrectomy with Billroth II Reconstruction	58
	<i>Roy R. Danks</i>	
16	Plication of Perforated Peptic Ulcer	64
	<i>Georgios Tsoulfas</i>	
17	Laparoscopic Plication of Perforated Ulcer	66
	<i>Roy R. Danks</i>	
18	Gastrostomy	70
	<i>Carol E.H. Scott-Conner</i>	
19	Percutaneous Endoscopic Gastrostomy	72
	<i>Mazen M. Hashisho</i>	
20	Radical Subtotal Gastrectomy for Cancer . . .	74
	<i>Mazen M. Hashisho, Roy R. Danks, and Mario Martinasevic</i>	
21	Total Gastrectomy	80
	<i>Mario Martinasevic</i>	
22	Vertical Banded Gastroplasty	84
	<i>Mario Martinasevic</i>	
23	Roux-en-Y Gastric Bypass for Obesity	88
	<i>Yi-Horng Lee</i>	
24	Laparoscopic Roux-en-Y Gastric Bypass for Obesity	92
	<i>Yi-Horng Lee</i>	
25	Simple Excision of Duodenal Diverticulum . .	98
	<i>Roy R. Danks</i>	
26	Transduodenal Excision of Duodenal Diverticulum	102
	<i>Roy R. Danks</i>	

Section III Small Intestine and Appendix

27	Small Bowel Resection	106
	<i>Ross Bengtson</i>	

28	Enterolysis for Intestinal Obstruction	110
	<i>Mazen M. Hashisho</i>	
29	Feeding Jejunostomy	112
	<i>Mazen M. Hashisho</i>	
30	Appendectomy	114
	<i>Mohamad Allam</i>	
31	Laparoscopic Appendectomy	118
	<i>Natisha Busick and Georgios Tsoulfas</i>	
32	Resection of Meckel's Diverticulum	122
	<i>Ross Bengtson</i>	

Section IV Large Intestine

33	Right Hemicolectomy	126
	<i>Carol E.H. Scott-Conner</i>	
34	Left Hemicolectomy	130
	<i>Nate Thepjatri</i>	
35	Low Anterior Resection	134
	<i>Nate Thepjatri</i>	
36	Abdominoperineal Resection	138
	<i>Carol E.H. Scott-Conner</i>	
37	Subtotal Colectomy with Ileostomy and Hartmann's Pouch	142
	<i>Mazen M. Hashisho</i>	
38	Total Proctocolectomy with Ileoanal Reservoir and Ileoanal Anastomosis	146
	<i>Carol E.H. Scott-Conner</i>	
39	Total Proctocolectomy with Ileostomy	150
	<i>Carol E.H. Scott-Conner</i>	
40	End Ileostomy	154
	<i>Kareem A. Hamdy</i>	
41	Loop Ileostomy	158
	<i>Kareem A. Hamdy</i>	
42	Transverse Loop Colostomy	162
	<i>Kareem A. Hamdy</i>	
43	Closure of Transverse Loop Colostomy	164
	<i>Kareem A. Hamdy</i>	
44	Subtotal Colectomy for Lower GI Bleeding . .	166
	<i>Mazen M. Hashisho</i>	
45	Hartmann's Procedure	170
	<i>Carol E.H. Scott-Conner</i>	

46	Ripstein Procedure for Rectal Prolapse	174
	<i>Carol E.H. Scott-Conner</i>	

Section V Anus, Rectum, and Pilonidal Region

47	Rubber Band Ligation of Hemorrhoids	176
	<i>Shauna Lorenzo-Rivero</i>	
48	Hemorrhoidectomy	178
	<i>Shauna Lorenzo-Rivero</i>	
49	Drainage of Perirectal Abscess	180
	<i>Shauna Lorenzo-Rivero</i>	
50	Anorectal Fistulotomy	182
	<i>Shauna Lorenzo-Rivero</i>	
51	Lateral Internal Sphincterotomy for Chronic Anal Fissure	184
	<i>Shauna Lorenzo-Rivero</i>	
52	Anoplasty for Anal Stenosis	186
	<i>Carol E.H. Scott-Conner</i>	
53	Marsupialization of Pilonidal Sinus	188
	<i>Mohamad Allam</i>	
54	Excision and Primary Closure of Pilonidal Sinus	190
	<i>Mohamad Allam</i>	

Section VI Hepatobiliary Tract

55	Cholecystectomy	192
	<i>Mazen M. Hashisho</i>	
56	Laparoscopic Cholecystectomy	196
	<i>Mazen M. Hashisho</i>	
57	Open Common Bile Duct Exploration	200
	<i>Christopher T. Bunch</i>	
58	Roux-en-Y Hepaticojejunostomy or Choledochojejunostomy	204
	<i>Natisha Busick</i>	
59	Carcinoma of Hepatic Duct Bifurcation	210
	<i>Natisha Busick</i>	
60	Hepatic Wedge Resection	216
	<i>Georgios Tsoulfas</i>	
61	Right Hepatic Lobectomy	218
	<i>Georgios Tsoulfas</i>	
62	Left Hepatic Lobectomy	222
	<i>Georgios Tsoulfas</i>	

Section VII Pancreas

- 63 Partial Pancreaticoduodenectomy
(Whipple Procedure) 226
Natisha Busick
- 64 Total Pancreaticoduodenectomy 232
Natisha Busick
- 65 Distal Pancreatectomy 238
Natisha Busick
- 66 Pancreatic Cystogastrostomy 242
Natisha Busick
- 67 Pancreaticojejunostomy
(Puestow Procedure) 246
Andrew A. Fedder

Section VIII Spleen

- 68 Splenectomy (Open) for Disease 250
Charles H. Mosher
- 69 Laparoscopic Splenectomy 254
Carol E.H. Scott-Conner
- 70 Splenectomy for Trauma 258
Charles H. Mosher
- 71 Partial Splenectomy 262
Charles H. Mosher
- 72 Splenorrhaphy 266
Charles H. Mosher

**Section IX Hernia Repairs and Surgery for
Necrotizing Fasciitis**

- 73 Bassini Repair of Inguinal Hernia 270
Mohamad Allam
- 74 Shouldice Repair of Inguinal Hernia 274
Carol E.H. Scott-Conner
- 75 McVay Repair of Inguinal Hernia 278
Peter Fretz
- 76 Mesh Repair of Inguinal Hernia 282
Benjamin E. Schneider and Peter Fretz
- 77 Laparoscopic Inguinal Hernia Repair:
Transabdominal Preperitoneal 286
Alvina Won

78	Laparoscopic Inguinal Hernia Repair: Totally Extraperitoneal	290
	<i>Alvina Won</i>	
79	Repair of Femoral Hernia	294
	<i>Kareem A. Hamdy</i>	
80	Ventral Hernia Repair	298
	<i>Peter Fretz</i>	
81	Operations for Infected Abdominal Wound Dehiscence and Necrotizing Fasciitis of the Abdominal Wall	300
	<i>Kristen Sihler</i>	

Section X Breast

82	Breast Biopsy	302
	<i>Mazen M. Hashisho</i>	
83	Excision of Ducts	304
	<i>Carol E.H. Scott-Conner</i>	
84	Needle-Localized Breast Biopsy	306
	<i>Abdi Ahari</i>	
85	Lumpectomy (Partial Mastectomy) and Axillary Node Dissection	308
	<i>Abdi Ahari</i>	
86	Sentinel Node Biopsy for Breast Cancer	312
	<i>Mazen M. Hashisho</i>	
87	Modified Radical Mastectomy	314
	<i>Michael C. Fraterelli</i>	
88	Total (Simple) Mastectomy	318
	<i>Michael C. Fraterelli</i>	
89	Operation for Breast Abscess	320
	<i>Carol E.H. Scott-Conner</i>	

Section XI Lymph Nodes

90	Sentinel Node Biopsy for Melanoma	322
	<i>Mazen M. Hashisho</i>	
91	Superficial Inguinal Lymph Node Dissection	324
	<i>Mazen M. Hashisho</i>	
92	Excision of Melanoma	328
	<i>Mazen M. Hashisho</i>	
93	Inguinal and Pelvic Lymphadenectomy	330
	<i>Carol E.H. Scott-Conner</i>	

Section XII Head and Neck

- 94 Superficial Parotidectomy 334
Carol E.H. Scott-Conner
- 95 Thyroid Lobectomy 338
Michael C. Fraterelli
- 96 Total Thyroidectomy 342
Michael C. Fraterelli
- 97 Parathyroidectomy for Adenoma 346
Andrew A. Fedder
- 98 Parathyroidectomy for Secondary/Tertiary
Hyperparathyroidism 350
Andrew A. Fedder
- 99 Cricothyroidotomy 354
Amy Bobis
- 100 Tracheostomy 356
Amy Bobis
- 101 Percutaneous Tracheostomy 358
Mazen M. Hashisho

Section XIII Miscellaneous Procedures

- 102 Placement of Subclavian Central Venous
Catheter 360
Amy Bobis
- 103 Placement of Internal Jugular Central
Venous Catheter 364
Amy Bobis
- 104 Renal Transplantation 368
Gustavo Martinez-Mier

Part II VASCULAR SURGERY**Section XIV Cerebrovascular Occlusive Disease**

- 105 Carotid Endarterectomy 372
Jamal J. Hoballah
- 106 Carotid Endarterectomy Using the
Eversion Technique 376
Dale Maharaj and R. Clement Darling III
- 107 Redo Carotid Endarterectomy 380
David Corry and Mark Adelman
- 108 Carotid Subclavian Bypass 386
Julie Freischlag and John Lane

109	Carotid Subclavian Transposition	390
	<i>Julie Freischlag and John Lane</i>	
110	Vertebral Artery Reconstruction	394
	<i>David Corry and Mark Adelman</i>	
111	Aorto-Innominate Artery Bypass	400
	<i>Christian Bianchi and Jeffrey L. Ballard</i>	

**Section XV Mesenteric and Renal Artery
Occlusive Disease**

112	Antegrade Aortoceliac/Mesenteric Bypass for Chronic Mesenteric Ischemia	404
	<i>Roderick T.A. Chalmers</i>	
113	Superior Mesenteric Artery Embolectomy with Primary/Patch Closure for Acute Embolic Mesenteric Ischemia	408
	<i>Roderick T.A. Chalmers</i>	
114	Superior Mesenteric Artery Thrombectomy with Retrograde Aortomesenteric Bypass for Acute Thrombotic Mesenteric Ischemia	412
	<i>Roderick T.A. Chalmers</i>	
115	Bilateral Aortorenal Bypass	416
	<i>Jamal J. Hoballah</i>	
116	Hepatorenal Artery Bypass	420
	<i>Jamal J. Hoballah</i>	
117	Transaortic Celiac and Superior Mesenteric Artery Endarterectomy	424
	<i>Christian Bianchi and Jeffrey L. Ballard</i>	
118	Transaortic Renal Artery Endarterectomy . . .	428
	<i>Christian Bianchi and Jeffrey L. Ballard</i>	

Section XVI Aortoiliac Occlusive Disease

119	Thoracofemoral Bypass	432
	<i>Kelly S.A. Blair and Hisham Bassiouny</i>	
120	Aortobifemoral Bypass	438
	<i>Jamal J. Hoballah</i>	
121	Retroperitoneal Aortofemoral Bypass	446
	<i>Kelly S.A. Blair and Hisham Bassiouny</i>	
122	Axillobifemoral Bypass	452
	<i>Kelly S.A. Blair and Hisham Bassiouny</i>	

- 123 Iliofemoral Bypass 456
Munier M.S. Nazzal
- 124 Femorofemoral Bypass 460
Munier M.S. Nazzal

Section XVII Infrainguinal Occlusive Disease

- 125 Femoropopliteal Bypass with PTFE Graft . . . 464
Jamal J. Hoballah
- 126 Femoroinfrapopliteal PTFE Bypass with
 Adjunctive AVF or Vein Cuff 468
*Sujata Subramanian, Keith D. Calligaro,
 and Matthew J. Dougherty*
- 127 Femoroposterior Tibial Bypass with
 Reversed Greater Saphenous Vein 472
Jamal J. Hoballah
- 128 Femoroanterior Tibial Bypass with
 Nonreversed Greater Saphenous Vein 476
Jamal J. Hoballah
- 129 In Situ Femoroperoneal Bypass 480
Jamal J. Hoballah
- 130 Femoroplantar Composite Vein Bypass 484
Jamal J. Hoballah
- 131 Midbypass Revision 488
Jamal J. Hoballah
- 132 Distal Bypass Revision 492
Jamal J. Hoballah

Section XVIII Thromboembolectomy

- 133 Aortic Saddle Embolus 496
*Theodore H. Teruya and
 Ahmed M. Abou-Zamzam*
- 134 Lower-Extremity Thromboembolectomy 500
*Theodore H. Teruya and
 Ahmed M. Abou-Zamzam*
- 135 Upper-Extremity Thromboembolectomy 504
Jamal J. Hoballah

Section XIX Aneurysmal Disease

- 136 Thoracoabdominal Aortic Aneurysm Repair . . 506
John W. York and Samuel R. Money

- 137 Elective Transabdominal Replacement of
Infrarenal Abdominal Aortic Aneurysm 512
Jamal J. Hoballah
- 138 Left Posterolateral Retroperitoneal Abdominal
Aortic Aneurysm Repair 518
Dale Maharaj and R. Clement Darling III
- 139 Transabdominal Replacement of Ruptured
Infrarenal Abdominal Aortic Aneurysm 522
Jamal J. Hoballah
- 140 Replacement of Common Femoral Aneurysm
with PTFE Graft 528
Jamal J. Hoballah
- 141 Ligation of Popliteal Aneurysm:
Femoropopliteal/tibial Reversed
Vein Bypass 532
Jamal J. Hoballah

Section XX Endovascular Procedures

- 142 Endovascular Aneurysm Repair (AneuRx
bifurcated graft) 536
Murray L. Shames and Luis A. Sanchez
- 143 Endovascular Abdominal Aortic Aneurysm
Repair with the Ancure Endograft 542
Daniel J. Bertges and Michel S. Makaroun
- 144 Renal Artery Angioplasty and Stenting 546
Murray L. Shames and Luis A. Sanchez
- 145 Iliac Artery Angioplasty and Stenting 550
Murray L. Shames and Luis A. Sanchez
- 146 Inferior Vena Cava Filters 554
Murray L. Shames and Luis A. Sanchez
- 147 Ultrasound-Guided Percutaneous Obliteration
of Common Femoral Artery Pseudoaneurysm
with Thrombin Injection 558
Jamal J. Hoballah

Section XXI Venous Disorders

- 148 Stripping of the Greater Saphenous Vein
and Stab Avulsion of Branch Varicosities . . . 560
Michael S. Connors III and Samuel R. Money

- 149 Femorofemoral Vein Bypass (Palma Procedure) 564
Munier M.S. Nazzal

Section XXII Creation of Arteriovenous Fistulae for Dialysis

- 150 Radiocephalic Arteriovenous Fistula for Hemodialysis 568
Christopher T. Bunch
- 151 Creation of Brachiocephalic Fistula 572
Christopher T. Bunch
- 152 Creation of Brachio basilic Fistula 574
Mazen M. Hashisho
- 153 PTFE Forearm Graft for Hemodialysis 576
Mazen M. Hashisho
- 154 Creation of Upper-Arm Prosthetic Arteriovenous Grafts 580
Christopher T. Bunch

Section XXIII Sympathectomy

- 155 Supraclavicular Cervical Sympathectomy 584
Mario Martinasevic
- 156 Lumbar Sympathectomy 588
Mario Martinasevic

Section XXIV Amputations

- 157 Above-Knee Amputation 590
Mohamad Allam
- 158 Below-Knee Amputation 594
Mohamad Allam
- 159 Transmetatarsal Foot Amputation 598
Jamal J. Hoballah
- 160 Transmetatarsal (Ray) Toe Amputation 600
Jamal J. Hoballah
- 161 Transpharyngeal Toe Amputation 602
Jamal J. Hoballah

Section XXV Miscellaneous Procedures

- 162 Transaxillary First Rib Resection 604
William J. Sharp