

INDEX

- AAA *See* abdominal aortic aneurysm
Abdominal aortic aneurysm (AAA) resection, endovascular repair (EVAR) 672
Abdominal aortic aneurysm resection, open 676
Abdominal aortic aneurysm ruptured dissection, open 680
Abdominal laparotomy 728
Abdominal perineal resection (APR) *See* pelvic exenteration
Abdominal tumor resection or biopsy (pediatric) 1246
Abdominal/GI surgery chapter 725
 abdominal/GI surgery antibiotics 725
 abdominal/GI surgery pearls 726
Abdominoperineal resection (APR) 779
Abdominoplasty 1156
Abortion *See* dilation and evacuation
ACDF *See* anterior cervical decompression and fusion
Acetabulum, open reduction and internal fixation fractures of 1074
Achalasia 740
Achilles tendon repair 1097
ACL repair (anterior cruciate or collateral ligament tears) 1088
Acoustic neuroma, removal of 114
Acromioclavicular (AC) joint separation, correction of 1038
Acute kidney injury (AKI) *See* renal failure, acute risk factors for
Acyanotic lesions (left-to-right shunt) 1212
 atrial septic defect 1213
 patent ductus arteriosus 1219
 ventricular septic defect 1235
Adductor lengthening, hip muscle release 1284
Adnexal mass, surgery for 946
Adrenal pearls 381
 adrenal cortex 381
 adrenal medulla 382
Adrenalectomy 393
AICD *See* automated implantable cardioverter defibrillators
Airway fire protocol 432
ALS *See* amyotrophic lateral sclerosis
Alpha beta dopa chart 42
Alveolar cleft repair 1190

Alzheimer's.....	19
Amicar (Aminocaproic Acid)	56
Aminophylline	56
Amiodarone (Cordarone)	57
Ampicillin	1
Ampicillin/Sulbactam (Unasyn)	1
Amputation of the lower extremity.....	
above knee	See knee amputation, above
below knee	See knee amputation, below
disarticulation of the hip	See hip amputation, disarticulation
toe or foot.....	See top or foot amputation
Amrinone (Inocor)	57
Amyotrophic Lateral Sclerosis (ALS)	19
Anal fissure and lateral sphincterotomy excision	791
Anal fistulotomy	<i>See fistulotomy, anal</i>
Anaphylactic shock.....	44
Anaphylaxis	22
Anemia in liver disease	815
Aneurysm, intracranial.....	
anesthetic management goals.....	112
cerebral vasospasm	112
craniotomy for intact intracranial.....	118
grading (Hunt and Hess clinical grading system)	114
intracranial	111
intraoperative rupture of	125
preoperative rupture and subarachnoid hemorrhage.....	127
triple-H therapy (hypervolemic, hypertensive, hemodilution)	112
Ankle arthrodesis	1100
Ankle arthroplasty, total.....	1020
Ankle arthroscopy	1033
Ankle arthrotomy	1101
Ankle fractures, open reduction and internal fixation	1102
Ankle ligaments, repair/reconstruction	1103
Anterior cruciate or collateral ligament (ACL) repair	1089
Anterior resection of sigmoid colon (low) and rectosigmoidostomy	781
Antibiotic, surgical redosing guidelines	1
Antiemetics	30
Antiemetics, AChM ₁ -(Acetylcholine-muscarinic) receptor antagonist.....	31
scopolamine	31

Antiemetics, butyrophenones.....	31
droperidol (Inapsine).....	31
haloperidol (Haldol).....	31
Antiemetics, main classes	30
AChM ₁ acetylcholine-muscarinic receptor antagonists	31
dopamine 2 receptor antagonists.....	30
serotonin receptor antagonists.....	30
Antiemetics, dopamine 2 antagonists	30
metoclopramide (Reglan).....	30
butyrophenone.....	31
phenothiazines.....	31
Antiemetics, phenothiazine.....	31
Prochlorperazine (Compazine)	31
Promethazine (Phenergan).....	31
Antiemetics adjuncts.....	32
antacid, non-particulate.....	32
benzodiazepines	32
corticosteroid.....	32
histamine1 receptor antagonists	32
histamine2 receptor antagonists	32
NK-1 receptor antagonists	32
Antihistamine H ₁ blockers	
diphenhydramine (Benadryl)	32
Antihistamine H ₂ blockers	32
cimetidine.....	32
famotidine	32
nizatidine	32
ranitidine	32
Antithrombin III (AT III, Thrombate III)	58
Antrostomy, intranasal	358
Aortic arch aneurysm, open repair.....	682
Aortic cross-clamp	69
Aortic shunt.....	73
spinal cord perfusion.....	71
Aortic dissection pearls.....	670
definition and classification	670
clinical presentation	671
medical management	671
anesthetic goals	672

Aortic regurgitation (AR)	630
Aortic stenosis (AS).....	628
Aortic valve repair (balloon aortic valvotomy)	630
Aortic valve repair (open chest).....	632
Aortic valve replacement (open chest)	634
Appendectomy	766
APR (Abdominoperineal Resection)	779
Arm lift.....	<i>See</i> brachioplasty
Arteriovenous (AV) fistula or shunt	697
Arteriovenous Malformation	113
surgical resection/embolization (adult).....	132
surgical resection/embolization (pediatric).....	1181
Artery of Adamkiewicz.....	71
Artery thrombectomy/embolectomy, femoral	700
Arthrodesis of lower extremity	
ankle arthrodesis	1100
hip arthrodesis	1077
knee arthrodesis	1090
Arthrodesis of upper extremity	
thumb joint	1066
wrist arthrodesis	1068
Arthroplasty of lower extremities	1020
ankle arthroplasty, total.....	1020
hip arthroplasty, minimally invasive.....	1021
hip arthroplasty, total	1023
hip hemiarthroplasty, replacement femoral head.....	1026
knee arthroplasty, total	1027
Arthroplasty of upper extremities	1016
elbow arthroplasty, total.....	1016
shoulder arthroplasty, total.....	1017
Arthroscopy of lower extremities	1033
ankle arthroscopy	1033
hip arthroscopy.....	1035
knee arthroscopy	1036
Arthroscopy of upper extremities	1030
elbow arthroscopy	1030
shoulder arthroscopy	1031
Artificial urinary sphincters	<i>See</i> urinary sphincters
Ascending thoracic aortic aneurysm, open repair	686

Ascites in liver disease.....	815
ASD.....	<i>See</i> atrial septal defect
Aspiration.....	23
Atrial septal defect repair (ASD).....	1213
Augmentation cystoplasty.....	<i>See</i> bladder augmentation
Automated implantable cardioverter defibrillator	<i>See</i> AICD
AV fistula or shunt.....	<i>See</i> arteriovenous fistula or shunt
AVM	<i>See</i> arteriovenous malformation
AVM Spetzler and Martin Grading System.....	113
Awake craniotomy	<i>See</i> craniotomy, awake
Axillary node dissection	466
BAER or BAEP	<i>See</i> Brainstem auditory evoked responses
Baker's cyst.....	<i>See</i> popliteal cyst
Balloon aortic valvotomy.....	<i>See</i> aortic valve repair
Balloon mitral valvotomy [BMV)	<i>See</i> mitral valve repair
Bariatric surgery.....	758
body mass index formula	758
ideal body weight formula	758
Bartholin duct cyst	<i>See</i> marsupialization of Bartholin duct
Base deficit (BD)	54
BBB.....	<i>See</i> blood brain barrier
Beck's triad	50
Belt lipectomy	<i>See</i> lipectomy
Bile duct tumor, excision	836
Billroth I and Billroth II.....	<i>See</i> gastrectomy, subtotal
BIS™ Monitor (Bispectral Analysis)	92
Biventricular pacemaker FYI.....	579
Bladder augmentation	883
Bladder exstrophy repair.....	1276
Bladder slings.....	895
Bladder substitution surgery	892
Bladder, transurethral resection of lesions of the (TURB)	915
Blebs/bullae, excision of.....	512
Blepharoplasty, cosmetic	1122
Blepharoptosis repair	279
Blood Brain Barrier (BBB).....	82
BMI (Body mass index).....	758
Body cast.....	<i>See</i> spica cast
Brachial plexus surgery.....	1040

Brachioplasty (arm lift).....	1164
Brachytherapy	<i>See prostate seed implantation</i>
Brain and cranium, neurovascular surgeries.....	114
Brain edema and swelling causes	82
Brain herniation, types	81
cingulate	
classic	
transcalvarial	
uncal	
Brain tumors.....	109
anesthetic management	111
infratentorial brain masses	110
supratentorial brain masses	109
Brain tumor surgery	<i>See tumor, craniotomy for brain</i>
Brainstem Auditory Evoked Responses (BAER)	97
Branchial cleft cyst tract excision	1192
Breast biopsy, open	467
Breast biopsy with needle (wire) localization.....	468
Breast implants.....	1140
Breast reconstruction FYI	479
Breast reconstruction using latissimus dorsi myocutaneous (LDM) flap	481
Breast reconstruction using TRAM flap; pedicle or free TRAM graft.....	481
Breast surgery chapter.....	466
antibiotics for plastic/breast surgery	466
pearls	466
Brevibloc (Esmolol).....	58
Bronchoplastic resection	515
Bronchopleural fistula repair	517
Bronchopulmonary lavage	521
Bronchoscopy, flexible	493
Bronchoscopy, rigid	495
Brow lift	1125
Buniorrhaphy (exostectomy)	1104
Burch retropubic colposuspension	<i>See vesicourethral suspension</i>
Burns	21
Burns, prevention	25
CABG	<i>See coronary artery bypass graft</i>
Caldwell-Luc procedure.....	<i>See antrostomy, intranasal</i>
Canthorrhaphy.....	281

Canthotomy.....	282
Capnometry, sublingual	55
Capsule endoscopy.....	<i>See enteroscopy</i>
Capsulotomy	1143
Cardene (Nicardipine).....	58
Cardiac ablation	<i>See cardiac mapping</i>
Cardiac mapping and ablation procedure, transvenous	595
Cardiac surgery chapter	570
antibiotics.....	570
blood vessel response to alveolar hypoxia.....	573
cardiac anesthetics FYI	575
cardiac hemodynamic effects from disease states of heart	572
cardiac, oxygen consumption and balance.....	573
cardiac patient preoperative assessment	574
cardiac temperature and metabolic demand.....	573
hemodynamic chart - blood pressure and pulse pressure.....	570
hemodynamic chart – cardiac output, index, and coronary PP	571
hemodynamic chart - ejection fraction	571
hemodynamic chart - end-systolic and -diastolic volumes	571
hemodynamic chart – left atrial and ventricular pressures	571
hemodynamic chart – left and right ventricle stroke work and index.....	572
hemodynamic chart - pulmonary artery occlusion pressure	571
hemodynamic chart - pulmonary artery pressures	571
hemodynamic chart – pulmonary vascular resistance and index.....	572
hemodynamic chart – right atrial pressure and CVP	570
hemodynamic chart – right ventricular pressure.....	570
hemodynamic chart - stroke volume and index	572
hemodynamic chart – systemic vascular resistance and index	572
venous oxygen content (SVO ₂ or MVO ₂).....	573
Cardiac resynchronization	<i>See biventricular pacemaker insertion</i>
Cardiac tamponade.....	49
Cardiogenic shock.....	44
Cardiovascular Implantable Electronic Devices - CIED	575
Cardioversion.....	599
Cardizem (Diltiazem).....	59
Carotid arteries	73
carotid bodies	74
carotid sinus	73
common carotids	74

external carotids	74
internal carotids.....	74
Carotid endarterectomy (CEA).....	702
shunt.....	704
stump pressure	703
Carpal bone(s) fracture, open-reduction	1059
Carpal tunnel release.....	1060
Cataract extraction with intraocular lens implant (IOL).....	321
CBF	<i>See cerebral blood flow</i>
CEA.....	<i>See carotid endarterectomy</i>
Cefazolin (Ancef, Kefzol).....	1
Cefuroxime (Ceftin, Zinacef).....	1
Cerebral aneurysm	<i>See aneurysem, cerebral</i>
Cerebral blood flow (CBF)	75
autoregulation	85
how to alter with interventions	87
how to alter with pharmacology	85
pressure autoregulation	84
regulation of	76
Cerebral embolectomy, craniotomy for	139
Cerebral metabolic rate (CMRO ₂).....	77, 84-85, 1293
Cerebral metabolic rate of glucose consumption (CMRG _I)	75
Cerebral oxygen-metabolism flow coupling.....	84
CO ₂ responsiveness with cerebral vessels	85
coupling, acceptable uncoupling (luxury perfusion)	84
coupling, unacceptable coupling.....	84
coupling, unacceptable uncoupling.....	84
how anesthetics affect flow coupling.....	106
Cerebral palsy	21
Cerebral Perfusion Pressure (CPP)	76
affect on EEG.....	76
transducer levels with positioning	8
Cerebral protection.....	85
Cerebral spinal fluid.....	78
normal values	78
formation	78
circulation	78
absorption.....	79
circulation difficulties	79

Cerebral vasospasm	112
Cerebrospinal fluid.....	<i>See</i> CSF
Cerebrospinal fluid (CSF) leak repair.....	145
Cervical cerclage.....	988
Cervical decompression and fusion, anterior and posterior approaches.....	219
Cervical decompression and fusion, anterior approach (ACDF).....	210
Cervical decompression and fusion, posterior approach	215
Cervical ligation.....	<i>See</i> cervical cerclage
Cervical sympathectomy.....	<i>See</i> sympathectomy, cervical
Cervix, conization and biopsy.....	961
Cesarean section, birth	989
Cesarean section, emergency	993
Chalazion, excision of.....	284
CHD	<i>See</i> congenital heart disease
Chest tube.....	<i>See</i> thoracostomy, closed
Chest wall resection and/or reconstruction	561
Chin prosthesis.....	<i>See</i> genioplasty
Chin reduction.....	<i>See</i> mentoplasty
Choanal atresia (CA) repair	1194
Cholecystectomy	839
CIED	<i>See</i> cardiovascular implantable electronic devices
CIED, lead extraction from.....	593
CIED manufacturer contact information	583
CIED manufacturer, what they will need to know	583
CIEDs, procedure-specific risk to	581
electrocautery	581
electroconvulsive therapy	582
lithotripsy	582
MRI	582
radiation therapy	582
radiofrequency ablation	582
CIEDs, reprogramming and/or magnet response and use.....	584
CIED, what you need to know preoperatively if patient has	583
Circle of Willis.....	74
anterior vessels feed	74
posterior vessels feed	74
Circumcision	1278
Cirrhosis in liver disease	815
Clavicular fracture repair	1042

Cleft lip repair, unilateral or bilateral	1195
Cleft palate repair (palatoplasty).....	1198
Clindamycin (Cleocin).....	1
Clubfoot surgical correction	1286
CMRG _I (cerebral metabolic rate of glucose consumption)	75
CMRO ₂ (cerebral metabolic rate)	75
CMRO ₂ , CBF, CBV, and ICP, anesthetic effect on.....	104
CO ₂ -subcutaneous emphysema.....	37
Coagulopathy in liver disease	815
Coarctation of the aorta repair	1215
Cochlear implantation	337
Colectomy, partial.....	783
Colorectal resection pull-through	<i>See Hirschsprung's disease</i>
Colostomy closure	785
Colostomy creation (adult)	785
double barrel	786
loop	786
terminal	786
Colostomy creation (pediatric)	1248
Colporrhaphy	963
cystocele.....	963
enterocele	964
rectocele	964
Colpotomy.....	965
culdocentesis	965
culdoscopy	965
Compartment syndrome	1009
fasciotomy	1009
Complex regional pain syndrome	243
Complications in anesthesia, potential.....	22
anaphylaxis	22
aspiration.....	23
fire-intraoperative burns.....	24
malignant hyperthermic	26
postoperative nausea and vomiting.....	29
postoperative vision loss	33
Congenital diaphragmatic hernia (CDH) repair.....	1250
Continent diversion.....	<i>See bladder substitution surgery</i>
Continent ileostomy	774

Controlled hypotension, neurosurgery.....	106
Convergent procedure.....	601
Corectomy.....	<i>See</i> iridectomy
Corneal lacerations, repair of.....	312
Corneal transplant	314
Coronary artery bypass grafts (CABG) with cardiopulmonary bypass (CPB)....	614
Coronary artery bypass grafts, minimally invasive direct CABG (MIDCAB) ...	603
Coronary artery bypass grafts, off-pump CABG (OPCAB).....	607
Coronary artery bypass grafts, re-do and sternotomy issues	624
Coronary artery bypass surgery, robotically enhanced telemomanipulation	614
Cox Maze	<i>See</i> Maze procedure
CP.....	<i>See</i> cerebral palsy
CPP	<i>See</i> cerebral perfusion pressure
Cranial nerve decompression, microvascular	148
Cranial Nerves (CN)	83
Craniocervical decompression, posterior.....	153
Craniofacial reconstruction surgery chapter	251
antibiotics for head and neck	251
pearls	251
Craniopharyngioma, craniotomy for.....	157
Cranioplasty, craniotomy for	161
Craniosynostosis, craniectomy for.....	1182
Craniotomy, awake	165
Creutzfeldt-Jakob disease	19
Cryotherapy or radiofrequency ablation for Barrett's Esophagus	802
CSF (cerebrospinal fluid).....	78
CSF Absorption	79
CSF Circulation	78
CSF Formation.....	78
CSF regulation/circulation problems	79
CSF, normal values.....	78
Culdotomy.....	<i>See</i> colpotomy
Cushing Triad.....	80
Cyanotic lesions (right-to-left shunt).....	1212
Eisenmenger's syndrome	556, 1212, 1235
hypoplastic left heart syndrome	1212, 1218
patent foramen ovale.....	1170, 1212, 1229
pulmonary stenosis or atresia with a ventricular septal defect	1212, 1226
tetralogy of Fallot.....	1212, 1225 , 1243

transposition of the great arteries	1212, 1229
tricuspid atresia repair.....	1212, 1231
truncus arteriosus repair.....	1212, 1223, 1233
Cystectomy, radical, open.....	884
Cystectomy, simple.....	887
Cystolithotomy, suprapubic	888
Cystoscopy.....	855
Cystostomy, suprapubic	889
D&C	<i>See</i> dilation and curettage
D&E	<i>See</i> dilation and evacuation
Dacryocystorhinostomy	291
Dantrolene.....	21, 26, 27
DDAVP.....	<i>See</i> desmopressin
Decortication (pleural stripping).....	524
Deep brain stimulator (DBS), electrode and battery insertion.....	170
Deep Hypothermic Cardiac Arrest (DHCA).....	66
Dehiscence, repair of abdominal.....	727
Demylinating disease	18
guillain-barre syndrome	18
multiple sclerosis	18
Dentistry, operative.....	364
DEP	<i>See</i> dermatome evoked potential
Dermabrasion	<i>See</i> facial laser resurfacing
Dermatome Evoked Potentials (DEP)	97
Dermatomes	89
Descending thoracic aortic aneurysm, open repair	689
Desmopressin (DDAVP)	59
Dexmedetomidine (Precedex) infusion.....	65
DHCA	<i>See</i> deep hypothermic cardiac arrest
Diabetes mellitus.....	384
Diabetic ketoacidosis (DKA).....	385
Dialysis catheter placement, venous access.....	711
Diaphragmatic (adult) herniorrhaphy	935
Dilation and curettage (D&C), suction	972
Dilation and evacuation (D&E), therapeutic abortion	966
Distal flaps	480
free	480
pedicled	480

Distal revascularization.....	<i>See</i> vascular bypass grafts
Diuretic chart	847
loop diuretics.....	847
osmotic diuretics	847
potassium-sparing diuretics	847
thiazide diuretics	847
Diverticulectomy (Meckel's).....	768
DKA.....	<i>See</i> diabetic ketoacidosis
DLEBT	<i>See</i> double-lumen endobronchial tube
Dobutamine (Dobutrex)	59
Dopamine (Intropin)	59
Dorsal root rhizotomy	219
Double Lumen Endobronchial Tube (DLEBT)	492
Drapanas shunt.....	<i>See</i> interposition mesocaval shunt
Droperidol (Inapsine, Innovar)	31-33, 96
Duchenne	15
Dyes used in surgery.....	477, 848
Dysraphism, correction spinal	1185
Ear pinning.....	<i>See</i> otoplasty
Ear surgery chapter	336
antibiotics for head and neck	336
pearls	336
EBUS	<i>See</i> endobronchial ultrasound
ECT	<i>See</i> electroconvulsive therapy
Ectopic pregnancy.....	<i>See</i> tubal pregnancy, ectopic
Ectopic pregnancy, ruptured	958
Ectropion, correction of	285
EEG	<i>See</i> electroencephalography
EEG burst suppression	86, 90, 92
EEG waveforms	91
EGD	<i>See</i> Esophagogastrroduodenoscopy
Elbow arthroplasty, total	1016
Elbow arthroscopy	1030
Electroconvulsive therapy.....	1292
Electroencephalography (EEG)	90
BIS	92
EEG burst suppression with anesthetics	92
PSA 4000	93
Electromyography (EMG)	98

Electrophysiological measurements.....	90
EMG.....	<i>See</i> electromyography
Empyema, drainage of	527
Endobronchial ultrasound (EBUS)	529
Endocrine surgery chapter	381
adrenal pearls	381
antibiotics for head and neck	381
pancreas pearls.....	382
pancreatitis	389
parathyroid	390
thyroid.....	391
Endometrial ablation.....	969
Endoscopic retrograde cholangiopancreatography (ERCP)	804
Endoscopic sinus surgery.....	354, 355
Endoscopic ultrasound (EUS).....	807
Endoscopy surgery pearls	798
Endovascular neuroradiological procedures	172
endovascular techniques	173
neurolytic techniques	173
English-spanish translator.....	1300
Enteric fistula closure	770
Enterolysis.....	772
Enteroscopy.....	808
Enterostomy, ileostomy or jejunostomy	773
Entropion, correction of.....	287
EP	<i>See</i> evoked potentials
Ephedrine	60
Epididymectomy	903
Epidural hematoma	177
Epilepsy.....	21
Epinephrine (Adrenalin)	60
Epispadias repair	1279
Epistaxis, treatment of	359
ERCP.....	<i>See</i> endoscopic retrograde cholangiopancreatography
Ertapenem (Invanz).....	1
Esophageal dilation	732
Esophageal diverticulum, excision of.....	734
Esophagectomy	736
Esophagogastroduodenoscopy (EGD)	810

Esophagomyotomy	740
Esophagostomy	741
ESWL.....	<i>See</i> lithotripsy, extracorporeal shock wave
Ethmoidectomy	356
EUS	<i>See</i> endoscopic ultrasound
EVAR.....	<i>See</i> endovascular repair abdominal aortic aneurysm
Evoked Potentials (EP)	93
auditory (BAER).....	97
dermatome (Trigeminal)	97
how sensitive are they to anesthesia	93
motor (MEP)	98
somatosensory (SSEP)	94
visual (VEP).....	97
Eye filtration surgery	<i>See</i> trabeculectomy
Eye globe and orbit FYI.....	299
Eye removal	
enucleation	294
evisceration	295
exenteration.....	295
Eyelid laceration repair	288
Eyelid lesion, excision of.....	289
Facelift (rhytidectomy)	1128
Facial laser resurfacing (dermabrasion).....	1131
Facial nerve decompression.....	149
Factor 7	61
Fasciotomy	<i>See</i> compartment syndrome
Femoral artery, thrombectomy/embolectomy.....	<i>See</i> artery thrombectomy
Femoral fracture, closed reduction and external fixation	1080
Femoral fracture, open reduction internal fixation (ORIF) proximal	1081
Femoral head, prosthetic replacement	<i>See</i> hip hemiarthroplasty
Femoral herniorrhaphy.....	936
Femur FYI.....	1079
Femur fracture, repair of distal	1084
Femur fracture, repair of shaft	1085
Fenoldopam (Corlopam)	61
Fentanyl (Sublimaze) infusion	65
FESS (functional endoscopic sinus surgery)	<i>See</i> endoscopic sinus surgery
Fire in the operating room.....	24
Fistulotomy, anal.....	792

Flap procedures	480
distal flap (also see distal flap).....	480
latissimus dorsi myocutaneous flap	481
transverse rectus abdominis myocutaneous flap.....	481
deep inferior epigastric perforators flap.....	482
Flexor tendon laceration repair	1062
Foot amputation	1014
Foraminotomy.....	222
Foreign body aspiration, obstruction or ingestion, removal of	496, 1201
FRC	<i>See Functional Residual Capacity</i>
Frontal sinus drainage	356
Functional neurosurgery	191
Ganglion cyst excision	1064
Gastrectomy, subtotal - Billroth I and Billroth II	745
Gastrectomy, total	748
Gastric banding, adjustable	762
Gastric bypass (Roux-en-Y)	763
Gastric sleeve (vertical sleeve gastrectomy – VSG).....	765
Gastroplasty, vertical banded	<i>See vertical banded gastroplasty</i>
Gastroschisis repair	1255
Gastrostomy, percutaneous endoscopic tube (PEG) placement	751
Gastrostomy tube placement, open	752
GCS	<i>See glasgow coma scale</i>
Genioplasty	1132
Genitourinary irrigating solutions, factors affecting absorption	854
Genitourinary irrigating solutions FYI	854
distilled water.....	854
glycine.....	854
mannitol	854
sorbitol or dextrose.....	854
Genitourinary/renal surgery chapter	844
antibiotics for urologic procedure.....	844
diuretic chart	847
dyes used in GU/renal surgery	848
kidney anatomy	845
kidney functions	845
pearls	845
spinal and epidural levels needed in GU/renal surgery	853
surgery for patients without renal disease.....	848

ureteral stents FYI.....	854
urinary diversion, types.....	846, 885, 887, 889, 892
Genitourinary/renal surgery for patients with renal disease	852
anesthesia in the patient with renal disease pearls	852
see also “renal disease” in index	
Genitourinary/renal surgery for patients without renal disease	848
anesthetic management goals.....	848
Gentamicin (Garamycin)	1
GI endoscopy surgery chapter	798
GI endoscopy anesthesia adult.....	799
GI endoscopy anesthesia pediatric.....	800
GI endoscopy levels of anesthesia	800
GI endoscopy pearls.....	798
GI endoscopy patient factors necessitating anesthesia services	801
Glasgow coma scale (GCS)	51, 55, 89, 91
Globe repair, ruptured.....	298
Glossectomy.....	368
Glossopharyngeal neuralgia.....	148
Graft terms	479
allograft.....	479
autograft.....	479
composite	480
full-thickness	480
sheet skin.....	480
skin.....	480
skin substitutes	479
split-thickness	480
xeno or heterograft.....	479
Guillain-Barre syndrome	18
Gynecological surgery chapter	944
antibiotics gynecologic surgery	944
gynecological pearls.....	944
IV dyes to have available	945
preemptive pain management for GYN surgery.....	945
Gynecomastia, excision of (in male)	1145
Hallux abductus valgus repair.....	<i>See bunionectomy</i>
Hammer toe deformity, correction of	1106
Hartmann's procedure	787
Heart transplant	656

Heart transplant, what to expect following	661
Heller myotomy	<i>See esophagomyotomy</i>
Hematoma evacuation, epidural or subdural	176
Hemicolecction, right and ileocolostomy	783
Hemiplegia	22
Hemorrhoidectomy	794
Heparin	61
Hepatic encephalopathy in liver disease	815
Hepatic resection	818
Hepatoblastoma	1246
Hepatoportoenterostomy	1258
Hepatorenal syndrome in liver disease	816
Hepatorrhaphy	823
Herbals and anesthesia	1118
ANS function alteration	
bleeding	
sedation	
Hernia surgery chapter	934
hernia FYI	934
hernia pearls	934
hernia repair methods	934
HHNK	<i>See hyperglycemic hyperosmolar nonketotic syndrome</i>
Hiatal herniorrhaphy	937
Hip amputation, disarticulation	1010
Hip arthrodesis	1077
Hip arthroplasty, minimally invasive (MITHA)	1021
Hip arthroplasty, total	1023
Hip arthroscopy	1035
Hip hemiarthroplasty, replacement femoral head	1026
Hip muscle release	<i>See adductor lengthening</i>
Hip synovectomy	1078
Hip total arthroplasty	<i>See arthroplasty of hip</i>
Hirschsprung's disease, pull-through colorectal resection for	1249, 1259
HLHS	<i>See hypoplastic left heart syndrome</i>
Homunculus, motor and sensory	95
Humeral fracture, open reduction	1049
Humeral fracture, repair of distal (supracondylar, epicondylar, intercondylar)	1051
Humeral head fracture, open reduction of	1052
Humeral, radius, and/or ulna fracture(s), closed reduction of distal	1054

Huntington's chorea.....	20
Hydrocelectomy	905
Hyperglycemic hyperosmolar nonketotic syndrome (HHNK)	397
Hyperparathyroid	390, 419
Hyperthyroid	<i>See</i> Grave's disease
Hypertrophic obstructive cardiomyopathy (HOCM).....	57, 648
Hypoglycemia	108, 385, 817, 1166, 1167
Hypoparathyroid	390
Hypophysectomy	181
transsphenoidal	182
Hypoplastic left heart syndrome surgery (HLHS)	1218
Hypospadias repair.....	1280
Hypotension, controlled in neurosurgery.....	106
Hypothyroid	392, 393, 760, 1295
Hypovolemic shock	45
Hysterectomy	944
laparoscopic-assisted with transvaginal manipulation.....	947
obstetrical emergency	995
radical.....	948
total abdominal.....	949
vaginal.....	971
Hysteroscopy.....	973
IBW (Ideal Body Weight) formula	251, 275, 336, 350, 364, 381, 726, 758, 813, 844, 944, 987
ICP	<i>See</i> intracranial pressure
IDDM	<i>See</i> insulin dependent diabetes mellitus
Ileal conduit diversion.....	892
Imperforate anus, repair of.....	1262
Implantable cardioverter defibrillator (AICD) FYI	580
function codes	581
Implantable cardioverter defibrillator (AICD), insertion.....	590
Incisional (ventral) herniorrhaphy	939
Indigo carmine	478, 945, 959
In-flow reconstruction.....	722
aorto-bifemoral bypass graft	722
axillo-femoral or bifemoral bypass graft	722
femoral-femoral bypass graft	723
ileo-femoral bypass graft	723
Infratentorial brain masses	110

Infusions, anesthetic, sedation, and opioid	65
dexmedetomidine (Precedex).....	65
fentanyl (Sublimaze)	65
ketamine (Ketalar)	66
propofol (Diprivan).....	66
remifentanil (Ultiva)	66
Infusions, common cardiovascular	56
amicar (Aminocaproic Acid)	56
aminophylline	56
amiodarone (Cordarone)	57
amrinone (Inocor)	57
antithrombin III.....	58 , 615
brevibloc (Esmolol)	58 , 392, 1293
cardene (Nicardipine).....	58
cardizem (Diltiazem)	59
desmopressin (DDAVP)	59
dobutamine (Dobutrex)	59
dopamine (Intropin)	59
ephedrine	60
epinephrine (Adrenalin)	60
Factor 7	61
fenoldopam (Corlopam)	61
heparin.....	61
isoproterenol (Isuprel).....	61
lidocaine	62
milrinone (Primacor).....	62
nitroglycerin (Tridil, NTG)....	24, 62 , 69, 70, 107, 615, 619, 629, 640, 660, 1293
nitroprusside (Sodium Nitroprusside; SNP) ...	63 , 69, 70, 73, 106, 630, 640, 660, 671
norepinephrine (Levophed).....	19, 63 , 70, 128, 382, 396, 660, 661
phenylephrine (Neo-Synephrine)....	21, 63 , 70, 614, 629-30, 648, 657, 661, 987, 1212
protamine sulfate.....	64
tranexamic acid (Cyklokapron).....	64 , 657
trimethaphan (Arfonad)	65 , 107
vasopressin (Pitressin)	64 , 106, 107
Inguinal herniorrhaphy.....	940

Insufflation in laparoscopic surgery.....	34
gas embolism	37
subcutaneous emphysema.....	37
Insulin	382
Interposition mesocaval shunt.....	<i>See portosystemic shunt</i>
Interventional neuroradiology.....	<i>See neurointerventional procedures</i>
Intracranial aneurysms, anesthetic goals.....	112
Intracranial aneurysms FYI.....	111
Intracranial pressure.....	79, 110, 111
Intracranial pressure, hypertension	79
airway management	81
causes of.....	80
danger of brain herniation	81
danger of brain ischemia.....	80
interventions, drugs to decrease ICP and relax brain.....	81
interventions, hyperventilation to decrease ICP and relax brain	81
interventions, postural to decrease ICP and relax brain.....	81
signs and symptoms in an awake patient	80
signs and symptoms in anesthetized patient	80
Intracranial space-occupying lesions, anesthetic goals (brain tumor)	108-111
Intracranial vascular pathology, anesthetic goals (brain aneurysm).....	111-114
Intraocular foreign body, extraction of.....	301
Intussusception, reduction of	1264
IOL.....	<i>See intraocular lens implant</i>
Iridectomy.....	317-18, 319, 330
Ischemic Optic Neuropathy	33
Isoproterenol (Isuprel)	61, 596, 660, 661
J pouch	790
Kasai procedure or portoenterostomy.....	<i>See hepatopportoenterostomy</i>
Keratoplasty	<i>See corneal transplant</i>
Ketamine (Ketalar) infusion	17, 21, 66, 1293
Kidney transplant for donation	865
Kidney transplant recipient, cadaveric or live donor	868
Knee amputation, above.....	1011-12
Knee amputation, below	1013
Knee arthrodesis.....	1090
Knee arthroplasty, total	1027-8
Knee arthroscopy	1036, 1088, 1091
Knee FYI.....	1088

Knee manipulation under anesthesia	1090
K-pouch or Kock pouch	774, 789
Labyrinthectomy	339
Lacrimal duct probing	293
Lactate	54, 56
Lambert-Eaton Syndrome	14
Laminectomy with or without discectomy	224-25
Laminotomy	226-7
Laparoscopic surgery (insufflation in)	34
Laparotomy	<i>See abdominal laparotomy</i>
Laparotomy, exploratory or staging	728
Laparotomy, second look	954
Laryngectomy	369, 433-5
Laryngoscopy	81, 102, 105, 437 , 1175, 1201
Laser, advantages of	431
Laser airway issues	430
Laser applications for ENT procedures	431
Laser assisted in-situ keratomileusis	<i>See LASIK</i>
Laser, burn prevention with	432
Laser cyclophotocoagulation	329
Laser, hazards of	431
Lasers in surgery	430
Laser iridotomy	317, 330
Laser photocoagulation	331
Laser photodynamic therapy	333
Laser therapy and photocoagulation	329
Laser trabeculoplasty	333
Laser transmyocardial revascularization (TMR)	625
LASIK	335
LDM flap (latissimus dorsi myocutaneous)	480, 481
Lead extraction from a cardiovascular implantable electronic devices (CIED) ..	593
LEEP excision	<i>See loop electrical excision procedure</i>
LeFort fractures and osteotomies (LeFort I, II, III)	255
Levofloxacin (Levaquin)	2
Lidocaine	62 , 73, 278, 629, 703, 798, 800, 911
Lipectomy	1159
Liposuction	1156, 1161
Lithotomy position	11, 780, 922, 945, 982
Lithotripsy, electrohydraulic	874

Lithotripsy, extracorporeal shock wave (ESWL)	875
Lithotripsy, extracorporeal shock wave without water bath	878
Lithotripsy, laser	879
Lithotripsy, ultrasonic	880
Live Donor Liver Transplant (LDLT) .See liver donation for transplant, live donor	
Liver, biliary tract, gallbladder, spleen surgery chapter	813
anesthetic considerations in liver disease or liver surgery.....	818
anesthetics in liver disease or during liver surgery.....	818
liver anatomy pearls	813
liver antibiotics.....	813
liver blood flow.....	815
liver disease.....	815
liver functions	813
Liver donation for transplant, live donor	825
Liver transplant recipient, cadaveric and live donor (orthotopic).....	827
Lobectomy	493, 517, 532
Lobectomy or pneumonectomy (pediatric).....	1238
Local anesthetic dosing with and without epinephrine	1117
bupivacaine	
chloroprocaine	
etidocaine	
lidocaine	
mepivacaine	
prilocaine	
procaine	
ropivacaine	
tetracaine	
Loop electrosurgical excision procedure	961, 974
Lower body lift	<i>See lipectomy</i>
Lower Esophageal Sphincter (LES).....	23 , 1169
Lumbar discectomy or microdiscectomy.....	228-9
Lumbar fusion and instrumentation, posterior approach	233
Lumbar sympathectomy.....	247
Lumbosacral fusion and instrumentation, anterior approach.....	230
Lumpectomy	469
Lung biopsy	534-5
Lung transplant	536, 556-7
double.....	557
single	557

Lung volume reduction	509, 517, 536
Luxury perfusion	84
Lymph node mapping	<i>See sentinel lymph node biopsy</i>
Lymphadenectomy	<i>See axillary node dissection</i>
Lymphoscintigraphy	477, <i>See sentinel lymph node mapping</i>
indigo carmine dye	478
isosulfan blue dye	477
methylene blue dye	477
technetium	477
Malignant hyperthermia	15, 17, 26 , 573
Mammoplasty, augmentation	1147
Mammoplasty, reduction	1149
Mandibular fracture, reduction of	48, 260 , 262, 264, 364
Mandibular hypoplasia	1180
Goldenhar	
Pierre-Robin	
Treacher Collins	
Mandibular osteotomies (with or without genioplasty)	262
Marshall-Marchetti-Krantz [MMK])	<i>See vesicourethral suspension</i>
Marsupialization of Bartholin duct cyst or abscess	975
Mastectomy, modified radical	470
Mastectomy, radical	472
Mastectomy, simple	473
Mastectomy, subcutaneous	475
Mastoidectomy	337, 339, 340
Mastopexy	1152
Maxillary fractures, reduction	264
Maxillectomy, partial or total	265
Maze procedure	603
Meckel's diverticulectomy	<i>See diverticulectomy</i>
Mediastinal anatomy and anesthetic considerations	490
Mediastinal tumor excision, open approach	564
Mediastinoscopy	499
Meningioma, craniotomy for	186
Meniscectomy, lateral or medial	1091
Mentoplasty	1134
MEP	<i>See motor evoked potentials</i>
Metatarsal fractures, repair of	1107
Metatarsal head resection	1108

Metronidazole (Flagyl)	2
MH	<i>See malignant hyperthermia</i>
MIDCAB.....	<i>See minimally invasive direct CABG</i>
Milrinone (Primacor)	62, 641, 1211
Miscellaneous surgery/procedure chapter.....	1292
electroconvulsive therapy	1292
organ donation	1295
Mitral regurgitation.....	640
acute	640
chronic.....	641
Mitral stenosis	6, 639, 641, 642
Mitral valve repair (balloon mitral valvotomy [BMV])	641
Mitral valve repair (open chest)	644
Mitral valve replacement (open chest).....	646
Monroe-Kelly Hypothesis.....	77
Motor evoked potentials (MEP).....	73, 94, 98
Mouth surgery chapter	364
antibiotics for head and neck	364
Multiple Sclerosis	18
Muscle denervation.....	22
Muscle disease	
Lambert-Eaton Syndrome (Myasthenic Syndrome)	14
Muscular Dystrophy (MD).....	15
Myasthenia Gravis (MG)	15
Myotonia (Myotonic dystrophy).....	17
Periodic Paralysis hyperkalemic	17
Periodic Paralysis hypokalemic	17
Muscle necrosis.....	<i>See rhabdomyolysis</i>
Muscle relaxant, altered response to	21
burns.....	21
cerebral palsy	21
epilepsy	21
hemiplegia.....	22
muscle denervation	22
Muscular dystrophy	15
MVO ₂	<i>See venous oxygen content</i>
Myasthenia Gravis	15
Myelodysplasia	883, 1185
Myelomeningocele/Meningocele closure	1185

Myomectomy	952
Myotonia	<i>See myotonic dystrophy</i>
Myotonic dystrophy	17
Myringotomy with or without ear tube placement (tympanostomy)	340, 342
Nasal fracture, repair of	361
Nasal polypectomy.....	<i>See polypectomy, nasal</i>
Nasal septoplasty	362
NEC.....	<i>See necrotizing enterocolitis</i>
Neck and laryngologic surgery chapter	430
airway fire protocol.....	432
antibiotics for head and neck	430
lasers in surgery, safety and hazards	431
pearls	430
Neck dissection	433, 435
modified	440
radical.....	442-43
Neck lift	1138
Necrotizing enterocolitis (NEC) repair	1249, 1260, 1266
Neonatal anatomy pearls.....	1166
blood and labs	1167
cardiac	1167
respiratory airway	1166
temperature	1168
Neonatal and pediatric surgery chapter.....	1166
Neonatal anesthesia.....	1169
Neonatal emergency medications and equipment.....	1168
Neonatal IV Fluids and Blood	1171
Neonatal NPO guidelines.....	1171
Neonatal pharmacology and anesthesia FYI.....	1169
Nephrectomy, laparoscopic.....	857
Nephrectomy, open	859
Nephrectomy, radical	860
Nephrostomy tube, kidney; ureteral or percutaneous	862
Neuro spine surgery pearls.....	207
Neuroblastoma	490, 1246-7
Neurodegenerative disease.....	19
Alzheimer's.....	19
Amyotrophic lateral sclerosis	19
Creutzfeldt-Jakob disease (spongiform encephalopathy)	19

Huntington's chorea.....	20
Parkinson's disease	20
Shy-Drager Syndrome	21
Neurogenic shock.....	46
Neurointerventional procedures.....	190
frame-based stereotaxy	190
frame-less stereotaxy	191
functional neurosurgery	191
stereotactic radiosurgery	191
Neurophysiologic Monitoring.....	90
and cerebral blood flow	91
anesthetics and body states influencing intraoperative	99
EEG burst suppression.....	86, 92
EEG – Electroencephalography.....	90
Evoked potentials.....	93
Electromyography.....	98
Wake up test.....	99
Neurovascular surgery chapter	75
anesthesia	103
anesthesia goals.....	102
anesthesia pearls.....	75, 101
anesthetics affect on CMRO ₂ , CBF, CBV, and ICP	104
anesthetics to avoid	105
antibiotics for neurosurgery	75
controlled hypotension, issues and drugs used	106
IV fluids, colloids, blood product goals.....	108
preoperative testing.....	102
vasoactive drugs.....	106
NIDDM	<i>See</i> non-insulin dependent diabetes mellitus
Nipple reconstruction.....	1154
Nissen fundoplication, laparoscopic (adult)	743-4
Nissen fundoplication, laparoscopic (pediatric)	1269
Nitroglycerin (Tridil, NTG).....	24, 62, 69, 70, 107, 615, 619, 629, 640, 660, 1293
Nitroprusside (Sodium Nitroprusside; SNP) ..	63, 69, 70, 73, 106, 630, 640, 660, 671
Norepinephrine (Levophed)	19, 63, 70, 128, 382, 396, 660, 661
Obesity pearls.....	759
body mass index formula	758
ideal body weight formula	758

obese patient anesthetic challenges.....	759
obese patient associated medical co-morbidities	760
obesity classification.....	758
Obstetric surgery chapter	987
antibiotics for obstetric surgeries	987
drugs to have available.....	987
obstetric pearls	987
Obstetrical emergency hysterectomy	995
Oculocardiac reflex.....	276 , 278
Olecranon fracture, repair	1055
Omphalocele repair.....	1270
OPCAB	<i>See off-pump coronary artery bypass</i>
Ophthalmic surgery chapter.....	275
anesthesia	277
antibiotics for head and neck	275
important eye anatomy and terms	276
oculocardiac reflex	276
pearls	275
Oral cavity lesions, excision of	372
Orbit fracture repair	303
Orbital floor fractures, open reduction.....	270
Orbitotomy, anterior and lateral.....	306
Orchidopexy.....	<i>See orchiopexy</i>
Orchiectomy.....	900, 905-6
Orchiopexy.....	909, 1282
Organ Donor Management – Heart-beating Brain-Dead Organ Donor.....	1295
Orthopedic surgery chapter.....	1004
antibiotics orthopedic surgery.....	1004
common complications in orthopedic surgeries	1007
ortho surgeries with category of emergency, urgent, elective	1006
orthopedic surgery pearls	1004
tourniquet FYI.....	1005
Orthopedics, common surgical complications	1007
deep vein thrombosis	1007
compartment syndrome.....	1009
fasciotomy for compartment syndrome	1009
fat embolism syndrome.....	1008
rhabdomyolysis	1008
Ossicular chain reconstruction.....	344

Otoplasty	1134
Out-flow reconstruction	723
femoral-popliteal bypass graft	723
femoral-tibial bypass graft	724
popliteal-tibial bypass graft.....	724
Oxytocics in obstetrics	987
methylergonovine maleate (methergine)	
pitocin (oxytocin)	
prostaglandins	
Pacemaker	15, 575 , 1143, 1292
asynchronous modes	577
biventricular (cardiac resynchronization) insertion	588
lead types	576
naming function codes	576-7
pacing modes preserve AV synchrony	577
permanent FYI	578
terms.....	575
types	576
Pacemakers FYI	575
Pacing, permanent	587
biventricular pacemaker insertion.....	587
pacemaker insertion, permanent	589
Pacing, temporary	585
epicardial electrode, insertion and removal	585
transcutaneous.....	586
transesophageal	586
transvenous electrode insertion.....	586
Palatoplasty	<i>See cleft palate repair</i>
Pallidotomy	<i>See functional neurosurgery pg 193</i>
Palmar fasciectomy	1065
Palonosetron (Aloxi).....	30
Pancreatectomy	384, 389, 402
Pancreatic pseudocyst, drainage of	405
Pancreatic transplant	416-7
Pancreaticoduodenectomy	408 , 837
Pancreaticojejunostomy	411-2
Pancreatitis, drainage for	414
Panendoscopy	446
Parathyroidectomy	419-20

Parkinson's disease	20 , 31, 170, 191
Parotidectomy	446
Patellar fracture, open reduction and internal fixation.....	1092
Patellar realignment	1093
Patellar tendon rupture repair.....	1095
Patellectomy.....	1096
Patent ductus arteriosus (PDA) closure	1219
PD catheter.....	<i>See</i> peritoneal dialysis catheter
PDA.....	<i>See</i> patent ductus arteriosus
Pectus excavatum or carinatum correction	1240
Pediatric, air leak with endotracheal tube	1174
Pediatric anatomy pearls	1172
cardiac	1172
loose teeth	1173
respiratory airway	1172
temperature	1172
Pediatric, anesthetic management with congenital heart disease..	1178, 1180, 1211 ,
1226	
Pediatric blood products FYI	1177
Pediatric cardiology anesthesia FYI	1213
Pediatric cardiovascular surgery FYI.....	1210
Pediatric, common diseases and anesthetic implications.....	1178
cerebral palsy	1179
Down syndrome	1178
mandibular hypoplasia	1180
Pediatric, cuffed vs. uncuffed endotracheal tubes	1174
Pediatric, emergency medications and equipment.....	1173
Pediatric, endotracheal tubes, LMA, DLEBT, and airway adjuncts.....	1173
Pediatric IV Fluids	1177
Pediatric NPO guidelines	1177
Pediatric thoracic surgery and anesthetic implications	1237
Pediatric, one-lung ventilation options	1175
Pediatric, pharmacology age of maturation	1175
Pediatric, risk factors for POV/PONV specific in children	1171
Pedicle fixation of spine.....	1110
PEG tube placement.....	<i>See</i> gastrostomy, percutaneous
Pelvic exenteration.....	953-4
Pelvic fracture and disruption, open reduction and internal fixation.....	1072
Pelvic FYI	1069

Pelvis, closed reduction and external fixation	1070
Penectomy, partial or total	900
Penile condylomata acuminata excision (genital warts).....	901
Penile implant	902
Peptic ulcer closure	754
Pericardial tamponade.....	572, 651
Pericardial window	<i>See pericardiectomy</i>
Pericardiectomy (Pericardial Window).....	50, 644, 651
Pericardiocentesis	50, 652
Periodic Paralysis.....	17
Peripheral nerve blocks.....	1006-07
axillary	
Bier block	
femoral	
femoral and sciatic	
infraclavicular	
intercostobrachial	
interscalene	
popliteal	
sciatic	
supraclavicular	
Peripheral nerve repair	241-2
Peripheral vascular disease	33, 668 , 760
atherosclerotic arterial insufficiency.....	668
non-atherosclerotic arterial insufficiency	668
Peritoneal dialysis (PD) catheter placement	930
Permanent pacemakers FYI	578
Peroral Endoscopic Myotomy (POEM).....	811-2
Phenylephrine (Neo-Synephrine).....	63
Pheochromocytoma.....	392, 393, 396
Pheochromocytoma adrenal tumor, resection of	395
Pilonidal cyst and sinus excision	794
Plastic surgery chapter	1117
anesthetic implications.....	1119
antibiotics for plastic surgery.....	1117
local anesthetic chart.....	1117
plastic surgery pearls.....	1118
risks with anticoagulant medications	1118
risks with herbals	1118

Pleural stripping	<i>See decortication</i>
Pneumonectomy	539
Pneumonectomy (a/k/a Lobectomy – pediatric)	1238
Pneumonectomy with extrapleural resection	543
Pneumoperitoneum risks.....	37
gas embolism	
subcutaneous emphysema	
POEM procedure	<i>See Peroral Endoscopic Myotomy</i>
Polypectomy, nasal	357
PONV	<i>See postoperative nausea and vomiting</i>
Popliteal cyst excision.....	1096
Portacaval shunt.....	<i>See portosystemic shunt</i>
Portal hypertension	712, 714, 715, 813, 815 , 1258
Portosystemic shunt	712-13
Positioning and patient effect.....	6
compression injury areas at risk.....	7
migration of ETT during surgery.....	7
effects on functional residual capacity.....	7
lateral position and affect on ventilation/perfusion ratio	8
positioning primarily effects CV, pulmonary, nerves.....	6
transducer levels and patient position	8
Positions, surgical	9
fracture table	14
jack-knife	13
lateral-decubitus	13
flexed lateral-decubitus	14
lithotomy	11
prone	9
reverse trendelenburg	11
sitting/beachchair	12
supine	9
trendelenburg	10
Posterior fossa anatomy	192
Posterior fossa exploration, craniotomy or craniectomy	191, 193
Posterior fossa pathology	192
Postoperative Nausea and Vomiting (PONV)	28
Antiemetics (see also “antiemetics”)	30
predictors for	30
strategies to reduce	28

risk factors: patient specific	28
risk factors: anesthetic.....	28
risk factors: surgical	29
Postoperative Vision Loss (POVL)	33
Postpartum tubal ligation (PPTL)	996
Potential complications in anesthesia	22
POVL <i>See postoperative vision loss</i>	
Precedex worksheet	65
Preoperative guidelines	2
clinical predictors of perioperative cardiac risk factors	4
preoperative testing guidelines	3
prior test results.....	4
preoperative medication guidelines	4
MET score.....	5
Preferred wait time for elective noncardiac surgery in patient with cardiac disease	6
Presacral rectopexy	795
Proctocolectomy, total	789
J-pouch.....	790
K-pouch.....	774, 789
Propofol (Diprivan) infusion.....	66, 77, 81, 86, 95, 96, 99, 100
Prostate gland, transrectal cryosurgical ablation of	913
Prostate gland, transurethral resection of (TURP) and bladder (TURB)	915
TURP syndrome.....	915
Prostate seed implantation, transrectal.....	929
Prostatectomy	
radical perineal (total)	918
radical retropubic	920
robotic-assisted laparoscopic	922
simple perineal	924
simple retropubic	926
suprapubic	927
transvesical..... <i>See prostatectomy, suprapubic</i>	
Protamine Sulfate.....	64
PSA 4000 (Patient State Analysis)	93
Pterygium, excision of	311
Pulmonary artery banding.....	1223
Pulmonary valve stenosis repair	1224
Pyelolithotomy, nephrolithotomy, ureterolithotomy	863

Pyloromyotomy.....	1273
Pyloroplasty	756-7
Radial keratotomy.....	334
Radius and/or ulnar fracture, open reduction.....	1056
Rectopexy	<i>See presacral rectopexy</i>
Rectosigmoidostomy.....	781
Reduction pneumoplasty.....	<i>See lung volume reduction</i>
Reflex sympathetic dystrophy.....	<i>See Complex regional pain syndromes</i>
Refractive eye surgery	334
Refractive keratoplasty	<i>See radial keratotomy</i>
Remifentanil (Ultiva) infusion.....	66, 99, 100, 102, 105
Renal disease.....	849
post-renal.....	849
pre-renal	849
renal.....	849
Renal disease and anesthesia pearls	851
Renal disease and general anesthesia FYI	852
Renal disease and regional anesthesia FYI.....	853
Renal disease and spinal and epidural anesthesia	853
Renal disease and surgery - questions to ask preoperatively	851
Renal disease physiologic changes	849
Renal failure, acute risk factors	850
Renal failure, chronic risk factors	851
Renal failure drug action alteration.....	852
Renal failure, major electrolyte imbalance	849
Renal failure, medical management.....	851
Renal function, anesthetics that directly alter	848
Renal function, anesthetics that indirectly alter.....	848
Renal patients IV fluids	854
Resection of small intestine with anastomosis.....	775
Resection, segmental lung	546
Retained placenta, removal	998
Retinal detachment, repair of	324
Retinal ischemia.....	33
Retroperitoneal space.....	393, 730
Retroperitoneal tumors, excision of.....	730
Rhabdomyolysis.....	850-51, 1008
compartment syndrome.....	1008
Rhinoplasty	1118, 1135-36

RK	<i>See</i> radial keratotomy, <i>See</i> refractive keratoplasty
Robotic-assisted surgery, positives and negatives	38
Rotator cuff tear, correction of.....	1031, 1044
Roux-en-Y.....	<i>See</i> gastric bypass
Ryanodex	27
Sacral nerve stimulator, implantation	889
Salpingo-oophorectomy.....	949, 950, 953, 956
Scleral buckling	<i>See</i> retinal detachment
Scoliosis, surgical treatment of.....	1112
Seed implantation, transrectal prostate	929
Segmentectomy.....	<i>See</i> resection, segmental lung
Selective vestibular neurectomy	<i>See</i> labyrinthectomy
Sentinel lymph node (SLN) biopsy.....	476
IV dyes and mapping for SLN	<i>See</i> I lymphoscintigraphy
Septal myectomy/myotomy	648
Septic shock 1 st stage/hyperdynamic	46
Septic shock 2nd stage/hypodynamic	47
Septoplasty.....	<i>See</i> nasal septoplasty
Septum (septal) myectomy/myotomy	648
Serotonin (5-HT3) receptor antagonists.....	30
Shock states.....	43
anaphylactic	44
cardiogenic	45
hypovolemic.....	45
neurogenic	46
septic shock, 1 st stage	46
septic shock, 2 nd stage	47
Shoulder arthroplasty, total	1017
Shoulder arthroscopy	1031
Shoulder dislocation, correction of recurrent anterior	1046
Shoulder girdle FYI	1038
Shy-Drager Syndrome	21
Sigmoid colon, anterior resection of.....	781
Sinus and rhinologic surgery chapter.....	350
antibiotics for head and neck	350
pearls	350
Skin and Flap Grafting.....	480
graft terms	479
Small bowel transplant.....	777

Small intestine, resection of with anastomosis	<i>See resection of small intestine</i>
Somatosensory Evoked Potentials (SSEP)	94
Somatostatin.....	382, 383, 384
Spermatocoelectomy.....	907
Spetzler and Martin Grading System for AVMs	113
Sphenoidotomy	350, 358
Spica cast application.....	1288
Spigelian herniorrhaphy	941
Spinal column vertebrae	208
Spinal cord blood supply	210
Spinal tumor resection	<i>See tumor resection of the spine</i>
Spine pedicle fixation	<i>See pedicle fixation of spine</i>
Spine reconstruction, anterior and/or posterior approach	235
cervical.....	236
cervicothoracic.....	235
thoracic.....	236
transdiaphragmatic.....	236
transthoracic	236
Splenectomy.....	412, 842
Splenomegaly in liver disease.....	815
Splenorenal shunt.....	712
SSEP	<i>See somatosensory evoked potentials</i>
Stapedectomy	346
Steep Trendelenburg in robotic-assisted surgery	40
Stereotactic procedures	190
frame-based.....	190
frame-less.....	191
Stereotactic radiosurgery	191 , 199, 1191
Sterilization procedure	<i>See tubal ligation</i>
Sternoclavicular dislocation, correction of	1048
Stomach stapling	<i>See vertical banded gastroplasty</i>
Strabismus, correction of	308
Subarachnoid hemorrhage	112, 127
Subarachnoid hemorrhage, medical management of.....	128
Subarachnoid hemorrhage, surgical management of.....	128
Subcutaneous emphysema	37 , 517
Subdural hematoma	177
Submandibular gland excision.....	449-50
Suprapubic catheter.....	<i>See cystostomy, suprapubic</i>

Supratentorial brain masses	109
SVN.....	<i>See selective vestibular neurectomy</i>
SVO ₂	<i>See venous oxygen content</i>
Sympathectomy, cervical	244
Sympathectomy, lumbar	247
Syndactyly repair	1290
Synovectomy of hip	<i>See hip synovectomy</i>
Tarsorrhaphy	<i>See canthorrhaphy</i>
TAVR.....	<i>See transcatheter aortic valve replacement</i>
TEF	<i>See tracheal esophageal fistula</i>
Temporomandibular joint arthroscopy/arthrotomy.....	375
Tendon lengthening or transfer	1109
Testicular biopsy	907
Testicular torsion	908
Tetralogy of Fallot (TOF) correction	1225
TEVAR	<i>See thoracic endovascular aortic aneurysm repair</i>
Thalamotomy	<i>See functional neurosurgery pg 191</i>
Thoracic aortic aneurysm, ascending, open repair.....	<i>See ascending thoracic aortic aneurysm, open repair</i>
Thoracic aortic aneurysm, descending, open repair..	<i>See descending thoracic aortic aneurysm, open repair</i>
Thoracic endovascular aortic aneurysm repair (TEVAR)	692
Thoracic lung surgery chapter	489
thoracic lung surgery pearls.....	489
operative sites within the thorax and associated disorders	489
thoracic and lung surgeries anesthesia, main points	490
double-lumen endobronchial tube.....	492
Thoracic sympathectomy, endoscopic	502
Thoracoscopy	504
Thoracostomy, closed (chest tube)	552
Thoracostomy, open.....	550
Thoracotomy	554
Thumb joint stabilization or arthrodesis	1066-68
Thymectomy	16, 489, 566
Thyroglossal duct cyst resection	451
Thyroidectomy, substernal or intrathoracic	427-8
Thyroidectomy, subtotal, total (neck approach)	423-4
Tibia and/or fibula fractures, repair of	1098
TIPS	<i>See transjugular intrahepatic portosystemic shunt</i>

Tissue expander	486-7
TMP (transmural pressure)	77 , 112
Tocolytics in obstetrics	987
magnesium sulfate	988
ritodrine (Yutopar)	987
terbutaline (Brethine)	988
Toe amputation	1015
TOF	<i>See</i> tetralogy of fallot
Tonsillectomy and/or adenoidectomy (T&A).....	1203-04
T & A, return to surgery for bleeding.....	1206
TORP (total ossicular replacement prosthesis)... <i>See</i> ossicular chain reconstruction	
Total ankle arthroplasty	1020-21
Total elbow arthroplasty	1016
Total hip arthroplasty minimally invasive (MITHA)	1023-24
Total knee replacement (TKR)	<i>See</i> Knee arthroplasty, total
Total shoulder arthroplasty (TSA)	1017-18
Trabeculectomy.....	319
Tracheal esophageal fistula (TEF) correction.....	1242
Tracheal resection and reanastomosis.....	453
Trachelectomy, radical.....	976
Trachelorrhaphy.....	977
Tracheobronchial stenting, endoscopic.....	507
Tracheostomy, adult.....	265 , 369, 434, 458
Tracheostomy, pediatric.....	1180, 1194, 1208
TRAM flap (transverse rectus abdominis myocutaneous).....	481
Tranexamic Acid (Cyklokapron)	64 , 657
Transcatheter Aortic Valve Implantation (TAVI)	<i>See</i> transcatheter aortic valve replacement
Transcatheter aortic valve replacement (TAVR).....	637
Transducer levels with positioning	
phlebostatic axis.....	8
Transjugular Intrahepatic Portosystemic Shunt (TIPS).....	714
Transmural Pressure (TMP).....	77
Transposition of the great arteries (TGA) correction	1229
Transurethral resection of prostate.....	915
Transvaginal oocyte retrieval (TVOR)	979
Transvesical prostatectomy.....	<i>See</i> prostatectomy, suprapubic
Trauma resuscitation.....	47
anesthesia pearls.....	55

capnometry.....	55
blood products, colloids, IV fluids in trauma	52
end points in resuscitation.....	55
primary survey	47
recommendations	55
resuscitation markers	54
secondary survey.....	50
Tricuspid atresia surgery.....	1231
Trigeminal neuralgia.....	148
Trimethaphan (Arfonad)	64 , 106, 107
Truncus arteriosus repair.....	1233
Tubal ligation, sterilization	957
Tubal pregnancy, ectopic	958
Tuboplasty, fallopian tubes.....	959
Tumor, craniotomy for brain.....	199
Tumor resection of the spine.....	239
Turbinectomy	359
TURP (transurethral resection of prostate)	915
TURP syndrome.....	915
Tympanoplasty.....	344, 348
Tympanostomy	<i>See</i> ear tube placement
Tympanostomy tube placement	<i>See</i> PE tubes (pressure equalization tubes)
UFE	<i>See</i> uterine fibroid embolization
Ulna, fractures of proximal, repair.....	1058
Ulnar nerve transposition.....	248
Umbilical herniorrhaphy	942
UPPP	<i>See</i> uvulopalatopharyngoplasty
Ureteral reimplantation	982, 1283
Ureterectomy.....	881
Ureterostomy, cutaneous.....	882
Urethral meatotomy	890
Urethroplasty.....	891
Urinary diversions.....	892
continent.....	846
continent ileal.....	847
noncontinent cutaneous.....	846
uretersigmoidostomy.....	847
Urinary sphincter, artificial	873
Urinary stress incontinence surgery.....	896

Uterine fibroid embolization (UFE).....	960
Uterine inversion management	1000
Uterine rupture repair.....	1002
Uvulopalatopharyngoplasty (UPPP).....	377
VAD	<i>See ventricular assist device</i>
Vaginal vault suspension, surgery for.....	979
Vaginotomy.....	<i>See colpotomy</i>
Vagotomy.....	389, 756
anterior serotomy	757
Valve disease	628
Valve disease treatment goals	628
Vancomycin (Vancocin)	2 , 23
Varicocelectomy	910
Varicose vein (saphenous) excision and stripping.....	716
Vascular anatomy lower extremity	668
Vascular bypass grafts	720
See in-flow reconstruction	722
See out-flow reconstruction	723
Vascular insufficiency, acute blockage of distal vessels	669
Vascular insufficiency, surgical interventions for arterial occlusive disease	669
Vascular insufficiency, types of grafts for distal revascularization.....	670
Vascular pathology, intracranial	113
anesthesia management goals	112
arteriovenous malformation (AVM)	113
Vascular surgery chapter.....	667
vascular antibiotics.....	667
vascular surgery pearls.....	667
Vasectomy.....	911
Vasopressin	64 , 181
Vasovasostomy	912
VATS	<i>See video-assisted thoracoscopic surgery</i>
VBG	<i>See Vertical Banded Gastroplasty</i>
Vena cava filter insertion	718
Venous oxygen content (SVO ₂ or MVO ₂).....	573
Venous thrombectomy/embolectomy	719
Ventral hernia.....	<i>See incisional herniorrhaphy</i>
Ventricular assist device (VAD), insertion	654
Ventricular catheter/shunt placement for hydrocephalus (VP shunt)	203
Ventricular septal defect repair (VSD)	1235

Ventricular system and cerebrospinal fluid (CSF).....	77
Monroe-Kelly hypothesis.....	77
Ventriculostomy/ventriculoscopy (VP shunt) (pediatric).....	1189
VEP	<i>See</i> visual evoked potentials
Vertebrae of spinal column.....	208
Vertical banded gastroplasty (VBG).....	765
Vertical sleeve gastrectomy-VSG.....	<i>See</i> gastric sleeve
Vesicourethral suspension	898
Vesicovaginal fistula repair	981
Vestibular schwannoma	<i>See</i> acoustic neuroma
Video-assisted thoracoscopic surgery (VATS).....	509
Viral hepatitis A B C.....	816
hepatitis D	817
Visual evoked potentials (VEP).....	97
Vitrectomy, anterior and posterior approaches	301, 327
VP shunt.....	<i>See</i> Ventricular catheter/shunt placement for hydrocephalus
VSD.....	<i>See</i> ventricular septal defect
Vulvar, condylomata acuminata, excision of (genital warts)	983
Vulvectomy	
radical.....	984
simple.....	986
Wake up test.....	99
Wedge resection.....	<i>See</i> resection, segmental lung
Whipple procedure.....	<i>See</i> pancreaticoduodenectomy
Wrist arthrodesis	1068
Zenker's diverticulectomy	462
Zenker's diverticulum.....	462, 734
Zygomatic fracture, reduction of	272