

Index

a

- abdomen 119
 - acute 51–57
 - assessment 51–52
 - decision-making
 - algorithm 110
 - diagnostic imaging 56–57
 - differential diagnosis 51
 - etiologies 52
 - pathophysiology 51
 - stabilization 52–55
 - treatment response
 - monitoring 54
 - counterpressure, hemoperitoneum 170
 - examination 55
 - free fluid 15, 56
 - hernias *see* hernias
 - muscles 190
 - trauma 190–197
 - blunt 190–192
 - penetrating
 - injuries 192, 606–607
 - treatment 193–195
 - see also* bite wounds; burn injuries
- abdominal drainage
 - biliary emergencies 162
 - pancreatic abscessation 225
 - peritonitis 142, 144
 - see also* peritoneal effusion
- abdominocentesis
 - acute abdomen 56
- biliary emergencies 151–153
- gastrointestinal foreign bodies 80
- gastrointestinal ulcers 243–244
- hemoperitoneum 165, 168
- peritonitis 121, 123
- uremia 267–269
- uroabdomen 290–291, 300
- abscess
 - hepatic 237
 - pancreatic 148, 216–225
 - prostatic 32, 553–564
 - scrotal 551–552
- acepromazine 12, 19
 - upper respiratory obstruction 357
- acetabular fracture 732
- acute abdomen *see* abdomen
- acute kidney injury (acute renal failure) 265, 274
 - gastric dilatation and volvulus 107
- adenocarcinoma 236
 - biliary 236
- adrenal gland
 - hemorrhage 174–175
 - neoplasia 174–175
- adventitial scissors 319
- airway maintenance 362
 - see also* brachycephalic airway syndrome; intubation; upper respiratory obstruction
- alar amputation 379
- albumin 130
- peritonitis 128–130, 139
- pyothorax 429, 432
- transfusion 118, 130
 - see also* hypoalbuminemia
- alginate dressings 639
- alpha-2 adrenergics 12, 18–19
- alveolar–arterial oxygen gradient
 - 3, 4
 - flail chest 484
- ammunition 600–601
- amputation
 - alar 379
 - open fractures and 724
 - penis 309, 547–550
- analgesia 11–13, 18–19
 - biliary emergencies 156
 - bite wound victims 579, 585
 - burn injuries 590, 594–595
 - cesarean section
 - postoperative 532
 - chest wall trauma 470–471
 - flail chest 484
 - colonic torsion 117
 - degloving and shear injuries 633
 - diaphragmatic hernia 423, 424
 - esophageal foreign body 66
 - hemoperitoneum, postoperative 175
 - intussusception 84, 86
 - laryngeal paralysis, postoperative 389–390
 - lung lobe torsion, postoperative 455
 - necrotizing fasciitis 621

- analgesia (*cont'd*)
 - pancreatic abscessation 223
 - pneumothorax, postoperative 449
 - post-cardiac arrest 523
 - prostatic abscessation 564
 - pyometra 537
 - pyothorax 429, 432
 - septic arthritis 711
 - septic peritonitis 131, 132
 - ureteral interventions 329–330
- anastomosis
 - colonic torsion 117
 - intussusception 84–85
 - rectal prolapse 90
 - ureteral 281–283, 322–323
 - urethral 307–308, 346–348
- Anderson–Gustilo classification, open fractures 716
- anemia
 - bleeding gastrointestinal ulcers 241
 - ureteral obstruction and 319–320
- anesthesia
 - biliary emergencies 157
 - cesarean section 529–530
 - chest wall trauma 471
 - gastric dilatation and volvulus 97, 98
 - hemoperitoneum 175–176
 - pectus excavatum 480
 - rectal prolapse 89
 - septic peritonitis 131, 132
 - upper respiratory obstruction 362
- angiogenesis 630
- animal trauma triage (ATT) score 1
- ankylosis, temporomandibular joint 695
- antebrachiocarpal joint luxation/subluxation 731
- anti-inflammatory drugs *see* corticosteroids; non-steroidal anti-inflammatory drugs (NSAIDs)
- antibiotics *see* antimicrobial therapy
- anticoagulant rodenticide toxicity
 - hemothorax 436, 438
 - pericardial effusion 503, 512
- anticoagulation therapy, septic peritonitis 130–131
- antidiuretic hormone *see* vasopressin
- antiemetics
 - biliary emergencies 156, 163
 - intestinal volvulus 113
 - intussusception 84, 86
- antifibrinolytics, hemoperitoneum 169
- antimicrobial therapy
 - biliary emergencies 156
 - bite wounds 582–585, 696
 - burn injuries 590–591
 - chest wall trauma 472
 - colonic torsion 117
 - degloving and shear injuries 642–643
 - hepatic diseases 235
 - incisional infections 658
 - prophylactic use 656–657
 - necrotizing fasciitis 621–622
 - open fractures 719–721
 - pancreatic abscessation 221, 224
 - penetrating wounds 612
 - pericarditis 512
 - prostatic abscess 560
 - pyometra 537–538, 539–540
 - pyothorax 411–412, 427–429
 - reconstructive surgery 647
 - rectal prolapse 89
 - resistance 123
 - septic arthritis 707–708, 712
 - septic peritonitis 126, 127, 142
 - antibiotic lavage 134
 - septic shock 8
 - topical 590–591
 - upper respiratory obstruction 362
 - ureteral interventions 319, 330
- antitussive therapy, tracheal collapse 397
- anxiolytics 11–13, 18–19
- aorta 433
 - compression 518
- approximating clamps 319
- arrhythmias 5
 - gastric dilatation and volvulus 94, 95
 - postoperative 106
 - hemoperitoneum patients 176
 - postoperative 175
 - hepatic surgery, postoperative 235–236
 - see also* bradycardia; pacemaker therapy
- arterial catheterization 17–18
- arthritis, septic *see* septic arthritis
- arthrocentesis 704–707
- arthroscopy 44, 711, 714
 - instruments and supplies 45
- arthrotomy 44, 711
 - instruments and supplies 46
- arytenoid cartilages 384
 - lateralization 25, 387–389, 394
 - aftercare 389–390
 - complications 390
 - instruments 29
 - prognosis 390
- aseptic peritonitis 120
- aseptic technique 655–656
- assessment
 - cardiovascular 5–8
 - initial 1–2
 - neurological 14–15
 - respiratory 2–4
 - urinary 15–16
 - see also specific conditions*
- asynchronous breathing 407
- atipamezole 12
- atrioventricular block 490, 493
- atropine, bradycardia 491
- auscultation
 - lung lobe torsion 452
 - respiratory assessment 2
 - upper airway obstruction 356
 - urethral obstruction 332
- autologous blood patch pleurodesis 412–413, 449
- autolytic debridement, burn wounds 591
- autotransfusion

- hemoperitoneum 167–168
- hemothorax 411, 439
- avulsion, lip 698
- azotemia 15–16, 266
- ureteral obstruction 313, 314
- b**
- bacterial keratitis 676, 679
- baculum (os penis) fracture 545
- ballistics *see* gunshot wounds
- bandaging
 - burn wounds 591
 - degloving and shear injuries 636–642
 - necrotizing fasciitis wounds 623–625
 - open fracture wounds 719
 - penetrating wounds 608
 - skin graft 651
- belt-loop gastropexy 103
- benign prostatic hyperplasia (BPH) 554
- benzodiazepines 12, 19
- big kidney–little kidney (BKLK) syndrome 313
- bile 146
- bile peritonitis 56, 123, 147, 149, 151
 - surgical treatment 162
- biliary emergencies 146–163
 - anatomy 146
 - causative diseases 147–149
 - diagnosis 149–154
 - etiology 147
 - obstruction 21, 146, 147–149, 153
 - rupture 146–147, 151–153
 - surgical treatment 154–162
 - bile duct 160–162
 - bile peritonitis 162
 - gallbladder 157–160
 - instruments 21
 - postoperative monitoring 162–163
 - prognosis 163
 - traumatic injury 162
- bilirubin 147, 149–151
 - postoperative monitoring 162–163
- bioactive dressings 641
- biopsy, liver 230–231
- bipolar vessel-sealing device, staphylectomy 376–377
- bismuth subsalicylate 249
- bite wounds 575–585
 - antibiotic use 582–585
 - assessment 579–580
 - head and neck wounds 579
 - limb wounds 579
 - perineal wounds 579
 - thoracic and abdominal wounds 579
 - local tissue injury 575
 - oral 695–696
 - postoperative management 585
 - stabilization 576–579
 - systemic effects 575–576
 - treatment 580–585
- bladder
 - drainage 208–209
 - entrapment with perineal hernia 208–211
 - neurovascular anatomy 294
 - palpation 15
 - retroflexion 207–212
 - rupture 269–270, 285–286, 288–296
 - diagnosis 290–292
 - surgical treatment 293–296
 - see also* urinary tract
- bleeding *see* hemorrhage
- bleeding gastrointestinal ulcers 238–250
 - clinical signs 240–241
 - diagnostics 241–246
 - etiology 238–240
 - medical management 247–249
 - surgical management 250
- blind intubation 360
- blood analysis
 - hemoperitoneum 168
 - hepatic diseases 229–230
 - pericardial effusion 504
 - pyometra 535
- blood pressure measurement 5
 - direct arterial 17
- blood transfusion *see* transfusion
- Boari flap 281–282
- body wall repair, bite wounds 582
- bone grafting 722
- bone plates 46
- brachycephalic airway syndrome 372–382
 - anatomy 372
 - diagnostics 373–375
 - stabilization 372–373
 - surgical management 25, 375–380
 - complications 381–382
 - postoperative care 380–381
 - temporary tracheostomy 364, 379–380
- bradycardia 489
 - pacemaker therapy 489–500
- brain injury 661
- breathing difficulty *see* dyspnea
- bronchiectasis 395
- bronchioles 451
- bronchodilators, tracheal collapse 397–398
- bronchomalacia 395
- bronchoscopy
 - lung lobe torsion 453
 - tracheal collapse 397
 - stent placement 401
- bullet wounds *see* gunshot wounds
- bupivacaine 66
 - diaphragmatic hernia 423
 - epidural for cesarean section 530
 - pyothorax 432
 - septic peritonitis 131
- buprenorphine 11
- burn injuries 586–599
 - chemical burns 595–597
 - electrical burns 597–599
 - oral 697–698
 - pathophysiology 586–587
 - postoperative care 594–595
 - presentation 586
 - stabilization 587–591
 - surgical complications 595
 - treatment 591–594
 - debridement 591–594
 - negative pressure wound therapy (NPWT) 594

butorphanol 11
 tracheal collapse 397
 upper respiratory
 obstruction 357

C

C-reactive protein,
 pyometra 535–536, 540
 cadoxemer iodine dressings 641
 calcium channel blockers,
 uremia 275
 calcium gluconate, hyperkalemia
 treatment 268, 289, 319
 calculi
 bile duct 161
 gallbladder 147–148, 153, 157
 ureteral 313–318, 320
 urethral 23, 271,
 331–333, 336–339
 cancer *see* neoplasia
 Canine Tactical Combat Casualty
 Care guidelines 605
 capnography, cardiopulmonary
 resuscitation
 monitoring 521
 cardiac arrhythmias *see*
 arrhythmias
 cardiac injury following
 burns 590
 cardiac tamponade 501
 cardiogenic shock 7
 cardiomegaly
 pectus excavatum 477
 pericardial effusion 504
 cardiomyopathy
 dilated (DCM) 504
 septic 128
 cardiopulmonary arrest (CPA)
 causes 514
 recognition of 514–515
 cardiopulmonary resuscitation
 (CPR) 514
 open-chest 515–522
 benefits of 516
 indications and
 contraindications 515
 monitoring 520–522
 post-arrest care 522–523
 prognosis 524

cardiovascular system
 assessment 5–8
 operating room tips 26–31
 stabilization
 treatment response
 monitoring 54
 with acute abdomen 52–54
 with bleeding gastrointestinal
 ulcers 247
 carpal luxation 730–731
 carpometacarpal injuries 731
 carprofen 12
 castration
 perineal hernia 201–202
 prostatic abscessation 564
 scrotal hernia 188
 testicular emergencies 552
 catheterization
 arterial 17–18
 intraosseous 16
 urinary 16, 270–272, 335–337
 venous 16–17
 celiotomy
 pancreatic
 abscessation 218–221
 postoperative hemoabdomen
 144–145
 secondary septic peritonitis
 141–143
 central nervous system
 penetrating injuries 606
 stabilization with acute abdomen
 54–55
 central venous catheterization 17
 central venous pressure (CVP)
 6–7, 272
 uremia 272
 cerebral perfusion pressure
 (CPP) 14, 516, 661
 cervical esophagotomy 63
 cervicopexy 571
 cesarean section 31–32, 527–533
 anesthetic
 considerations 529–530
 complications 532–533
 instruments and supplies 32
 postoperative care 532
 presentation 527–528
 chemical burns 595–597

chemodectoma 503, 513
 chemotherapy, pericardial effusion
 management 513
 chest compressions 516
 pectus excavatum 478
see also cardiopulmonary
 resuscitation (CPR)
 chest wall disease 469
 blunt trauma 471–472
 penetrating
 wounds 472–474, 606
see also bite wounds
 stabilization 469–474
see also flail chest; pectus
 excavatum
 chitosan 641
 chlorhexidine solution 46
 bite wounds 580
 degloving and shear
 wounds 634
 peritonitis 134
 cholangiography 153
 cholangitis 148
 cholecystectomy 157–158, 162
 cholecystitis 148, 154
 cholecystoduodenostomy 159
 cholecystoenterostomy
 159–160, 163
 cholecystostomy 158–159
 cholecystotomy 157
 choledochal stenting 161–162
 choledochoduodenostomy 161
 choledocholithiasis 147–148
 choledochotomy 160–161
 cholelithiasis 147–148, 153, 154
 chylothorax 456
 cimetidine 248
 circumcostal gastropexy 104
 circumferential wiring, jaw
 fractures 691–692
 cleft palate 688
 closed-suction drainage, septic
 peritonitis 138–139,
 143–144
 coagulopathies
 biliary emergencies 151, 156
 hemoperitoneum patients 176
 hemothorax and 436, 438
 septic peritonitis 130–131

- coccygeus muscle 199
 - cold water irrigation, burn
 - injuries 590
 - collagen dressings 641
 - colloid administration 6
 - bite wound victims 578
 - burn injuries 589
 - gastric dilatation and
 - volvulus 95
 - hemoperitoneum 165–167
 - intestinal volvulus 113
 - ocular emergencies 661–662
 - septic peritonitis 128
 - uremia 273
 - colon anatomy 115
 - colonic resection 117
 - colonic torsion 115–118
 - diagnostics 115–116
 - prognosis 118
 - stabilization 116–117
 - surgical management 117–118
 - colopexy
 - colonic torsion 118
 - perineal hernia 206–207
 - rectal prolapse 91–92
 - compartment syndrome 595
 - computed tomography (CT)
 - acute abdomen 55, 57
 - biliary emergencies 154
 - chest wall trauma 471
 - colonic torsion 115–116
 - esophageal obstruction 61
 - gastrointestinal foreign body 74
 - gastrointestinal ulcers 243
 - hemoperitoneum 168–169
 - intussusception 82–83
 - lung lobe torsion 453–454
 - pancreatic
 - abscessation 217–218
 - pleural space disease 409–410
 - pneumothorax 445
 - tracheal collapse 396–397
 - upper respiratory
 - obstruction 362
 - congestive heart failure 491, 503
 - conjunctival grafting 679–683
 - constrictive pericarditis 502, 510
 - continuous renal replacement
 - therapy (CRRT) 275
 - contracture 631
 - contrast studies 23–25
 - instruments 28
 - cooling
 - pectus excavatum 476
 - respiratory distress 359
 - corneal trauma 673–679
 - foreign body 674–676
 - laceration 676–679
 - corneal ulcers 662, 673
 - coronary ligament 226
 - corticosteroids
 - gastrointestinal ulceration
 - association 239
 - pericardial effusion 512
 - post-cardiac arrest 522
 - upper respiratory
 - obstruction 357
 - coughing, tracheal collapse 396
 - COX inhibitors 238–239
 - coxofemoral luxation 732, 734
 - creatinine, peritoneal
 - effusions 123
 - cricoid cartilage 384
 - crystalloid administration 6
 - acute abdomen 53
 - biliary emergencies 156
 - burn injuries 589
 - esophageal foreign body 59–60
 - gastric dilatation and
 - volvulus 95
 - hemoperitoneum 165–167
 - intestinal volvulus 113
 - cyanosis 3
 - cyclooxygenase (COX) inhibitors 238–239
 - cyst, prostatic 563–564
 - cystectomy, partial 294–296
 - cystic endometrial hyperplasia
 - (CEH) 534
 - cystography 293, 301
 - cystopexy 207–208
 - cystoscopy 337
 - cystostomy catheter, subcutaneous
 - ureteral bypass
 - system 328–329
 - cystostomy tube placement 159, 298–301, 304–305, 308, 333–335
 - complications 334–335
 - low profile tubes 333–334
 - minimally invasive inguinal
 - approach 304–305
 - percutaneous 333
 - permanent 310
 - standard surgical approach 304
 - cystotomy 337
 - cytokines 576
 - cytology
 - hemothorax 438
 - liver 230
 - lung lobe torsion 454
 - pericardial effusion 506
 - peritonitis 121–122, 142, 151, 162–163
 - pyothorax 427–428
 - septic arthritis 704–705
 - uroabdomen 291
- d**
- debridement
 - bite wounds 580–581
 - burn wounds 591–594
 - autolytic 591
 - enzymatic and
 - mechanical 591
 - surgical 591–594
 - degloving and shear
 - wounds 635–636
 - incisional infection
 - management 658
 - necrotizing fasciitis 622–623
 - open fractures 718
 - penetrating wounds 607
 - decompression
 - bladder 16, 209
 - gastric 96–98
 - defibrillation, internal 518–519
 - degloving and shear
 - injuries 631–632
 - complications 643
 - immediate response 633
 - management 633–643
 - antibiotics 642–643
 - dressings 636–642
 - topical medications 643
 - dehiscence
 - burn wound 595

dehiscence (*cont'd*)
 gastrointestinal surgery 141
 foreign body 77, 80
 gastric dilatation and volvulus 106
 pacemaker placement
 complication 500
 peritonitis 124, 139–140
 skin flap edge 648
 staphylectomy site 382
 dehydration 8–14
 monitoring parameter
 guidelines 10
 Dennis blade 318
 dental surgery
 safety requirements 40
 supplies 40, 41–43
 instrument
 sterilization 40–44
 deracoxib 12
 dermis 626
 dexmedetomidine 12, 18–19
 upper respiratory
 obstruction 357
 dexrazoxane 597
 dextrose, hyperkalemia
 treatment 268,
 289, 319
 diagnostic peritoneal lavage (DPL)
 121
 uremia 269
 uroabdomen 290–291
 diaphragm 418–419
 pelvic 199
 diaphragmatic
 hernia 413, 417–424
 diagnostics 420
 examination 419–420
 pathophysiology 417–418
 postoperative care 423–424
 stabilization 421
 surgical treatment 421–423
 complications 424
 diazepam 12, 19
 5 α -dihydrotestosterone
 (DHT) 554–556
 dilated cardiomyopathy
 (CDM) 504

dissecting scissors 318
 disseminated intravascular
 coagulation (DIC)
 biliary emergencies 151
 gastric dilatation and
 volvulus 107
 hemoperitoneum 176
 hemothorax 439
 septic peritonitis 130
 distributive shock 7–8
 acute abdomen 53
 fluid therapy 53–54
 monitoring parameter guidelines
 10
 diuretics, uremia 273–275
 dobutamine 9
 septic peritonitis 129
 dopamine 9
 septic peritonitis 129
 uremia 275
 doxapram hydrochloride 386
 doxorubicin
 extravasation 596–597
 drainage
 bladder 208–209
 gallbladder, preoperative 156
 peritoneal effusions 134–139,
 143–144
 pleural effusion 428
 prostatic abscess 560–561,
 562, 564
 septic joints 708–711, 713
 see also abdominal drainage
 dressings
 degloving and shear
 injuries 636–642
 necrotizing fasciitis
 wounds 623–625
 open fracture wounds 719
 penetrating wounds 605, 608
 ductus deferens fixation 208
 dyspnea
 bite wound victims 577–578
 diaphragmatic hernia 419
 laryngeal trauma 391
 see also brachycephalic airway
 syndrome; respiratory distress;
 upper respiratory obstruction

dystocia 527
 stabilization 528–529
e
 echocardiography
 pectus excavatum 477
 pericardial effusion 505–506
 echolaryngography 362
 edema
 burn wounds 595
 pulmonary 424, 481
 effusions *see* pericardial effusion;
 peritoneal effusion; pleural
 effusion
 elbow luxation 727–730
 electrical burns 597–599
 oral 697–698
 electrocardiography (ECG)
 cardiopulmonary resuscitation
 monitoring 521
 gastric dilatation and
 volvulus 95
 hemoperitoneum 175
 hepatic surgery,
 postoperative 235–236
 hyperkalemia 212, 288–289
 pacemaker therapy 492
 pericardial effusion 505
 uremia 272
 urinary tract injury 288–289
 emphysema, subcutaneous,
 tracheostomy
 complication 370–371
 endoscopy
 esophageal obstruction 61, 62
 gastrointestinal
 ulcers 245–247, 250
 laryngeal trauma 391–392
 upper respiratory
 obstruction 361
 endotracheal intubation *see*
 intubation
 enteral nutrition 251–261
 complications 260–261
 contraindications 252
 dietary options 259
 feed delivery 259
 feed monitoring 259–260

- feeding tubes 252–258
- gastrointestinal foreign body
 - removal 80
- gastrointestinal ulcers 249
- indications 251–252
- intussusception 86
- pancreatic
 - abscessation 223–224
 - see also* nutritional support
- enteroplication 85–86
- enterotomy 76–77
- enucleation 667–669
 - instruments and supplies 37, 39, 663
- epicardial
 - pacemaker 492, 495–496
- epidermis 626
- epididymitis 551–552
- epiglottic cartilage 384
- epinephrine, septic
 - peritonitis 129
- episiotomy, vaginal prolapse
 - management 570
- epithelialization 629
- eschar 587
- esomeprazole 248–249
- esophagojejunostomy tube 258
- esophagostomy tube
 - placement 253–256
- esophagotomy 63–65
- esophagus
 - anatomy 58
 - foreign body 20, 58–69
 - diagnostics 60–61
 - non-surgical
 - treatment 61–62
 - pathophysiology 58–59, 60
 - postoperative care 66
 - stabilization 59–60
 - surgical treatment 62–65
 - stick injuries 69
- external abdominal oblique
 - muscles 190
- extracorporeal renal replacement
 - therapy (ERRT) 275
- extraluminal ring prostheses,
 - tracheal collapse 398–399
- extraocular surgery 39
 - instrument set 37
- eye 663
 - see also* ocular emergencies
- eyelid laceration repair 669–671
 - instruments and supplies 39
- f**
 - falciform ligament 226
 - famotidine 248
 - fascia lata graft, perineal hernia
 - repair 205–206
 - fecal analysis,
 - gastrointestinal ulcers 241
 - feline lower urinary tract disease (FLUTD) 331, 332, 336
 - femorotibial luxation 735–737
 - fenoldopam, uremia 275
 - fentanyl 11, 18
 - septic peritonitis 131, 132
 - fibroplasia 630
 - fishhooks, esophageal 66–67
 - flail chest 472, 483–485
 - diagnosis 483–484
 - treatment 484–485
 - flaps 645
 - bite wound repair 582
 - burn injury repair 594–595
 - complications and management 645–651
 - distal flap necrosis 649–651
 - hematoma 648
 - infection 647
 - self-trauma/
 - mutilation 648–649
 - seroma 647–648
 - skin edge dehiscence 648
 - degloving and shear
 - injuries 630, 631, 635
 - flail chest 485
 - gastropexy 103–104
 - hernia repair 188, 195, 205
 - open fracture management 724
 - palate defect repair 378, 688
 - tracheostomy 367
 - ureteral repair 282
 - urethral repair 348
- fluid therapy
 - acute abdomen 53–54
 - response monitoring 54
 - biliary emergencies 156
 - bite wound victims 578–579
 - bleeding gastrointestinal
 - ulcers 247
 - burn injuries 587–590
 - cesarean section 530
 - chest wall trauma 469–470
 - distributive shock 53–54
 - gastric dilatation and
 - volvulus 95
 - hemoperitoneum 165–167
 - hyperkalemia 289
 - hypovolemic shock 6–7, 53
 - intestinal volvulus 111, 113
 - intussusception 83–84
 - necrotizing fasciitis 620–621
 - ocular emergencies 661
 - pericardial effusion 506
 - prescription formula 9
 - pyometra 537
 - pyothorax 427, 429
 - septic peritonitis 128
 - uremia 273
 - ureteral obstruction 317
 - urethral trauma 298
- flumazenil 12, 19
- fluoroquinolones, necrotizing
 - fasciitis and 613–614
- fluoroscopy
 - esophageal obstruction 62
 - tracheal collapse 396
 - stent placement 400–401
- foam dressings 639
- focused assessment sonography for
 - trauma (FAST) 15
- hemoperitoneum 168
- thoracic (TFAST) 4, 437–438
- uremia 267
- uroabdomen 290
- folded flap palatoplasty 378
- forceps
 - esophageal 61–62
 - jeweler's 317–318
 - Pierce tissue 318

foreign body
 corneal 674–676
 esophageal 20, 58–69
 gastrointestinal 20, 70–80
 oral 696–697

fractures
 bite wounds 582
 hyoid apparatus 392
 instruments and supplies 47
 jaw 688–692
 open 44–46, 715–724
 antimicrobial
 therapy 719–721
 bone grafting 722
 classification 716–717
 complications 724
 evaluation 715–716
 fixation 721–722
 radiography 717
 wound
 management 718–719,
 722–724

os penis 545

ribs 471–472
see also flail chest

tooth 687

frostbite 599

funnel chest *see* pectus excavatum

furosemide, uremia 274–275

g

gait analysis, septic arthritis 704

gallbladder 146
 mucocele 148, 153–154
 neoplasia 149
 porcelain 153
 preoperative drainage 156
 rupture 151–153, 162
 stones 147–148
 surgery 157–160
 traumatic injury 162
see also biliary emergencies

gastric acid reducers 248–249

gastric decompression 96–98

gastric dilatation and volvulus (GDV) 93–107
 complications 106–107
 operative techniques 98–106

pathophysiology 94
 postoperative care 106
 prognosis 107
 risk factors 93–94
 stabilization 94–98

gastric invagination 100

gastric necrosis 99, 106, 107

gastric resection 99–100

gastrocolopexy 106

gastrointestinal system
 foreign body 20, 70–80
 classification 70
 examination 71
 imaging 72–74
 laboratory findings 71–72
 long-term complications 80
 pathophysiology 70
 postoperative care 78–80
 prognosis 80
 signs 71
 surgical techniques 74–78

operating room tips 20–22

surgical instruments 21
see also small intestine; *specific conditions*; stomach

gastrojejunostomy tube 258

gastropexy 101–104, 106

gastrostomy tube
 placement 256–257

gastrotomy 75, 77

Gelfoam 234

Glasgow Coma Score, modified (mGCS) 15

glenoid malformation 726

glide sign 4

glomerular filtration rate (GFR) 316
 measurement 266
 ureteral obstruction and 313

glucocorticoids, tracheal collapse 398

glucose
 dextrose, hyperkalemia
 treatment 268, 289, 319

peritoneal
 effusions 122–123, 142

gonadotropin-releasing hormone (GnRH), vaginal prolapse
 management 570

grafts 645
 bone grafting 722
 burn injury treatment 594
 conjunctival 679–683
 degloving injuries 635
 failure 651
 perineal hernia repair 205–206

granulation tissue 630

granulomas, following tracheal
 stenting 402

gunshot wounds 474, 600–603
 ammunition 600–601
 oral 697
 velocity 601–602

h

hair follicles 626

hand antisepsis 655–656

head trauma 661

healing *see* wound healing

heart 501–502
 blood supply 433, 434
 post-burn injuries 590
see also arrhythmias;
 cardiomegaly;
 cardiomyopathy;
 cardiovascular system

heart-base tumors 503

Helicobacter 240

HemaBlock 235

hemangiosarcoma 168
 cardiac walls 502–503, 506,
 509–510, 513
 splenic 173

hematochezia 241

hematologic testing *see* blood
 analysis

hematoma, skin flap site 648

hemoabdomen 20, 56
 post-celiotomy 144–145

hemoperitoneum 164–176
 complications 175–176
 diagnostics 168–169
 examination 164–165
 hepatic neoplasia 236
 medical management 169–170
 postoperative care 175
 prognosis 176–177

- signs 164
 - spontaneous 171–175
 - stabilization 165–168
 - surgical management 170–175
 - traumatic 171
 - hemorrhage
 - adrenal gland 174–175
 - bite wounds 578
 - degloving and shear
 - injuries 633
 - kidney 175, 279–280
 - liver 171–172, 234, 235
 - oral 698–699
 - postoperative 144–145, 235
 - see also* bleeding gastrointestinal
 - ulcers; hemoabdomen;
 - hemoperitoneum;
 - hemothorax
 - hemostatic techniques
 - hemoperitoneum 170–171
 - hepatic surgery 234–235
 - surgical hemostasis 171
 - hemothorax 411, 433–440
 - anatomy 433–435
 - chest wall trauma 469
 - diagnosis 436–438
 - medical management
 - 438–439
 - non-traumatic causes 435–436
 - postoperative 435
 - surgical treatment 439–440
 - traumatic 435
 - heparin, septic
 - peritonitis 130–131
 - hepatic artery 226–227
 - hepatic disease *see* liver
 - hepatobiliary scintigraphy 154
 - hepatocellular carcinoma
 - (HCC) 236
 - hernias
 - abdominal 178–189
 - incisional 197–198
 - inguinal/scrotal 183–189
 - traumatic 190–197
 - umbilical 178–183
 - diaphragmatic 413, 417–424
 - perineal 199
 - sciatic 199
 - herniorrhaphy
 - diaphragmatic hernia 422
 - perineal hernia 203
 - adjuncts 206–208
 - hip luxation 732–735
 - histamine-2 receptor antagonists
 - (H2RA) 248–249
 - honey
 - burn wound
 - management 590–591
 - degloving and shear
 - injuries 641
 - dressings 641
 - necrotizing fasciitis wound
 - management 623–625
 - human chorionic gonadotropin
 - (hCG), vaginal prolapse
 - management 570
 - hydrogel dressing 640
 - hydromorphone HCl 11
 - hyoid apparatus fracture 392
 - hyperbaric oxygen therapy,
 - necrotizing fasciitis 625
 - hyperbilirubinemia 147
 - hyperfibrinolysis 438, 439
 - hyperglycemia, post-cardiac arrest
 - 522
 - hyperkalemia
 - treatment 56, 268, 289, 319
 - uremia 267
 - urinary tract obstruction 56,
 - 212, 319
 - urinary tract trauma 288–289
 - hyperthermia
 - laryngeal paralysis 385
 - pectus excavatum 476
 - upper respiratory
 - obstruction 359
 - hypoalbuminemia
 - gastrointestinal obstruction 71
 - liver disease 229
 - septic peritonitis 128–130, 139
 - wound healing and 229
 - hypodermis 626
 - hyponatremia, with
 - intussusception 84
 - hypoperfusion, gastric dilatation
 - and volvulus 94–95
 - hypotension 128
 - septic peritonitis 126–128
 - hypothermia, therapeutic 523
 - hypoventilation
 - chest wall trauma 469–470
 - postoperative 455–456
 - hypovolemic shock 5–7
 - acute abdomen 52–53
 - fluid therapy 6–7, 53
 - monitoring parameter guidelines
 - 10
 - hypoxemia 156, 361
 - hypoxemic shock 2–4
 - monitoring parameter
 - guidelines 10
 - hysterectomy *see*
 - ovariohysterectomy
 - hysteropexy 571
- i**
- ileus, gastric dilatation and
 - volvulus 107
 - impalement injuries 611–612
 - incisional gastropexy 101–103
 - incisional hernias 197–198
 - incisional infections 652–658
 - epidemiology 652–654
 - prevention 655–657
 - risk management 654–655
 - surveillance 657
 - treatment 657–658
 - incorporating gastropexy 106
 - infection
 - bite wounds 582–585
 - burn injuries 595
 - pacemaker site 499
 - pericardial effusion and
 - 503
 - scrotal 551–552
 - skin flaps 647
 - see also* incisional infections;
 - specific infections*
 - inflammatory response
 - bite wounds 576
 - burn injuries 587
 - inflammatory phase of wound
 - healing 628–629
 - oral 687

inguinal hernias 183–189
 diagnosis 184–185
 treatment 185–188
 inotropes, septic
 peritonitis 128, 129
 instruments
 biliary surgery 21
 cardiovascular surgery 26–31
 Cesarean section 32
 gastrointestinal surgery 20–22
 hepatic surgery 22
 ocular surgery 35–39
 sterilization 38
 oral surgery 40–43
 sterilization 40–44
 reproductive system
 surgery 33–35
 respiratory system surgery 25,
 28–30
 routine soft tissue instrument
 set 20, 21
 urinary system
 surgery 22–23, 27
 wound management 36
 intercarpal joint luxation 731
 internal abdominal oblique
 muscles 190
 internal obturator muscle
 transposition 203–204
 interphalangeal joint
 luxation 732
 intervertebral disc disease
 (IVDD) 15
 gastrointestinal ulceration
 association 239
 intestinal volvulus 108–114
 complications 113–114
 diagnostics 109–111
 pathophysiology 108
 presentation 108–109
 prognosis 114
 treatment 111–113
 intestine *see* gastrointestinal system
 intracranial pressure,
 increased 14, 362, 661
 tracheostomy complication 371
 intraocular surgery *see* ocular
 emergencies
 intraosseous catheterization 17

intravenous catheterization 16–17
 intubation
 bite wound victims 577–578
 blind 360
 brachycephalic airway
 syndrome 373
 laryngeal trauma 392–393
 nasopharyngeal 360–361
 orogastric 96, 97
 retrograde 360
 upper respiratory obstruction
 359–361
 intussusception 81–87
 diagnosis 81–83
 postoperative care 86
 prognosis 87
 stabilization 83–84
 surgical management 84–86
 irrigation *see* lavage
 ischemia–reperfusion injury
 gastric dilatation and
 volvulus 94,
 98
 intestinal volvulus 111, 113
 post-cardiac arrest 522–523
 ischemic necrosis, intestinal
 volvulus 113
 ischial osteotomy 306

j

jaundice 150
 jaw
 fractures 688–692
 open-mouth locking 693–695
 see also temporomandibular joint
 jejunostomy tubes 258
 jeweler's forceps 317–318
 joint irrigation 44, 708–711, 713
 instruments and supplies 44
 joint luxation 725–726
 carpus 730–731
 elbow 727–730
 hip 732–735
 interphalangeal 732
 metaphalangeal 732
 reduction 725–726
 scapula 726
 shoulder 726–727
 stifle 735–737

tarsus 737–738
 temporomandibular
 joint 692–693

k

keratitis, bacterial 676, 679
 ketamine 12, 18
 septic peritonitis 131, 132
 kidney
 acute injury (renal failure) 107,
 265, 274
 anatomy 279
 big kidney–little kidney (BKLK)
 syndrome 313
 hemorrhage 175
 neoplasia 175
 trauma 279–280
 treatment 280

l

labial sutures through buttons, jaw
 fractures 691
 lactate
 gastric dilatation and
 volvulus 95
 metabolic acidosis 432
 peritoneal
 effusions 122–123, 142
 synovial, septic arthritis 707
 lactic acidosis 5
 laparoscopy
 biliary
 emergencies 156, 158–159
 gastrointestinal foreign
 bodies 75
 intussusception 85
 perineal hernias 206, 207
 prostatic abscess 560
 rectal prolapse 91–92
 laparotomy
 diaphragmatic hernia 422
 indications 56
 septic peritonitis 131, 133
 open peritoneal
 drainage 136–137
 laryngeal paralysis 383–390, 394
 diagnostics 385–386
 emergency treatment 386–387
 iatrogenic 402

medical management 387
 presentation 385
 surgical management 387–390
 aftercare 389–390
 complications 390
 prognosis 390
 laryngeal sacculotomy 378
 laryngeal tie-back procedure 25
 laryngoscopy 391–392
 larynx
 anatomy 384–385
 examination 361, 385–386
 stenosis 393–394
 trauma 391–394
 diagnosis 391–392
 emergency
 management 392–393
 surgical treatment 393–394
 see also laryngeal paralysis
 laser lithotripsy 339
 laser staphelectomy 376
 lateral thoracotomy *see*
 thoracotomy
 lavage
 bite wounds 580–582
 degloving and shear
 wounds 636
 diagnostic peritoneal
 (DPL) 121, 269, 290–291
 open fracture wounds 718–719
 penetrating wounds 607
 pleural 412
 pyothorax 428–429
 septic joints 708–711, 713
 septic peritonitis 133–134, 143
 leiomyoma 569
 levator ani muscle 199
 lidocaine 12, 18
 epidural for cesarean
 section 530
 gastric dilatation and volvulus
 95, 98
 hemoperitoneum 176
 hepatic surgery,
 postoperative 236
 septic peritonitis 131, 132
 lip avulsion 698
 liver
 abscess 237

anatomy 226–228
 diagnostics 229–230
 hemorrhage 171–172
 lobe torsion 237
 neoplasia 171, 236
 metastatic disease 236
 physiology 228–229
 surgery 230–235
 biopsy 230–231
 hemostasis methods 234–235
 instruments 22–23
 lobectomy 21–22,
 171–172, 231–234
 postoperative complications
 235–236
 trauma 236–237
 loop diuretics, uremia 274–275
 lung
 anatomy 451, 452
 lobe torsion 451–458
 detorsion with
 pneumopexy 457
 diagnostics 453–454
 etiology 451–452
 postoperative care 455–456
 stabilization 452–453
 surgical
 treatment 454–455, 458
 treatment
 complications 455, 456
 lobectomy 447–448, 464–465
 complete 455, 458, 464–465
 partial 464
 pulmonary contusions 469,
 471, 472, 483
 pulmonary edema 424, 481
 luxation *see* joint luxation

m

macrophages 576
 in wound healing 629
 magnetic resonance imaging (MRI)
 biliary emergencies 154
 hemoperitoneum 168–169
 malnutrition 252
 see also nutritional support
 Manchester triage system 1
 mandibular fractures 688, 691
 mannitol

ocular emergencies 661–662
 uremia 273–274
 marsupialization, prostatic abscess
 562, 564
 masticatory muscle myositis 695
 median sternotomy *see* sternotomy
 melena 241
 meloxicam 13
 meshes, perineal hernia repair
 205–206
 mesothelioma 503, 505, 506,
 509, 513
 metabolic acidosis
 uremia 267
 urinary tract trauma 286–288
 metabolic shock 8
 metapthalangeal joint
 luxation 732
 metastatic disease, liver 236
 methadone HCl 11
 micropore dressing 640
 midazolam 12, 19
 misoprostol 249
 morphine 11
 mouth *see* oral emergencies
 mucocele,
 gallbladder 148, 153–154
 mucosal binding agents 249
 multiple organ dysfunction
 syndrome (MODS) 576
 muzzling, jaw fracture 688–691
 myocarditis 491
 myofibroblasts 631
 myositis
 masticatory muscle 695
 necrotizing *see* necrotizing
 fasciitis/myositis

n

naloxone 11, 18
 nares, stenotic 374–375, 378–379
 nasoesophageal feeding tubes
 252–253
 nasogastric feeding tubes
 252–253
 nasojejunal tube 258
 nasopharyngeal
 intubation 360–361
 neck, penetrating injuries 606

- necrosis
 - burn injuries 587
 - gastric 99, 106, 107
 - intestinal 109, 113
 - pancreatic 216, 217
 - skin flap 649–651
 - tracheal 402
 - necrotizing fasciitis/
 - myositis 613–625
 - analgesia 621
 - antimicrobial therapy 621–622
 - diagnosis 618–620, 622
 - microbiology 614–615
 - pathophysiology 615–617
 - postoperative wound
 - management 623–625
 - risk factors 613–614
 - stabilization 620–621
 - surgical management 622–623
 - needle holders 318
 - needle thoracocentesis 411, 412, 413–414
 - needles, esophageal foreign
 - bodies 68
 - negative pressure wound
 - therapy (NPWT)
 - burn wounds 594
 - degloving and shear wounds 638
 - see also* vacuum-assisted closure (VAC)
 - neonate resuscitation 32, 532
 - supply box 33
 - neoplasia
 - adrenal 174–175
 - arrhythmias and 491
 - biliary obstruction 149
 - gastrointestinal ulceration
 - association 239–240
 - hemothorax and 435–436
 - hepatic 171, 236
 - pericardial effusion and 502–503
 - renal 175
 - splenic 173
 - see also specific neoplasms*
 - neoureterocystostomy 323–326
 - extravesicular 324–326
 - intravesicular 323–324
 - nephrocystopexy 281
 - nephrostomy catheter,
 - subcutaneous ureteral bypass system 328–329
 - nephrostomy tube 280, 283
 - neurological assessment 14–15
 - acute abdomen 54–55
 - neutrophils 576
 - in wound healing 629
 - nictitating membrane laceration
 - repair 671–673
 - instruments and supplies 39
 - nizatidine 248
 - NMDA antagonists 12, 18
 - non-steroidal anti-inflammatory
 - drugs (NSAIDs) 12, 19
 - esophageal foreign body
 - management 66
 - GI-ulceration
 - association 238–239
 - ocular trauma
 - management 669, 672–673, 677, 679, 682
 - norepinephrine 8, 9
 - septic peritonitis 128, 129
 - NSAIDs *see* non-steroidal anti-inflammatory drugs (NSAIDs)
 - nutritional support
 - biliary emergencies 163
 - bite wound victims 585
 - burn injuries 595
 - degloving and shear injuries 643
 - gastrointestinal foreign body
 - removal 80
 - increasing voluntary consumption 251
 - intussusception 86
 - pancreatic
 - abscessation 223–224
 - postpartum 532
 - septic peritonitis 133
 - timing 252
 - ureteral interventions 329
 - see also* enteral nutrition; parenteral nutrition
- O**
- ocular emergencies
 - 35–39, 661–683
 - conjunctival grafting 679–683
 - corneal trauma 673–679
 - drug recommendations 667
 - examination 662
 - extraocular surgery 39
 - eyelid laceration 669–671
 - intraocular surgery 38
 - nictitating membrane lacerations 671–673
 - proptosis 663–669
 - stabilization 661–662
 - surgical preparation 35, 662–663
 - surgical supplies 35–39, 662
 - instrument sterilization 38
 - oliguria 267, 273
 - omentalization, prostatic abscess 562–563, 564
 - omeprazole 248, 249
 - open fractures *see* fractures
 - open peritoneal drainage 135–136
 - open-chest cardiopulmonary
 - resuscitation *see* cardiopulmonary resuscitation (CPR)
 - open-mouth jaw locking 693–695
 - opioids 11, 18
 - acute abdomen 55
 - bite wounds 579
 - burn injuries 590
 - colonic torsion 117
 - esophageal foreign body 66
 - hemoperitoneum,
 - postoperative 175
 - intussusception 84, 86
 - pancreatic abscessation 223
 - pneumothorax,
 - postoperative 449

- pyometra 537
 - oral emergencies 39–44, 687–699
 - bite wounds 695–696
 - bleeding 698–699
 - burns 697–698
 - foreign bodies 696–697
 - inflammation 687
 - jaw fractures 688–692
 - lip avulsion 698
 - masticatory muscle myositis 695
 - open-mouth jaw locking 693–695
 - palate defects 688
 - projectile injuries 697
 - safety requirements 40
 - surgical supplies 40, 41–43
 - instrument sterilization 40–44
 - swellings 687
 - temporomandibular joint ankylosis 695
 - temporomandibular joint luxation 692–693
 - tooth displacement 688
 - tooth fractures 687
 - oral examination, upper respiratory obstruction 361
 - orchitis 551–552
 - orogastric intubation 96, 97
 - orthodontic supplies 41
 - orthopedic emergencies 44–48
 - os penis fracture 545
 - osteotomy
 - ischial/pubis 306
 - pelvic 306, 308
 - ovariohysterectomy
 - cesarean section
 - alternative 532
 - inguinal hernia 186
 - pyometra 539
 - ureteral trauma 280, 281
 - uterine prolapse 566
 - oxygen therapy
 - acute abdomen 54
 - brachycephalic airway syndrome 373
 - chest wall trauma 469
 - diaphragmatic hernia 421–422, 423–424
 - flail chest 484
 - hemoperitoneum 165
 - hyperbaric, necrotizing fasciitis 625
 - hypoxemic shock 3
 - laryngeal paralysis 386
 - lung lobe torsion, postoperative 456
 - pancreatic abscessation 223
 - pectus excavatum 476
 - pleural space disease 408
 - pneumothorax 444
 - pyothorax 432
 - upper respiratory obstruction 356–357
 - oxymorphone 12
 - cesarean section 530
- P**
- pacemaker syndrome 500
 - pacemaker therapy 26, 489–500
 - complications 497–500
 - lead dislodgement 497–499
 - epicardial pacemaker 492, 495–496
 - indications 489–491
 - patient evaluation 491
 - programming 496–497
 - transcutaneous pacing 491–492
 - transvenous pacemaker 492
 - permanent 493–495
 - temporary 493
 - pain management *see* analgesia
 - palate defects 688
 - palpation
 - abdomen 55
 - intussusception 81
 - bladder 15, 292
 - gallstone
 - manipulation 157, 161
 - hernias 184, 185, 192, 197, 200, 208
 - prostatic abscessation 559
 - urethral obstruction 332–333
 - pancreas
 - abscessation 148, 216–225
 - complications 224
 - diagnostics 217–218
 - postoperative care 222–224
 - prognosis 224–225
 - surgical management 218–222, 225
 - anatomy 216–217
 - necrosis 216, 217
 - pseudocyst 148–421
 - pancreatitis 148–149, 154
 - pantoprazole 248–249
 - paracostal hernias 190
 - paraphimosis 545–546
 - parasitic infections, hemothorax and 436
 - parenteral nutrition 16, 17, 252
 - gastrointestinal foreign body 80
 - intussusception 86
 - see also* nutritional support
 - paresthesia, postoperative 649
 - pectus excavatum 475–482
 - diagnostics 477
 - etiology 475
 - postoperative care 481–482
 - prognosis 482
 - severity 477
 - signs 475–476
 - stabilization 476
 - treatment 478–481
 - complications 480–481
 - pedicle flaps *see* flaps
 - pelvic diaphragm 199
 - pelvic osteotomy 306, 308
 - pelvic symphysiotomy 306, 308
 - penetrating wounds 600
 - abdomen 192, 606–607
 - antibiotic use 612
 - chest wall 472–474, 606
 - gunshot wounds 600–603
 - impalement injuries 611–612
 - local tissue effects 603–604

- penetrating wounds (*cont'd*)
 - porcupine quill injuries 600, 608–611
 - postoperative care 612
 - stabilization 605–607
 - surgery 607–608
 - systemic effects 605
 - see also* bite wounds
- penis
 - anatomy 541
 - emergencies 32, 542–550
 - stabilization 543
 - paraphimosis 545–546
 - priapism 546–547
 - strangulation 545
 - surgical treatment 543
 - amputation 309, 547–550
 - instruments and supplies 34
 - trauma 542–545
- percutaneous balloon
 - pericardiotomy 512–513
- percutaneous dilatational
 - tracheostomy 368–369
- perforated film dressings 641
- pericardial effusion 27–29, 409, 501–513
 - diagnosis 503–506
 - etiology 502–503
 - prognosis 513
 - stabilization 506–508
 - surgical treatment 508–511
 - thoracoscopy 511–512
- pericardiectomy 29–31, 508–510
 - instruments and supplies 31
- pericardiocentesis 27–29, 30, 506–508, 512
 - complications 508
- pericarditis 512
 - constrictive 502, 510
- pericardium 501–502
- perineal hernia 199
 - emergency
 - presentations 208–215
 - etiology 199–200
 - treatment 201–208
- perineal region 199
- perineal urethrostomy 342–345
- periodontal extraction cassette 41
- peripheral venous
 - catheters 16–17
- peritoneal effusion 56, 120–121
 - analysis 121–123, 291
 - collection 121
 - drainage 134–139, 225, 289–290
 - gastrointestinal ulcers 243–244
 - uroabdomen 289–290, 291
- peritoneum 119
 - see also* hemoperitoneum
- peritonitis 56, 119–140
 - aseptic 120
 - bile 56, 123, 147, 149, 151
 - surgical treatment 162
 - diagnosis 120–123
 - etiology 119–120
 - localized 120
 - patient care
 - considerations 123–131
 - primary 119–120
 - septic *see* septic peritonitis
- persistent atrial
 - standstill 490–491
- personal protective equipment 40
- petroleum-impregnated
 - dressings 641
- phenothiazines 12, 19
- physical therapy, necrotizing
 - fasciitis 625
- Pierce tissue forceps 318
- piroxicam 13
- placenta 527–528, 530–531
- pleural effusion
 - drainage 428
 - evaluation 2, 410
 - postoperative 456, 511
 - see also* hemothorax; pyothorax
- pleural space
 - disease 407–413, 441
 - causes 409, 410–413
 - evaluation 408–410
 - lateral thoracotomy 25, 29
 - signs 407
 - stabilization techniques 413–415
- sternotomy 25–26
 - see also* diaphragmatic hernia; hemothorax; pneumothorax; pyothorax
- pleurodesis 412–413, 449
- pneumoperitoneum 120
- pneumothorax 412–414, 441–450, 606
 - assessment 2
 - bite wounds and 578
 - chest wall trauma 469, 472
 - diagnostics 444–445
 - etiology 441
 - medical management 445–446
 - pacemaker placement
 - complication 500
 - pathophysiology 441–443
 - postoperative care 449–450
 - presentation 443–444
 - prognosis 450
 - stabilization 444
 - surgical management 446–449
- porcine gelatin 234
- porcupine quill
 - injuries 600, 608–611
- portal hypertension 145
- portal vein 228
- portosystemic shunt (PPS) 145
- post-cardiac arrest syndrome 522
- povidone-iodine
 - bite wounds 580
 - degloving and shear wounds 634–635
 - impregnated dressings 641
 - ophthalmic surgery 35
- prepubic tendon rupture 191
- prepubic urethrostomy 346
- priapism 546–547
- primary peritonitis 119–120
- Pringle maneuver 171, 234
- progestogens, vaginal prolapse
 - management 570
- prolapse
 - rectal 20, 88–92
 - uterine 565–567
 - vaginal 32–33, 567–572

- proptosis 663–669
 - prostaglandin analogues 249
 - prostate gland
 - abscessation 32, 553–564
 - diagnosis 559
 - management 559–564
 - pathophysiology 556–559
 - postoperative care 564
 - prognosis 564
 - anatomy 553
 - infected cysts 563–564
 - physiology 553–556
 - surgery 560–564
 - instruments and supplies 34–35
 - prostatectomy, partial 562, 564
 - proton pump inhibitors (PPIs) 248–249
 - pseudocyst, pancreatic 148–421
 - pubic osteotomy 306
 - pulmonary contusions 469, 471, 472, 483
 - pulmonary edema
 - diaphragmatic hernia complication 424
 - reexpansion 481
 - pulmonary vessels 433
 - pulpectomy instruments and supplies 42
 - pulse oximetry 3, 54
 - hemothorax 444
 - upper respiratory obstruction 361
 - pyelonephritis 319
 - pyometra 534–540
 - diagnosis 534–537
 - postoperative care 539–540
 - prognostic indicators 540
 - stabilization 537–538
 - surgical treatment 32, 539
 - instruments 33
 - pyonephrosis, ureteral obstruction and 316, 317
 - pyothorax 411–412, 425–432
 - diagnostics 427–428
 - medical management 428–429
 - pathophysiology 425
 - postoperative care 432
 - presentation 425–426
 - prognosis 432
 - stabilization 426–427
 - surgical treatment 429–431
- r**
- rabies control 585
 - radiation therapy, pericardial effusion management 513
 - radiography
 - acute abdomen 56
 - biliary emergencies 153
 - colonic torsion 115
 - diaphragmatic hernia 420
 - dystocia 529
 - esophageal foreign body 60–61
 - fractures 717
 - gastric dilatation and volvulus 96
 - gastrointestinal foreign body 72
 - gastrointestinal ulcers 242
 - hemothorax 444
 - hepatic diseases 230
 - intestinal volvulus 111
 - intussusception 81
 - laryngeal paralysis 386
 - laryngeal trauma 392
 - lung lobe torsion 453
 - necrotizing fasciitis 622
 - pancreatic abscessation 217
 - pectus excavatum 477
 - pericardial effusion 504
 - peritonitis 120–121
 - pleural space disease 409
 - pyometra 434
 - pyothorax 428
 - septic arthritis 704
 - thoracic 3–4
 - tracheal collapse 396
 - stent placement 400–401
 - upper respiratory obstruction 361
 - ureteral obstruction 315
 - urethral trauma 300–301
 - uroabdomen 291–293
 - ranitidine 248
 - reconstructive surgery 645
 - see also* flaps; grafts
 - rectal perforation with perineal hernia 214–215
 - rectal prolapse 20, 88–92
 - associated conditions 89
 - perineal hernia 215
 - evaluation 88
 - treatment 88–92
 - rectal resection 90–91
 - rectus abdominis muscle 190
 - recurrent laryngeal nerve, iatrogenic injury 370
 - reduction, luxated joints 725–726
 - carpus 731
 - elbow 729
 - hip 734–735
 - interphalangeal 732
 - metaphalangeal 732
 - shoulder 727
 - reexpansion pulmonary edema 481
 - refeeding syndrome 261
 - relaparotomy 133, 135
 - renal descensus 281
 - renal replacement therapy 275
 - renal trauma *see* kidney
 - renal vessels 279
 - injury 280
 - reperfusion injury *see* ischemia–reperfusion injury
 - reproductive system, operating room tips 31–33
 - respiratory distress 355
 - assessment 2, 355–356
 - chest wall trauma 469
 - diagnostics 361–362
 - pectus excavatum 476
 - pyothorax 426
 - stabilization 356–361
 - tracheal collapse 396
 - see also* brachycephalic airway syndrome; pleural space disease; upper respiratory obstruction
 - respiratory system
 - assessment 2–4

respiratory system (*cont'd*)
 operating room tips 25
 stabilization with acute
 abdomen 54
 resuscitation
 acute abdomen 53–54
 bite wound victims 577–579
 bleeding gastrointestinal
 ulcers 247
 hemoperitoneum 165–168
 hypovolemic shock 6–7
 intestinal volvulus 111
 intussusception 83–84
 neonate 32, 33, 532
see also cardiopulmonary
 resuscitation (CPR)
 retrograde intubation 360
 retrograde urohydropulsion 23,
 271, 335–336
 instruments 27
 rib fractures 471–472
see also flail chest
 rib pivot thoracotomy 462
 robenacoxib 13, 19
 Robert Jones bandage 46, 591
 rodenticide toxicity *see*
 anticoagulant rodenticide
 toxicity
 Rummel tourniquet 171

S

scapula luxation 726
 scarring 631
 sciatic hernia 199
 scissors
 adventitial 319
 dissecting 318
 scrotal hernias 183–189
 diagnosis 185
 scrotal infection 551–552
 scrotal urethrostomy 340–342,
 549–550
 sedatives 11–13, 18–19
 laryngeal paralysis 385, 390
 respiratory distress management
 357

brachycephalic airway
 syndrome 374
 Seidel test 673
 Seldinger technique
 central catheter placement 17
 percutaneous cystostomy 333
 thoracostomy 414, 415
 self-expanding stents,
 urethra 348–350
 semitendinosus muscle
 transposition 204–205
 sepsis, bite wound
 victims 576, 585
 septic arthritis 703
 diagnosis 703–707
 interventional
 treatment 708–711
 local and regional antibiotic
 delivery 712
 medical treatment 707–708
 prognosis 714
 treatment choice 712–714
 septic cardiomyopathy 128
 septic peritonitis 56, 120
 diagnosis 141–142
 gastrointestinal foreign
 body 71–72, 80
 intussusception 84
 medical therapy 123
 antibiotics 126, 127, 142
 patient care
 considerations 123–131
 peritoneal effusion
 analysis 121–123
 prognosis 140
 prostatic abscess
 rupture and 559
 secondary 141–143
 surgical
 therapy 131–140, 143–144
 complications 139–140
see also peritonitis
 septic shock 7–8, 53
 with necrotizing fasciitis 617,
 618, 621
 seroma

pacemaker placement
 complication 494
 skin flap complication 647–648
 shear injuries *see* degloving and
 shear injuries
 shock 5
 bite wound victims 578
 cardiogenic 7
 diaphragmatic hernia and 417
 distributive 7–8
 acute abdomen 53
 hemoperitoneum 165
 hypovolemic 5–7
 acute abdomen 52–53
 fluid therapy 6–7, 53
 hypoxemic 2–4
 metabolic 8
 monitoring parameter
 guidelines 10
 pyometra 537
 septic 7–8, 53
 short bowel syndrome 114
 shoulder luxation 726–727
 sick sinus syndrome 489–490,
 493
 silver sulfadiazine (SSD) cream
 burn injuries 590, 594
 degloving and shear
 wounds 643
 necrotizing fasciitis
 wounds 625
 sinus bradycardia 489
 sinus node dysfunction
 489–490, 493
 skin 626
 anatomy 626–627
 blood supply 626–627, 646
 viability assessment 649
 skin flaps *see* flaps
 small intestine
 anatomy 75–76
 foreign body removal 76–78
 obstruction or rupture with
 perineal hernias
 213–214
 smoke inhalation 587

- sodium bicarbonate
 - acidosis
 - correction 287–288, 319
 - hyperkalemia treatment 56, 212, 268, 289
 - soft palate resection 375–378
 - spiral prostheses, tracheal
 - collapse 399
 - splanchnic blood flow
 - regulation 229
 - splenectomy 100–101, 172, 173–174
 - splenic neoplasia 173
 - splenic torsion 172
 - splinting
 - flail chest 485
 - pectus excavatum 478, 479, 480–482
 - staphylectomy 375–378
 - stapling devices 233
 - stenting
 - choledochal 161–162
 - tracheal collapse 398, 399–401
 - complications 402–403
 - ureteral 283, 323, 326–330
 - urethral 348–350
 - sternotomy 25–26
 - instruments and supplies 30
 - median 462–463
 - pericardial effusion 509
 - pyothorax 429–431
 - pectus excavatum 479
 - stertor 356
 - stifle luxation 735–737
 - stomach
 - decompression 96–98
 - foreign body removal 74–75
 - invagination 100
 - necrosis 99, 106, 107
 - repositioning 98–99
 - resection 99–100
 - viability assessment 99
 - see also* bleeding gastrointestinal ulcers; gastric dilatation and volvulus (GDV); gastrointestinal system
 - stomatitis 687
 - stones *see* calculi
 - streptococci in necrotizing fasciitis 614–615
 - stress ulceration 240
 - stress-related mucosal disease (SRMD) 240
 - stridor 356
 - laryngeal paralysis 385
 - subcutaneous ureteral bypass
 - system 328–329, 330
 - subcutis 626
 - sucralfate 249
 - sugar, necrotizing fasciitis wound
 - management 623
 - superficial gluteal muscle
 - transposition 205
 - surgical instruments *see* instruments
 - surgical site infections *see* incisional infections
 - Surgicel 234–235
 - Swimmer's syndrome 475
 - symphysiotomy, pelvic 306, 308
 - synthetic micropore dressing 640
 - systemic inflammatory response syndrome (SIRS) 53, 576
 - gastric dilatation and volvulus 107
 - two hit theory 585
- t**
- tape muzzling, jaw
 - fracture 688–691
 - tarsal luxation 737–738
 - tarsorrhaphy 663–667
 - instruments and supplies 39
 - temporomandibular joint
 - ankylosis 695
 - luxation 692–693
 - tension pneumothorax 442, 444, 446
 - see also* pneumothorax
 - testicles 541–542
 - testicular emergencies 550–552
 - torsion 551
 - trauma 551
 - theophylline, tracheal
 - collapse 397–398
 - thoracocentesis 411, 412, 413–414
 - chest wall trauma 469
 - pneumothorax 444
 - pyothorax 427
 - thoracoscopy 440, 463–464
 - pericardial effusion 511–512
 - thoracostomy tubes 414–415
 - diaphragmatic hernia 423, 424
 - pneumothorax 446, 448, 449–450
 - pyothorax 428–429, 432
 - Seldinger technique 415
 - thoracotomy
 - lateral 25, 459–462
 - hemothorax 440, 446, 447
 - instruments and supplies 29
 - pericardial effusion 509
 - pyothorax 429–430
 - rib pivot 462
 - thorax anatomy 433–435
 - thrombocytopenia,
 - hemoperitoneum 168, 176
 - thromboelastography (TEG) 130
 - thrombosis, on pacemaker
 - lead 499
 - thyroid cartilage 384
 - tooth displacement 688
 - tooth fractures 687
 - torsion 108
 - colonic 115–118
 - liver lobe 237
 - lung lobe 451–458
 - splenic 172
 - testicular 551
 - toxic shock syndrome (TSS) 613, 614
 - trachea
 - anatomy 365–366
 - collapse 395–403
 - diagnostics 396–397
 - etiology 395
 - examination 396
 - medical management 397–398

- trachea (*cont'd*)
 - postprocedural complications 402–403
 - stenting 398, 399–401, 402–403
 - surgical treatment 398–401
 - iatrogenic injury 370
- tracheoscopy 361
- tracheal collapse 397
- tracheostomy 25, 364–371
 - aftercare and management 369–370
 - complications 370–371
 - equipment/instruments 28, 365
 - permanent 364, 367, 371
 - following laryngeal trauma 393–394
 - prognosis 371
 - surgical approach 366–367
 - temporary 364, 366–367, 370–371
 - percutaneous dilatational tracheostomy 368–369
 - tube removal 370
 - with brachycephalic airway syndrome 364, 379–380
- tranexamic acid (TXA), hemoperitoneum 169
- transcutaneous pacing 491–492
- transfusion
 - bite wound victims 578
 - hemoperitoneum 167–168
 - hypovolemic shock 6
 - septic peritonitis 130
 - albumin solution 130
 - fresh frozen plasma (FFP) 130
- transitional cell carcinoma (TCC), urethral 348
- transpelvic urethrostomy 345–346
- transthoracic
 - esophagotomy 63–65
- transvenous pacemaker 492
 - permanent 493–495
 - temporary 493
- transversus abdominis muscle 190, 191
- transvesicular percutaneous cystolithotomy 337–339
- trauma
 - abdominal hernias 190–197
 - complications 197
 - treatment 193–195
 - biliary emergency 162
 - chest wall 469–474
 - diaphragmatic hernia 417–418
 - eye *see* ocular emergencies
 - head 661
 - hemoperitoneum 171
 - kidney 279–280
 - laryngeal 391–394
 - liver 236–237
 - oral *see* oral emergencies
 - penis 542–545
 - pleural space
 - disease 408, 411–413
 - hemothorax 435
 - pneumothorax 441, 445–447
 - testicular 551
 - triage score 1
 - urinary tract 285
 - bladder 269–270, 285–286, 288–296
 - ureter 280–281
 - urethra 297–310
 - see also* bite wounds; burn injuries; degloving and shear injuries; fractures; joint luxation; penetrating wounds
- triage 1–2
 - cardiovascular assessment 5–8
 - respiratory assessment 2–4
- triangular ligaments 226
- trocharization, gastric dilatation and volvulus 96
- troponins 506
- tube cholecystostomy 158–159
- tube gastropexy 103–104
- turbinectomy 379
- u**
- ulcers
 - corneal 662, 673
 - gastrointestinal *see* bleeding
 - gastrointestinal ulcers
- ultrasound
 - acute abdomen 56–57
 - biliary emergencies 153–154
 - diaphragmatic hernia 420
 - fetal viability 529
 - gastrointestinal foreign body 73–74
 - gastrointestinal ulcers 243
 - hepatic diseases 230
 - intussusception 81–82
 - lung lobe torsion 453
 - pancreatic abscessation 217
 - peritonitis 120–121
 - pleural space disease 408–409
 - pyometra 534
 - pyothorax 428
 - thoracic 4
 - tracheal collapse 396
 - urinary system 15
 - ureteral obstruction 315–316
 - see also* focused assessment sonography for trauma (FAST)
- umbilical hernias 178–183
 - diagnosis 179, 180
 - treatment 179–183
- upper respiratory
 - obstruction 355–363
 - airway maintenance 362
 - assessment 2, 355–356
 - diagnostics 361–362
 - penetrating injuries and 606
 - stabilization 356–361
 - see also* tracheostomy
- uremia 265
 - assessment 267–270
 - causes 266
 - complications 266–267
 - diagnosis 265–266
 - monitoring 270–272
 - treatment 272–275
- ureteroliths 313–316
 - surgical removal 320–322
- ureterotomy 320–322
- ureters

- anatomy 279
 - obstruction 313–330
 - evaluation 315–316
 - medical therapy 317
 - stenting 283, 323, 326–328
 - antegrade approach 326–327
 - complications 327–328, 329, 330
 - retrograde approach 327
 - subcutaneous bypass system 328–329, 330
 - surgery 22, 281–283, 320–326
 - choice of intervention 330
 - complications 326
 - instruments 23, 317–319
 - postoperative care 329–330
 - trauma 280–281
 - urethra
 - anatomy 331–332
 - catheterization 335–337
 - antegrade 336
 - complications 336–337
 - retrograde 335–336
 - obstruction 268–269, 331–350
 - diagnostics 332–337
 - stabilization 332
 - rupture 331
 - stenting 348–350
 - stricture 302–303, 308
 - surgery 22–23, 302–310, 337–348
 - anastomosis 346–348
 - see also* urethrostomy; urinary diversion
 - trauma 297–310, 332
 - assessment 297
 - diagnosis 300–301
 - stabilization 297–300
 - treatment 302–310
 - urethrocytography 301
 - urethrography 301
 - urethrostomy 22–23, 27, 308–309, 339–346
 - instruments 27
 - perineal 342–345
 - prepubic 346
 - scrotal 340–342, 549–550
 - transpelvic 345–346
 - urethrotomy 23, 27, 339
 - instruments 27
 - urinalysis, pyometra 536–537
 - urinary bladder *see* bladder
 - urinary calculi
 - ureteral obstruction 313–317, 320–322
 - urethral obstruction 331, 332–333, 335–339
 - see also* ureters; urethra
 - urinary catheterization 16
 - uremia 270–272
 - urethral injury/obstruction 335–337
 - urinary diversion
 - permanent 308–310
 - urethral injury/obstruction 298–300, 304–305, 308–310, 333–335
 - uroabdomen 289–290
 - see also* cystostomy tube placement
 - urinary tract
 - assessment 15–16
 - contrast studies 23–25, 28
 - obstruction 56, 208–212, 268–269
 - operating room tips 22–23
 - trauma 285–289
 - see also* bladder
 - urine culture, pyometra 537
 - uroabdomen 212–213, 269–270, 285–296
 - diagnosis 290–293
 - evaluation 285–286
 - signs 285, 297
 - stabilization 286–290
 - surgical treatment 293–296
 - complications 296
 - urohydropulsion 23, 271, 335–336
 - instruments 27
 - urolithiasis 331, 332–333
 - see also* ureters; urethra
 - uoperitoneum 56, 285
 - see also* uroabdomen
 - uterine prolapse 565–567
 - uterus 565
- V**
- vacuum-assisted closure (VAC)
 - necrotizing fasciitis wounds 625
 - open fractures 722–724
 - septic peritonitis 136–138, 144
 - see also* negative pressure wound therapy (NPWT)
 - vagina 565
 - vaginal prolapse 32–33, 567–572
 - instruments and supplies 35
 - treatment 569–571
 - vaginal fold prolapse (VFP) 568–572
 - vaginocystourethrography 301
 - vascular access 16–18
 - vasopexy 208
 - vasopressin 8, 9
 - septic peritonitis 129
 - vasopressors 9
 - septic peritonitis 128, 129
 - vena cava 433
 - ventilation 361
 - vessel dilators 318
 - video-assisted thoracic surgery (VATS) 463–464
 - lung lobe torsion 458
 - pyothorax 429–430
 - volvulus *see* gastric dilatation and volvulus (GDV); intestinal volvulus
 - vomiting, gastrointestinal foreign body 70, 71
- W**
- wet-to-dry bandages
 - burn wounds 591
 - degloving and shear wounds 638–639
 - wound healing 627–631
 - cat and dog differences 631
 - delayed 643

wound healing (*cont'd*)
 inflammatory
 phase 628–629, 636–639
 maturation phase 630–631
 proliferative
 phase 629–630, 639–641
wound management 33–35

instruments and supplies 36
open fractures 718–719
 closure 722–724
see also bite wounds; burn
 injuries; degloving and
 shear injuries;
 penetrating wounds

x

X-rays *see* radiography

y

Yunnan Baiyao
 hemoperitoneum 169–170
 pericardial effusion 512

