Index

Note: Page numbers of article titles are in boldface type.

A

Abdominal pain
after gastric bypass, 472–476
in pregnancy, 521–522

Adhesions, 475–476

Adipokines
bariatric surgery effects on, 425–426
in insulin resistance, 396–397

Adiponectin
bariatric surgery effects on, 425–426
in insulin resistance, 397

Adipose cells, insulin resistance and,
396–397

Adjustable gastric banding (AGB)
bond adjustment in, 520–521
effectiveness of, 326–328
insurance coverage of, 335
laparoscopic. See Laparoscopic
adjustable gastric banding
(LAGB).

Adolescents, bariatric surgery for, 383–384, 386

AGB. See Adjustable gastric banding
(AGB).

Anemia, after bariatric surgery, 387

Anesthesia
intraoperative management of, 348
preoperative evaluation for, 347
pulmonary considerations in, 436

Anxiety disorders, 451–454

Appetite control, postoperative, 457

Asthma
bariatric surgery effects on, 439
in obesity, 434–435

Atherosclerosis
bariatric surgery effects on, 421
in insulin resistance syndrome, 398
in polycystic ovary syndrome, 402

Atrial fibrillation, in obesity, 418

B

Banding, gastric, adjustable. See Adjustable
gastric banding (AGB).

Bariatric surgery
body contouring after, 463
cardiovascular disease and, 415–431
cholecystectomy with, 445–447
complications of. See Complications.
contraindications for, 340–341
cost-effectiveness of, 330–333
costs of, 329–330
diabetes mellitus management after,
407–408
eating disorders before and after,
454–458
effectiveness of, 326–329
for challenging patients, 383–392
adolescents, 383–384, 386
elderly, 385, 388–389
pregnant, 387–388
super obese, 384–385, 389–390
for metabolic disorders, 402–409
gastrointestinal disorders after,
443–450
guidelines for, 335–336
indications for, 326–329
insurance coverage for, 334–335
laparoscopic. See Laparoscopic
procedures; subjects starting with
Laparoscopic.
mortality rate in. See Mortality rate.
nutrition after. See Nutritional
consequences.
nutritionist role in, 341–342
options for, 326–329
outcome of
pulmonary, 438–439
versus volume of procedures,
370–375
perioperative care in, 339–351
pregnancy after, 515–528
primer on, 353–381
procedures for. See also individual
procedures.
selection of, 359–370
types of, 326, 357–358
INDEX

Bariatric (continued)
psychologist/psychiatrist role in, 342
psychosocial considerations in,
451–469
pulmonary considerations in, 433–442
quality of life after, 458–461
surgeon role in, 341
volume of, versus outcome, 370–375

Bariatrician, preoperative activities of,
342–347

Behavioral therapy, for weight loss, 325

Bilevel positive airway pressure,
preoperative, 344–345

Biliary disease, 472–473, 477–478

Biliopancreatic diversion
adverse events in, 373
eating behavior modification after, 509
for metabolic conditions, 403, 407
nutritional consequences of, 505–506

Binge eating disorder, 454–457

Body contouring, after bariatric surgery,
463

Body dysmorphic disorder, 460

Body image, 460–461

Body mass index, in obesity definition,
321–322

Bypass, gastric, Roux-en-Y.
See Roux-en-Y gastric bypass (RYGB).

Calcium
deficiency of, 479
metabolism of, 503

Carbohydrate metabolism, 501

Cardiac dysrhythmias
bariatric surgery effects on, 422
in obesity, 418

Cardiovascular disease, 415–431
bariatric surgery and
functional changes, 422–424
in preexisting disease, 420–422
mechanisms, 423, 425–426
risk factors, 419–420
structural changes, 422–424
obesity effects on
risk factors, 416–418
structural changes, 418–419

Cardiovascular system, preoperative
evaluation of, 343–344

Cesarean section, 522

Cholecystectomy, with bariatric surgery,
445–447

Cholecystitis, 445–447

Cholelithiasis
after gastric banding, 494
after gastric bypass, 473
preoperative screening for, 346

Coagulation status, preoperative evaluation
of, 345

Combined malabsorptive and restrictive
procedures
mechanism of action of, 500
nutritional consequences of,
505–507

Complications, 471–483
abdominal pain, 472–476, 521–522
biliary disease, 472–473, 477–478
cholelithiasis, 474, 494
excessive weight loss, 495
food bolus obstruction, 491
gastric dumping, 462
gastric prolapse, 486–489
gastroesophageal dilation, 489–490
gastrojejunal stricture, 473–474
in pregnancy, 521–523
inadequate weight loss, 494–495
internal hernias, 475–476, 521–522
intestinal obstruction, 475–476
marginal ulceration, 474–475
metabolic, 407–408, 479, 507–508
nausea and vomiting, 462, 476–478,
507, 521
nutritional. See Nutritional
consequences, of bariatric
surgery.
of laparoscopic adjustable gastric
banding (LAGB), 485–497
of Roux-en-Y gastric bypass (RYGB),
471–483
overview of, 472
plugging, 462
port problems, 492–493
suboptimal weight loss, 461–462
thromboembolism, 345, 437–438,
478–479
weight regain, 479–480
wound, 356–357, 480–481, 522

Continuous positive airway pressure, for
sleep apnea
postoperative, 438–439
preoperative, 344–345

Contouring, body, after bariatric surgery,
463

Contraceptives, bariatric surgery and, 387,
524–525
Coronary artery disease
  bariatric surgery effects on, 421
  bariatric surgery with, 420
  in obesity, 417
  preoperative screening for, 344
Cost-effectiveness, of bariatric surgery, 330–333
Cytokines, in insulin resistance, 396

D
Depression, 451–454
“Diabesity,” 400–401, 416–417
Diabetes mellitus
  bariatric surgery effects on, 419
    in obesity, 393, 399–401, 403–409,
      416–417
    in polycystic ovary syndrome, 401–402
Duodenal switch operation
  adverse events in, 373
    for metabolic conditions, 403
  laparoscopic, 367–368
  nutritional consequences of, 505–506
    use of, 358–359
Duodenoeileostomy, in duodenal switch operation, 367–368
Dyslipidemia, bariatric surgery effects on, 419
Dysphagia, after gastric bypass, 474
Dyspnea, bariatric surgery effects on, 439

E
Eating behavior, modification of, 508–509
Eating disorders, 454–458
  bariatric surgery effects on, 457
    binge eating, 454–457
    counseling on, 457–458
    night eating syndrome, 455
    postoperative weight loss and, 456–457
Echocardiography, stress, preoperative, 343
Economic aspects, of obesity and bariatric surgery, 321–338
Elderly persons
  bariatric surgery in, 385, 388–389
  insulin resistance in, 395–396
Embolism, pulmonary, 437–438, 478–479
Employment, after bariatric surgery, 459–460
Endocrine evaluation, preoperative, 343
Endotracheal intubation, difficulty with, 348
Enoxaparin, perioperative, 345
Enteric leaks, 480–481
Epworth Sleepiness Scale, preoperative, 344
Erosion, of band, in gastric banding, 491–492
Esophagitis, reflux
  bariatric surgery effects on, 447–448
    in LAGB procedure, 363
Exercise tolerance, bariatric surgery effects on, 439

F
Fatty liver disease, 346, 444–445
Fertility
  after bariatric surgery, 524
    preoperative evaluation of, 346–347
Financial impact, of obesity and bariatric surgery, 321–338
Fistula, gastrogastric, 474–475
Folate
  deficiency of, 387, 479
    metabolism of, 502–503
Food bolus, obstruction from, 491

G
Gallbladder disease
  after gastric banding, 494
    after gastric bypass, 472–473
      in obesity, 445–447
        preoperative screening for, 346
Gastric banding, adjustable. See Adjustable gastric banding (AGB).
Gastric bypass, Roux-en-Y. See Roux-en-Y gastric bypass (RYGB).
Gastric dumping, 462
Gastric prolapse, 486–489
Gastroesophageal dilation, 489–490
Gastroesophageal reflux disease
  bariatric surgery effects on, 447–448
    in LAGB procedure, 363
Gastrogastric fistula, 474–475
Gastrointestinal system
  bariatric surgery effects on, 443–450
    preoperative evaluation of, 345–346
Gastrojejunostomy
in Roux-en-Y gastric bypass, 365
structure at, 473–474

Gastroplasty, vertical banded. See Vertical
banded gastroplasty (VBG).

Genetic factors
in insulin resistance, 395
in polycystic ovary syndrome, 401

Ghrelin
bariatric surgery effects on, 406–407
in appetite control, 457

Glucose-dependent insulinotropic peptide,
406–407

Glucose-like peptide 1, 406–407

H

Health-related quality of life, 458–461

Heart disease. See Cardiovascular disease.

Heart failure
bariatric surgery effects on, 421–422
in obesity, 417–418

Heparin, perioperative, 345, 478

Hernia(s)
incisional
in gastric bypass, 480
in laparoscopic versus open
procedures, 356–357
in LRYGB procedure, 365–366
internal, 475–476, 521–522

Hypercoagulability, preoperative testing
for, 345

Hypertension, bariatric surgery effects on,
420

Hypoalbuminemia, after duodenal switch
operation, 368

Hypoglycemia, hyperinsulinemic, with
nesidioblastosis, 407–408

Hypoventilation, in obesity, 435–437

I

Ileoleostomy, in duodenal switch
operation, 367–368

Incision, hernia of
in gastric bypass, 480
in laparoscopic versus open
procedures, 356–357
in LRYGB procedure, 365–366

Incretins, in insulin resistance, 406

Infection, wound
in gastric bypass, 480
in laparoscopic versus open
procedures, 356–357

Insulin resistance
in obesity, 394–397, 403–407
in polycystic ovary syndrome, 401–402

Insulin resistance syndrome (metabolic
syndrome)
bariatric surgery effects on, 419
in obesity, 397–399, 403–409, 416–417

Insurance coverage, for bariatric surgery,
334–335

Internal hernias, 475–476, 521–522

Intestinal obstruction, 475–476

Intussusception, 475–476

Iron
deficiency of, 366–367, 479
metabolism of, 502
supplementation of, 510

Ischemia, intestinal, 476

J

Jejunoojejunostomy, in Roux-en-Y gastric
bypass, 365

L

LAGB. See Laparoscopic adjustable gastric
banding (LAGB).

Laparoscopic adjustable gastric banding
(LAGB), 359–363
adverse events in, 373
band characteristics in, 485–486
complications of, 485–497, 507–508
during pregnancy, 388
eating behavior modification after,
508–509
erosion of band after, 491–492
fatty liver disease improvement after,
445
for elderly persons, 389
for metabolic conditions, 403–404
for super obese, 389–390
gastroesophageal reflux disease
correction in, 448
hyperinsulinemic hypoglycemia after,
408
loosening band after, 491
pregnancy after, 517–521
statistics on, 358
tight band in, 490–491
Laparoscopic duodenal switch, 367–368
Laparoscopic procedures
advantages of, 354–357
gastric bypass, costs of, 330
pulmonary considerations in, 436–437
Laparoscopic Roux-en-Y gastric bypass (LRYGB), 363–367
during pregnancy, 388
for adolescents, 386
for metabolic conditions, 404–405
for super obese, 389–390
learning curve for, 371, 374
pregnancy after, 517–518, 521, 523
pulmonary function after, 355
statistics on, 358
Laparoscopic sleeve gastrectomy, 359, 368–370
LAP-BAND. See Laparoscopic adjustable gastric banding (LAGB).
Leaks, 480–481
Leptin, 396–397, 425–426
Lipid metabolism, 501
Lipotoxicity, insulin resistance in, 396, 398
Liver, nonalcoholic fatty disease of, 346, 444–445
Liver function tests, preoperative, 346
LRYGB. See Laparoscopic Roux-en-Y gastric bypass (LRYGB).

M
Malabsorptive procedures. See also specific procedures.
for metabolic conditions, 402–403
mechanism of action of, 500
nutritional consequences of, 505
types of, 326, 357–358
Malnutrition. See also Nutritional consequences.
definition of, 499
protein-calorie, 479
Marginal ulceration, after gastric bypass, 474–475
Marital function, 460–461
Metabolic problems, in obesity, 393–414
diabetes mellitus, 393, 399–401, 403–409
insulin resistance, 394–397, 403–407
insulin resistance syndrome, 397–399, 403–409
polycystic ovary syndrome, 346–347, 401–402, 524
Metabolic syndrome. See Insulin resistance syndrome (metabolic syndrome).
Minerals
deficiencies of, 503–504
supplementation of, 510–511
Mood disorders, 451–454
Mortality rate
in bariatric surgery, 339
in elderly persons, 389
risk scoring for, 347
versus no surgery, 422
versus surgeon and facility volumes, 370–372, 374
in obesity, 418
Muscles, oxidative capacity defects in, insulin resistance and, 396

N
Nausea and vomiting, 462, 476–478, 507, 521
Necrosis, intestinal, 476
Nesidioblastosis, hyperinsulinemic hypoglycemia with, 407–408
Night eating syndrome, 455
Nonalcoholic fatty liver disease, 346, 444–445
Nonalcoholic steatohepatitis, 346, 444–445
Nutritional consequences, of bariatric surgery, 499–514
calcium deficiency, 479
combined malabsorptive and restrictive, 505–507
complications and, 507–508
counseling on, 341–342
eating behavior modification and, 508–509
folate deficiency, 387, 479
iron deficiency, 366–367, 479
malabsorptive, 505
monitoring of, 511
pregnancy and, 387–388
preoperative preparation for, 509–510
preoperative status and, 503–504
protein deficiency, 368
protein-calorie malnutrition, 479
Nutritional (continued)
restrictive, 504–505
supplements in, 510–511
versus normal gastrointestinal
absorption, 500–503
versus procedure type, 499–500
vitamin deficiencies, 366–367, 387, 477, 479
zinc deficiency, 479

Obesity
bariatric surgery for. See Bariatric
surgery.
cardiovascular disease in
risk factors, 416–418
structural changes, 418–419
diabetes mellitus in, 393, 399–401, 403–409
eating disorders in, 454–458
etiology of, 325
financial impact of, 323–325
gallbladder disease in, 445–447
in pregnancy, risks of, 516
infertility in, 346–347, 524
insulin resistance in, 394–397, 403–407
insulin resistance syndrome in,
397–399, 403–409, 416–417
metabolic aspects of, 393–414
nonsurgical management of, 325–326
polycystic ovary syndrome in,
346–347, 401–402, 524
prevalence of, 322–323, 339, 353
psychiatric disorders in, 451–454
pulmonary considerations in, 433–442
quality of life in, 458–461
risks of, 321–322
suicide risk in, 454
super obese, surgical challenges in,
384–385, 389–390

Obesity hypoventilation syndrome, 435–437

Obesity paradox, 418

Obstructive sleep apnea
bariatric surgery effects on, 420, 438–439
in obesity, 417, 435–437
preoperative screening for, 344–345

Occupational function, after bariatric
surgery, 459–460

Oral contraceptives, bariatric surgery and,
378, 524–525

Oral hypoglycemic agents, for diabetes
mellitus, 401

Ovary, polycystic disease of

bariatric surgery impact on, 401–402
in obesity, 524
preoperative screening for, 346–347

P

Pain
abdominal
after gastric bypass, 472–476
in pregnancy, 521–522
joint, bariatric surgery effects on, 459
postoperative
in laparoscopic versus open
procedures, 356
pulmonary considerations in, 437

Peptide YY, bariatric surgery effects on,
406–407

Perioperative care, 339–351
interdisciplinary team for, 341–342
nutritional counseling in, 341–342
preoperative assessment in, 340–341
psychologic evaluation in, 342
pulmonary considerations in, 436–437

Pickwickian syndrome, 435–437

Plastic surgery, after bariatric surgery, 463

Polycystic ovary syndrome
bariatric surgery impact on, 524
in obesity, 401–402
preoperative screening for, 346–347

Port problems, after gastric banding,
492–493

Postoperative pain
in laparoscopic versus open
procedures, 356
pulmonary considerations in, 437

Preconception, bariatric surgery and, 378

Pregnancy
after bariatric surgery, 515–528
abdominal pain in, 521–522
adjustable band management in,
520–521
cesarean section in, 522–523
improved fertility and, 524
nutrition for, 519–520
outcomes of, 517–519
prevention of, 524–525
bariatric surgery during, 387–388
obesity risks in, 516

Preoperative period
assessment in, 340–341
bariatrician activities in, 342–347
nutritional preparation in, 509–510
vitamin deficiencies in, 503–504
Protein
  deficiency of, 368
  metabolism of, 500–501
Protein-calorie malnutrition, 479
Psychiatric disorders, 451–454
Psychologic evaluation, preoperative, 342
Pulmonary dysfunction. See Respiratory dysfunction.
Pulmonary embolism, 437–438, 478–479
Pulmonary hypertension, bariatric surgery effects on, 439

Q
Quality of life, 458–461

R
Respiratory dysfunction, in obesity
  asthma, 434–435
  obesity hypoventilation syndrome, 435–436
  obstructive sleep apnea. See Obstructive sleep apnea.
  pathophysiology of, 433–434
  perioperative considerations in, 436–437
  postoperative, 438–439
  pulmonary embolism risk and, 437–438
Respiratory system
dysfunction of. See Respiratory dysfunction.
  function of, after laparoscopic procedures, 354–355
  preoperative evaluation of, 344–345
Restrictive procedures. See also specific procedures.
  cardiovascular effects of, 424
  for metabolic conditions, 402–403
  mechanism of action of, 500
  nutritional consequences of, 504–505
  types of, 326, 357–358
Roux-en-Y gastric bypass (RYGB)
  cardiovascular effects of, 424
  complications of, 373, 471–483, 507–508
  abdominal pain, 472–476
  metabolic, 479
  nausea and vomiting, 476–478
  nutritional, 479
  thromboembolism, 478–479
  weight regain, 479–480
  wound, 480–481
cost-effectiveness of, 331–332
costs of, 330
eating behavior modification after, 508–509
effectiveness of, 326–328
fatty liver disease improvement after, 444–445
for metabolic conditions, 403, 407
gastroesophageal reflux disease correction in, 447–448
in cardiovascular disease, 420
insurance coverage of, 335
  mechanism of action of, 358
  nutritional consequences of, 505–506
  pregnancy after, 517–518, 521, 523
  pulmonary function after, 355
  statistics on, 358
RYGB. See Roux-en-Y gastric bypass (RYGB).

S
Sexual function, 460–461
Skin, sagging, after bariatric surgery, 463
Sleep apnea
  bariatric surgery effects on, 420, 438–439
  in obesity, 417, 435–437
  preoperative screening for, 344–345
Sleeve gastrectomy, laparoscopic, 359, 368–370
Small intestine
  leaks from, 480–481
  obstruction of, 475–476
Steatohepatitis, nonalcoholic, 346, 444–445
Stress, in laparoscopic versus open procedures, 356
Stress echocardiography, preoperative, 343
Stroke risk
  bariatric surgery effects on, 422
  in obesity, 418
Sudden cardiac death, in obesity, 418
Suicide risk, in obesity, 454
Supplements, after bariatric surgery, 510–511
Surgery, bariatric. See Bariatric surgery.
Systemic stress response, in laparoscopic versus open procedures, 356
Thromboembolism, 345, 437–438, 478–479

Ulceration, marginal, after gastric bypass, 474–475

Ursodeoxycholic acid, for gallstone dissolution, 446–447

VBG. See Vertical banded gastroplasty (VBG).

Venothromboembolism
  postoperative, 437–438, 478–479
  preoperative screening for, 345

Ventricular ectopy, in obesity, 418

Vertical banded gastroplasty (VBG)
  cardiovascular effects of, 424
  eating behavior modification after, 508–509
  effectiveness of, 326–329
  failure of, 357–358
  pregnancy after, 518

Vitamin(s)
  deficiencies of

after bariatric surgery, 387, 477, 479
  after LRYGB procedure, 366–367
  preoperative, 503–504
  metabolism of, 501–502
  supplementation of, 510–511

Volvulus, 475–476

Vomiting. See Nausea and vomiting.

Weight loss
  excessive, after gastric banding, 495
  inadequate, after gastric banding, 494–495
  postoperative, binge eating and, 456–457
  suboptimal, 461–462, 479–480

Wernicke’s polyneuropathy, 479

Wound complications, 356–357, 480–481, 522

Zinc
  deficiency of, 479
  supplementation of, 510