

INDEX

Note: *Italicized page locators indicate figures; tables are noted with t*

A

- Abdominal scan, 138
- α blockade, preoperative management, 140
- ACC. *See* Adrenocortical carcinoma
- ACCORD, 294
- Acromegaly
 - clinical presentation, 19–20
 - diagnostic evaluation, 20–21
 - management, 21–24
 - medical therapy options, 24*t*
 - pathophysiology, 19
 - physical exam, 20
 - signs and symptoms of, 20
 - testing for, 23*t*
- ACTH. *See* Adrenocorticotrophic hormone
- ACTH-dependent Cushing's syndrome, 123, 126
- ACTH-independent Cushing's syndrome, 123, 126
- Actonel, 192*t*, 198
- Acute adrenal crisis, AI, 120
- Acute coronary syndrome, DM in, 300
- Acute illness, NTIS, 70
- Acute treatment of hypercalcemia, 172
- ADA. *See* American Diabetes Association
- ADA Standards of Medical Care in Diabetes (2013), 298
- Adenohypophysis. *See* Anterior pituitary
- ADH. *See* Antidiuretic hormone
- Adipocytes, release in, 339–340
- Adipokines, 340
- Adiponectin, 340
- Adipose tissue endocrinology, essentials of
 - adiponectin, 340
 - derived efferent signals, 340
 - endocrine regulation of lipid storage, 339–340
 - leptin, 340
 - lipodystrophies, 342
 - obesity, 341
 - types of, 339
- Adjuvant mitotane for tumors, 157
- Adjuvant radiotherapy
 - for adrenocortical carcinoma, 158
 - for craniopharyngiomas, 35
- Adrenal adenoma, 127
- Adrenal androgens, 115
 - replacement, 119
- Adrenal cortex, 113
- Adrenalectomy, 96
- Adrenal essentials
 - anatomy, 113
 - function of hormones, 115–116
 - histology, 113
 - hormone synthesis, 113, 114
 - regulation of adrenal function, 114–115
- Adrenal incidentaloma, 136
 - adrenal masses, 149
 - benign vs. malignant adrenal masses, 151, 152
 - hormone hypersecretion assessment, 149
 - patients
 - evaluation and management with, 151, 152
 - history and follow-up of, 153
 - pheochromocytoma, 149–150
 - primary aldosteronism, 150
 - SCS, 150

- Adrenal insufficiency (AI)
acute adrenal crisis, 120
with AITD, 362
causes of, 117
chronic treatment of, 119–120
critical illness-related
corticosteroid
insufficiency, 121
diagnosis of, 118–119
HC dosing conditions, 120
patient education and “sick day
management,” 120
symptoms and finding in, 117*t*
- Adrenal medulla, 113
- Adrenal steroidogenesis, 114
- Adrenal ultrasound, 235
- Adrenocortical carcinoma (ACC)
adjuvant mitotane/radiotherapy
and follow-up, 157–158
advanced disease, 158
clinical presentation, 155–157
epidemiology and
pathophysiology, 155
hormonal evaluation, 156*t*
initial therapy and surgical
approach, 157
mitotane effect on endocrine
function, 158–159
pathological evaluation, 157
staging for adult, 156*t*
- Adrenocorticotrophic hormone
(ACTH)
deficiency, 9, 9*t*
manifestations of, 8*t*
- Adult care, transition from pediatric
to, 30
- Adult growth hormone deficiency
(AGHD)
causes of, 25
clinical presentation, 25–26, 26*t*
diagnosis, 27
GH replacement therapy in,
recommendations for, 29*t*
imaging, 29
management, 29
provocative dynamic tests for, 28*t*
signs and symptoms of, 26*t*
- Adults
classification of hypoglycemia in,
321–322
DM screening in, 259
Adult Treatment Panel III, 299*t*
ADVANCE, 294
AGHD. *See* Adult growth hormone
deficiency
AI. *See* Adrenal insufficiency
AIT. *See* Amiodarone-induced
thyrotoxicosis
AITD. *See* Autoimmune thyroid
disease
Aldosterone antagonists, 150
Aldosterone-producing
adenoma, 150
Alemtuzumab, 76
Alendronate (Fosamax), 192*t*, 197
Alpha-glucosidase inhibitors, 346*t*
Aluminum-based antacids, 74
American Diabetes Association
(ADA)
for DM, 259, 264–266
guidelines for ill patients, 300
lipid management
recommendations, 298*t*
American Thyroid Association (ATA),
89, 90
Aminobisphosphonates, 197
Amiodarone
hypothyroidism, 75
pharmacology, 75
Amiodarone-induced thyrotoxicosis
(AIT)
classification, 75
diagnosis, 75
management, 75–76
Amylin mimetic (pramlintide), 346*t*
Anaplastic thyroid cancers (ATCs)
clinical presentation, 97
diagnostic evaluation, 98–99
differences between PDTC
and, 99*t*
external radiation therapy,
100–101
on FNAB, 98*t*
management, 100

- pathophysiology, 97
- signs and symptoms of, 98*t*
- surgery, 100
- treatment options and suggestions, 101*t*
- Anatomical imaging of
 - pheochromocytoma, 138
- Androgen replacement
 - adrenal, 119
 - risks of, 213–215, 214*t*–215*t*
- Androgens, 223
- Angiotensin-converting enzyme
 - inhibitors (ACEIs), 297, 304
- Angiotensin-II receptor, 304
- Anorgasmia, 220
- Anterior pituitary, 3
 - cells and hormones, 5–6
 - control of, 4
- Adrenal medical therapy, 128
- Antiandrogens, 230, 236–237
- Antibiotic therapy for STI, 317
- Antibody testing, glycemia
 - in DM, 260
- Anticonvulsant therapy, 290
- Antidepressants, 290
- Antidiabetic medications,
 - noninsulin, 262*t*–263*t*
- Antidiuretic hormone (ADH)
 - deficiency, 9*t*, 10
 - manifestations of, 8*t*
- Antihyperglycemic medications,
 - cardiovascular considerations of, 295*t*–296*t*
- Antiplatelet therapy, 299
- Appendiceal carcinoids tumors, 357*t*
- APS. *See* Autoimmune polyglandular syndromes
- Aredia, 197
- Arginine test for GH secretion
 - in adults, 28*t*
- Arginine vasopressin receptor (AVPR) antagonists, 40
- ARR testing. *See* Plasma aldosterone/renin ratio testing
- Arterial calcium stimulation, 323
- Arteries, blood supply, 113
- Artificial hypoglycemia, 322
- Aspirin therapy, 299
- Asymptomatic primary
 - hyperparathyroidism, parathyroidectomy in, 171, 172*t*
- ATA. *See* American Thyroid Association
- ATCs. *See* Anaplastic thyroid cancers
- Atherosclerosis, 293, 294
- ATP-binding cassette transporter A1 (ABCA1), 329
- ATP III LDL-C, goals and cutpoints for therapy, 335*t*
- Autoantibody, screening of, 362–363
- Autocrine regulation, 204
- Autoimmune adrenalitis, 117
- Autoimmune polyendocrinopathy–candidiasis–ectodermal dystrophy syndrome (APECED), 364
- Autoimmune polyglandular syndromes (APS), 361
 - diseases associated with, 363*t*
 - type 1 (APS1)
 - clinical presentation of, 364–365
 - diagnosis of, 365
 - features in, 361*t*
 - major and minor manifestations associated with, 364*t*
 - management of, 365
 - type 2 (APS2)
 - autoimmune conditions associated with, 362*t*
 - clinical presentation of, 361–362
 - diagnosis of, 362–363
 - features in, 361*t*
 - management of, 364
- Autoimmune thyroid disease (AITD), AI with, 362
- Autoimmune thyroiditis, 103

Autosomal recessive condition.
See autoimmune polyendocrinopathy–candidiasis–ectodermal dystrophy syndrome (APECED)

B

Barbiturates, 74
Bariatric surgery for obesity, 347
Basal insulin, 264–265
 β blockade, preoperative management, 140
Behavioral weight loss (BWL), 345
Beige cells, 339
Bexarotene, 77
Bicarbonate, hyperglycemic emergencies management, 274
Biguanides, 295*t*, 346*t*
Bilateral adrenalectomy, Cushing's syndrome, 128
Bilateral inferior petrosal sinus sampling (IPSS), 127
Bilateral primary aldosteronism, 131, 133, 134
Bile acid–binding resins, 337
Bile acid sequestrants, 74
Biliopancreatic diversion/duodenal switch for obesity, 347*t*
Biopsy, 358
Blood glucose control, 287, 304, 305
Blood pressure (BP), 136
 close monitoring, 141
 control, 287
Blood supply, 3, 113
Blood tests for male infertility, 218–219
BMD. *See* Bone mineral density
Body mass index (BMI), 259, 343–344
Bolus insulin, 265
Bone
 calcitonin, 167
 metabolism, 190

Paget's disease of. *See* Paget's disease of bone

PTH, 165
Bone mineral density (BMD)
 by DEXA, 189*t*
 maintenance of, 242
Boniva, 192*t*
Breastfeeding, 306
Brite cells, 339
Bronchial carcinoids tumors, 357*t*
Bronchoscopy, 358
Brown adipose tissue, 339
Bulbourethral glands, 202
Burned out Paget's disease, 195
BWL. *See* Behavioral weight loss

C

CAH. *See* Congenital adrenal hyperplasia
Calcidiol, 165
Calcifediol, 165
Calcitonin, 96, 167, 192*t*
Calcitonin receptor (CTR), 167
Calcium balance, maintenance of, 163–164
Calcium carbonate, 73
Calcium gluconate, 323
Calcium infusion, 183
Calcium intakes, 163, 164*t*
Calcium metabolism essentials
 calcitonin, 167
 calcium balance, maintenance of, 163–164
 PTH, 164–165
 vitamin D, 165–166
Calcium-sensing receptor (CaSR), 163
Carbamazepine, 74
 treatment for central DI, 45
Carcinoembryonic antigen (CEA), 96
Carcinoid syndrome, 359
Carcinoid tumors
 clinical presentation, 356–357, 357*t*
 diagnosis, 357–358

- general management
 - approach, 358
 - hepatic-predominant metastatic disease treatment, 359
 - hormonal hypersecretion
 - treatment symptoms of, 358–359
 - pathophysiology, 355
 - treatment options for control of, 359–360
- Cardiovascular complications, 196
- Cardiovascular disease (CVD), 311
- management in prediabetes, 312
 - in type 2 diabetes
 - antiplatelet therapy, 299
 - CHD screening, 300
 - DM in acute coronary syndrome, 300
 - dyslipidemia, 298
 - glycemic control, 294
 - hypertension management, 297
 - lipid guidelines, 298, 298*t*
 - NCEP, 299*t*
 - overview, 293
 - pathophysiology, 293, 294
 - risk factors, 300
- Cardiovascular health, maintenance of, 243
- Carney complex, 86
- Catecholamine
 - neurotransmitters, 221
- Catecholamine-producing tumors, 135
- Catecholamines
 - binding to β -adrenergic receptors, 340
 - function of adrenal hormones, 116
 - synthesis, 113
- CBT. *See* Cognitive behavioral therapy
- C-cell hyperplasia (CCH), 93
- C cells, 49
- CEA. *See* Carcinoembryonic antigen
- Central diabetes insipidus, 43
- etiologies of, 43*t*
 - interpretation of test results, 44
 - treatment, 45
- Central hypothyroidism, causes of, 63
- Cerebral edema, 275
- Cervical factors, female infertility, 245, 246, 249
- CETP. *See* Cholesterol ester transport protein
- CGA. *See* Chromogranin A
- Charcot neuroosteoarthropathy
 - background, 317–318
 - diagnosis, 318
 - management, 318–319
 - pathophysiology, 318
- CHD. *See* Coronary heart disease
- Chemotherapy, 141
- Chlorpropamide, treatment for central DI, 45
- Cholecalciferol, 165
- Cholesterol, 331
 - absorption inhibitor, 337
 - lipoproteins carrying, 325
- Cholesterol esters (CE), 325
- Cholesterol ester transport protein (CETP), 327, 329
- Cholestyramine, 74
- Chromogranin A (CGA), 357
- Chronic hypercalcemia, symptoms of, 170, 170*t*
- Chronic illness, NTIS, 70
- Chronic mucocutaneous candidiasis (CMC), 364
- Chronic treatment
 - of AI, 119–120
 - for hypercalcemia, 172
- Chvostek's sign, 182
- Chylomicrons (CM), 326, 331, 339
- Clofibrate, treatment for central DI, 45
- Clomiphene
 - citrate, 248
 - resistance to, 248
- CMC. *See* Chronic mucocutaneous candidiasis
- CNS stimulants/appetite suppressants, 346*t*
- Cognitive behavioral therapy (CBT), for obesity, 345

- Colonoscopy, 358
Combined oral contraceptives, 230
Computed tomography (CT)
 scans, 156
 abdominal, 138
 adrenal, 126, 133
 anatomical imaging, 138
 of chest, 94
 of neck, 57, 99
 for NET liver metastases, 358
 parathyroid, 177
Congenital adrenal hyperplasia (CAH)
 clinical presentation, 144–145
 laboratory testing and diagnostic evaluation, 145, 145*t*
 management, 145–147
 pathophysiology, 143–144, 143
 types of, 144
Congenital hypothyroidism, 63
Conivaptan, 40
Connecting peptide (C-peptide), 253
 glycemia in DM, 260
Coronary heart disease (CHD),
 screening, 300
Correction-dose insulin, 308
Corticotrophin-releasing hormone (CRH) testing, 127
Corticotrophs, 6
Cosmetic therapies for
 hirsutism, 237
Cosyntropin stimulation test (CST), 118
Counter-regulatory hormones, 255
Cowden's syndrome, 86
CPA. *See* Cyproterone acetate
C-peptide. *See* Connecting peptide
Craniopharyngiomas
 background, 34
 management, 35
 presentation and evaluation, 35
CST. *See* Cosyntropin stimulation test
Cushing's disease, 126–128
Cushing's syndrome, 95
 causes, management of, 127–128
 clinical features, 123
 diagnostic strategy, 124–125
 differential diagnosis, 126–127
 etiologies, 123
 standard diagnostic tests for, 125–126
Cyproterone acetate (CPA), 236
Cytokines, 69
Cytotoxic chemotherapy, 359
- D**
Debulking surgery, 141
Deficient hormones, manifestations of, 8*t*
Demeclocycline, managing SIADH, 39
Denosumab (Prolia), 192*t*
DEXA. *See* Dual-energy X-ray absorptiometry
Dexamethasone, 118
DI. *See* Diabetes insipidus
Diabetes
 hypoglycemia in
 acute treatment of, 279
 classification of, 277
 etiologies, 277–278
 prevention of, 279
 preexisting. *See* Preexisting diabetes
 in pregnancy
 classification, 303
 diagnosis of GDM, 303–304
 management of, 304–305
 postnatal care, 305–306
 preconception care, 304
 prenatal considerations for, 305
 risk factors for GDM, 303
 type 1
 glycemic management in, 264–265
 TDD of, 264
 type 2
 cardiovascular disease in.
 See Cardiovascular disease, in type 2 diabetes

- glycemic management in, 265–267
- Diabetes insipidus (DI)
 - clinical manifestations, 43
 - definition, 43
 - diagnosis, 44
 - etiologies of, 43*t*
 - treatment, 45
 - types of, 43
- Diabetes mellitus (DM), 255
 - in acute coronary syndrome, 300
 - ADA for, 259
 - background, 257
 - drug-induced, 258
 - gestational, 259
 - glycemia in, 260
 - pharmaceutical options for, 261*t*
 - type 1
 - glycemic management in, 264–265
 - pathophysiology and clinical presentation of, 257
 - type 2
 - glycemic management in, 265–266
 - pathophysiology and clinical presentation of, 257–258
 - recommendations for delay, 312
- Diabetes prevention
 - associated conditions, 311
 - clinical presentation, 311
 - diagnostic evaluation, 311*t*
 - pathophysiology, 311
- Diabetic cardiomyopathy, 294
- Diabetic foot ulceration and infection
 - background, 315
 - long-term care, 317
 - management of, 316
 - osteomyelitis, 317
 - pathophysiology, 315–316
- Diabetic ketoacidosis (DKA), 257
 - diagnosis, 272*t*
 - evaluation, 272, 272*t*
 - laboratory abnormalities, 273
 - management, 273–274, 274*t*
 - complications of, 274–275
 - pathophysiology, 271
 - resolution of, 275
 - transition from IV insulin infusion, 275
 - typical precipitating factors, 272
- Diabetic nephropathy
 - clinical presentation, 286
 - diagnostic evaluation, 286
 - epidemiology, 285
 - management, 287
 - pathophysiology, 285
 - risk factors, 285
 - stages of, 286*t*
- Diabetic retinopathy
 - clinical presentation, 281
 - diagnostic evaluation, 281
 - management, 282
 - nonproliferative and proliferative, 281
 - pathophysiology, 281
 - retinal findings, 282*t*
- Diet
 - for metabolic syndrome, 350
 - for obesity, 345
- Dietary fiber, 346
- Differentiated thyroid cancer (DTC), 85
 - features indicating risk of recurrence of, 90*t*
 - initial treatment of, 89–90
- Diminished ovarian reserve (DOR), 249
- Discontinue oral antidiabetic agents, 307
- Distal sensory neuropathy, 316
- Distal symmetrical neuropathy, 315
- Distal symmetric polyneuropathy (DSPN)
 - clinical presentation, 289
 - management of, 290
 - pathophysiology, 289
 - screening and monitoring of, 289–290
- DKA. *See* Diabetic ketoacidosis
- DM. *See* Diabetes mellitus

- Dopamine, 77
Dopamine agonists
 for acromegaly, 22, 24*t*
 for nonfunctioning
 macroadenomas, 33
 for ovulation, 16
 treatment for
 hyperprolactinemia, 15
DOR. *See* Diminished ovarian reserve
Doxazosin, 140
DPP-4 inhibitors, 296*t*
Drospirenone, 230, 237
Drug-induced DM, 258
Drugs affecting thyroid function
 absorption, 73–74
 causing central
 hypothyroidism, 77
 directly, 75–77
 hormone metabolism, 74
DSPN. *See* Distal symmetric
 polyneuropathy
DTC. *See* Differentiated thyroid
 cancer
Dual-energy X-ray absorptiometry
 (DEXA), BMD by, 189*t*
Dysbetalipoproteinemia, 334
Dyslipidemia, 298
- E**
Early postnatal period, 202
EBRT. *See* External beam radiation
 therapy
Ectopic ACTH syndrome, 128
Eflornithine cream, hirsutism, 237
Ejaculatory duct, 202
Ejaculatory dysfunction, 217, 219
11-hydroxylase deficiency (11OHD),
 144, 147
Endocrine
 function, 201
 in MEN-1 and MEN-2, 366*t*–367*t*
 pancreas, 253–255
Endocrinopathies, 217
 therapies for, 219–220
Endogenous fat. *See* Transport
 of hepatic fat
Endometrium, menstrual cycle, 224*t*
Endoscopic ultrasound, 358
Energy expenditure,
 calculating, 343
Energy intake, calculating, 343
Enteral feeding, 308
Enzymes in steroid
 metabolism, 340
Epididymis, 202
Erectile dysfunction, 220
Ergocalciferol, 165
Estradiol, 222
Estrogen, 221, 222
 HRT, 192*t*
 skeletal protection, 178
 symptoms of deficiency, 240
Euvoemia, 38
Everolimus, mTOR inhibitor, 360
Evista, 192*t*
Exercise
 for metabolic syndrome, 350
 for obesity, 345
Exocrine function, 201
Exogenous fat. *See* Transport
 of dietary fat
External beam radiation therapy
 (EBRT), 85, 96, 141
Extracellular fluid (ECF) volume,
 classification of
 hypoosmolality by, 38
Ezetimibe, 337
- F**
Factitious hypoglycemia, 322
Factitious thyrotoxicosis, 53*t*
Familial combined
 hyperlipidemia, 333
Familial hyperaldosteronism
 type I, 131
 type II, 131
Familial hypercholesterolemia, 333
Familial hyperchylomicronemia, 333
Familial hypertriglyceridemia, 334
Familial medullary thyroid cancer
 (FMTC), 93
Family planning, 243
Fast-acting insulin, 308*t*
Fasting hypoglycemia, 321

- Female infertility. *See also* Male infertility
 causes of, 245
 clinical presentation, 246
 diagnostic evaluation, 246–247
 management, 247–249
 pathophysiology, 245
 preconception counseling, 247
 treatment of, 248
- Female reproduction essentials
 development in embryo, 221
 menopause, 224–226
 menstrual cycle hormones,
 221–224, 223*t*–224*t*,
 225–226
 puberty, 221
- Ferriman Gallwey hirsutism scoring
 system, 234, 235
- Fibrates. *See* Fibric acid derivatives
- Fibric acid derivatives, 337
- Fibroblast growth factor (FGF), 5
- Finasteride, 237
- Fine needle aspiration (FNA),
 81, 151
- 5-Hydroxyindole acetic acid
 (5-HIAA), 357
- Fludrocortisone suppression
 testing, 133
- Fluid restriction, managing
 SIADH, 39
- Flutamide, 237
- FMTC. *See* Familial medullary
 thyroid cancer
- FNA. *See* Fine needle aspiration
- Follicles, 49
- Follicular stimulating hormone
 (FSH), 222
 deficiency, 9*t*, 10
 manifestations of, 8*t*
- Follicular thyroid carcinoma
 (FTC), 85
 clinical presentation and
 diagnosis, 87
 definition, 85
 epidemiology, 85
 long-term management, 90–91
 pathogenesis, 86
 pathological features, 86–87
 persistent/recurrent disease
 management, 91–92
 prognosis, 87–88
 risk factors, 85–86
 TNM classification, 88
- Forteo, 192*t*
- Fosamax, 192*t*, 197
- Fracture, risk factors for, 191*t*
- Frederickson's classification of
 lipoprotein disorders, 333*t*
 type I, 333
 type II, 333
 type III, 334
 type IV, 334
 type V, 334
- Free cholesterol (FC), 325
- Free fatty acids, 339
- Free thyroxine index (FTI), 52*t*
- FTC. *See* Follicular thyroid
 carcinoma
- FTI. *See* Free thyroxine index
- Fuel homeostasis, insulin
 roles in, 255
- Fuel metabolism, essentials,
 253–255
- Functional imaging,
 pheochromocytoma, 138
- ## G
- Gastric banding procedure for
 obesity, 347*t*
- Gastric bypass procedure for
 obesity, 347*t*
- Gastric carcinoids tumors, 357*t*
- Gastrinoma, 359
- GDM. *See* Gestational diabetes
 mellitus
- Genetic testing,
 pheochromocytoma,
 138, 139
- Gestation, 202
- Gestational diabetes mellitus
 (GDM), 259
 diagnosis of, 303–304
 risk factors for, 303
 women with, 305–306

- GH receptor antagonist, 22, 23, 24*t*
- Glucagon
- actions of, 254
 - secretion, hypoglycemia lack, 278
 - test for GH secretion in adults, 28*t*
- Glucagon-like peptide 1 (GLP-1)
- analogs, 346*t*
 - receptor agonists, 296*t*
- Glucagonoma, 359
- Glucocorticoid-remediable aldosteronism (GRA), 131, 133, 134
- Glucocorticoids, 77, 114, 115, 237, 309
- equivalency chart for, 120*t*
 - replacement of AI, 119
- Glucose, 307, 339
- Glycemia in DM, diagnosis and management of, 260
- Glycemic control
- in type 1 diabetes, 264–265
 - in type 2 diabetes, 265–266, 294
- Glycemic issues in hospitalized patients
- in ICU, 309
 - outside ICU, 307–309
- Goiter effects, lithium, 76
- Gonadotrophs, 6
- Gonadotropin, 249
- Gonadotropin-releasing hormone (GnRH), 221, 237
- regulation of, 203
- GRA. *See* Glucocorticoid-remediable aldosteronism
- Granulomatous disease, 172
- Graves' disease, 53*t*
- Growth hormone (GH)
- manifestations of, 8*t*
 - measurement of, 20–21
 - replacement therapy
 - in AGHD, 29*t*
- Growth hormone deficiency (GHD), 25–26, 26*t*
- in adults. *See* Adult growth hormone deficiency
- Growth hormone–releasing hormone (GHRH), 28*t*
- Gynecomastia
- clinical presentation, 206
 - diagnostic evaluation, 206
 - history and physical examination in, 206*t*
 - management, 207
 - pathogenesis of, 205*t*
- ## H
- HAAF. *See* Hypoglycemia-associated autonomic failure
- HDDST. *See* High-dose dexamethasone test
- HDL. *See* High-density lipoprotein
- Hemoglobin A1c, glycemia in DM, 260
- Hepatic cholesterol pool, determination of, 328
- Hepatic-predominant metastatic disease, 359
- Heterogeneous syndrome, 227
- HHS. *See* Hyperosmolar hyperglycemic state
- High-density lipoprotein (HDL), 325, 331, 332
- High-dose dexamethasone test (HDDST), 126
- Highly active antiretroviral therapy (HAART), 342
- High-risk patients, benefit from metformin, 312
- Hirsutism
- clinical presentation, 233–235
 - diagnostic evaluation, 235
 - management, 236–238
 - pathophysiology, 233
 - in PCOS, 230
- HMG-CoA reductase inhibitors, 335–337, 336*t*
- Hormonal assessment for pituitary hypofunction, 9*t*
- Hormone hypersecretion
- assessment for, 149
 - biochemical evaluation for, 153
 - treatment symptoms of, 358–359

- Hormone replacement, 9–10
thyroid, 71, 73–77
- Hormone replacement therapy (HRT), 242
for females, 10
- Hormones
counter-regulatory, 255
of menstrual cycle, 221–224,
223*t*–224*t*
secretion, adrenal
incidentalomas, 153
- Hospitalized patients outside, ICU,
307–309
- HPA axis. *See* Hypothalamic-pituitary-adrenal axis
- HPT axis. *See* Hypothalamic-pituitary-thyroid (HPT) axis
- H² receptor antagonists, 73
- Hungry bone syndrome, 181
- Hurthle cell cancer, 87
- Hydrocortisone (HC), 146
dosing conditions of AI, 120
IV, 67
- Hyperandrogenism, 227–228
OCPs reducing, 236
- Hypercalcemia
clinical presentation, 170
crisis, 178
diagnostic evaluation, 170–172
incidence, 169
management, 172
pathophysiology, 169–170
- Hyperchloremic acidosis, 275
- Hyperfunction, screening for, 32
- Hyperglycemia for patients in ICU, 309
- Hyperglycemic emergencies
diagnosis, 272*t*
evaluation, 272, 272*t*
laboratory abnormalities, 273
management, 273–274, 274*t*
complications of, 274–275
pathophysiology, 271
resolution of, 275
transition from IV insulin
infusion, 275
typical precipitating factors, 272
- Hyperosmolar hyperglycemic state (HHS)
diagnosis, 272*t*
evaluation, 272, 272*t*
laboratory abnormalities, 273
management, 273–274, 274*t*
complications of, 274–275
pathophysiology, 271
resolution of, 275
transition from IV insulin
infusion, 275
typical precipitating
factors, 272
- Hyperparathyroidism, 94
clinical presentation, 176
diagnostic evaluation,
176–178
management, 178
pathophysiology, 175
- Hyperprolactinemia, 220
pathophysiology, 13
symptoms due to, 13*t*, 14
- Hypertension, 131, 141
management, 297
monitor for, 312
- Hyperthyroidism
clinical features of, 54
in pregnancy
clinical presentation, 106
diagnosis, 106
etiology and
pathophysiology, 105
laboratory evaluation, 106
management, 107
subclinical, 60–61
- Hypertonic saline, managing
SIADH, 39
- Hypertrichosis, 233
- Hypervolemia, 38
- Hypocalcemia
clinical presentation, 182
diagnostic evaluation scheme
for, 183, 183
laboratory testing, 182–183
management, 183, 184
pathophysiology, 181
specific causes, 181

- Hypoglycemia, 253, 274
development of, 271
disorders
classification in adults,
321–322
defined, 321
diagnosis, 322
imaging, 323
neurogenic vs. neuroglycopenic
symptoms, 321*t*
treatment, 323
lack of, 278
in patients with diabetes
acute treatment of, 279
classification of, 277
definition, 277
etiologies of, 277
prevention of, 279
symptoms of, 277
treatment of, 268, 300
- Hypoglycemia-associated
autonomic failure (HAAF),
risk factors for, 278
- Hypogonadism, prevalence of,
211–212
- Hypokalemia, 131, 274
- Hyponatremia treatment guidelines
for SIADH, 41
- Hypoosmolality
classification by ECF
volume, 38
clinical presentation, 37
diagnostic evaluation, 38
pathophysiology, 37
- Hypophyseal portal vessels, 3
- Hypopituitarism
background, 7
causes of, 7
clinical presentation, 7–8
diagnostic evaluation, 9
hormone replacement, 9–10
pathophysiology, 7
screening for, 32
surgery for, 33
- Hypotension, 141
- Hypothalamic-pituitary-adrenal
(HPA) axis, 115
- Hypothalamic-pituitary-testicular
axis, 203
in male, 209, 209
- Hypothalamic-pituitary-thyroid
(HPT) axis, 69, 70
- Hypothalamopituitary disease, 219
- Hypothyroidism, 75, 76
background, 63–64
clinical presentation of, 64*t*
diagnosis, 64
myxedema coma, 66–67
in pregnancy
clinical presentation, 103
diagnosis, 104
etiology and
pathophysiology, 103
laboratory evaluation, 104
management, 104–105
screening for, 103
subclinical, 66
treatment, 65–66
- Hypovolemia, 38
- I**
- Ibandronate (Boniva), 192*t*
- ICU
hospitalized patients outside,
307–309
patients in, 309
- Idiopathic hirsutism, 233
- Idiopathic hyperandrogenemia, 233
- IDL. *See* Intermediate density
lipoprotein
- Imatinib, 74
- Immobilization, 172
- Impaired Fasting Glucose (IFG), 311
- Impaired Glucose Tolerance
(IGT), 311
- IMRT. *See* Intensity-modulated
radiation therapy
- Inactivating enzyme. *See* Type 3
deiodinase (D3) catalyses
- Infection, diabetic foot, 315–317
- Infertility, 146
female. *See* Female infertility
male. *See* Male infertility
in PCOS, 231

- Insulin**
actions of, 253
defects, 257–258
basal, 264, 265
bolus, 265
cardiovascular considerations
of, 296*t*
excess, 277
formulations, 261*t*
hyperglycemic emergencies
management, 274
initial dose of, 309
measurements, 253
preparations of, 308*t*
protocol for initiating, 308
roles in fuel homeostasis, 255
TDD of, 275
use in pregnancy, 305
- Insulin-like growth factor-1 (IGF-1)**
testing, 20
- Insulin-lowering medications**, 237
- Insulinoma**, 358–359
- Insulin pump**. *See* SQ insulin
- Insulin resistance**, pathophysiology
of, 293
- Insulin-responsive glucose
transporter (Glut4)**, 339
- Insulin therapy**, 305
multiple-dose, 264
- Insulin tolerance test (ITT)**
for AGHD, 27, 28*t*
for diagnosis of AI, 118
- Intensity-modulated radiation
therapy (IMRT)**, 100
- Interferon- α** , 76–77, 359
- Interleukin-2**, 77
- Intermediate-acting insulin**, 308*t*
- Intermediate density lipoprotein
(IDL)**, 327, 331, 332
- Interpretation of test for diagnosis
of DI**, 44
- Interstitial compartment**,
testes, 201
- Intestinal fat absorption
inhibitor**, 346*t*
- Intraoperative hypertensive crisis**,
140–141
- Intrauterine insemination
(IUI)**, 249
- Intravenous (IV) fluids**,
hyperglycemic emergencies
management, 273–274
- Intravenous (IV) insulin infusion**,
transition from, 275
- Intravenous (IV) insulin protocols
for patients in ICU**, 309
- Intravenous (IV) saline infusion
testing**, 132
- In vitro fertilization (IVF)**, 249
- Iodine**, 53*t*
deficiency, 63
- Islets of Langerhans**, 253
- Isotonic saline**, managing
SIADH, 39
- ITT**. *See* Insulin tolerance test
- IUI**. *See* Intrauterine insemination
- IVF**. *See* In vitro fertilization
- K**
- Ketoacidosis**
development of, 271
diabetic. *See* Diabetic
ketoacidosis
- Kidney**
calcitonin, 167
PTH, 165
- L**
- Lactotrophs**, 5
- LADA**. *See* Latent autoimmune
diabetes of adults
- Lanthanum carbonate**, 73
- Laser photocoagulation**, 282
- Latent autoimmune diabetes
of adults (LADA)**, 258
- LCAH**. *See* Lipoid CAH
- LDL**. *See* Low-density lipoprotein
- LDLR**. *See* Low-density lipoprotein
receptor
- Leptin**, 340
- Leydig cells**, 201
- Lifestyle modifications**, treatment
for obesity, 345

Lipid

- control, 287
- disorders
 - components, 331
 - pharmacologic therapies, 335, 336*t*, 337–338
 - TC and LDL cholesterol, classification, 331–335
 - essentials, 325–329
 - guidelines, 298, 298*t*
- Lipid-poor adrenal tumors, 151
- Lipodystrophies, 342
- Lipoid CAH (LCAH), 144, 147
- Lipomastia, 205
- Lipoprotein
 - disorders, Frederickson's classification of, 333–334, 333*t*
 - lipid profile reflects, 325
 - structure and function, 325*t*–326*t*
- Lipoprotein lipase (LPL), 326, 339
- Lithium
 - effects, 76
 - mechanisms, 76
- Liver metastases, NETs, 358
- Long-acting insulin, 308*t*
- Long-term care, diabetic
 - foot ulceration and infection, 317
- Low-density lipoprotein (LDL), 325, 327–328, 331
- Low-density lipoprotein (LDL) cholesterol
 - ATP III, goals and cutpoints for therapy, 335*t*
 - classification of, 331–335, 332*t*
- Low-density lipoprotein receptor (LDLR), 327
- LPL. *See* Lipoprotein lipase
- Luteinizing hormone (LH), 222
 - deficiency, 9*t*, 10
 - manifestations of, 8*t*
- Lymphoma, 172

M

- Macroadenomas, 16, 19
 - nonfunctioning, 33
- Magnetic resonance imaging (MRI) scan
 - anatomical imaging, 138
 - craniopharyngiomas, 35
 - for NET liver metastases, 358
 - pituitary, 127
 - tumor size monitored, 16
- Malabsorption syndromes, evaluation of, 186
- Male factors, causes of infertility, 245, 247, 249
- Male infertility. *See also* Female infertility
 - clinical presentation, 218
 - definition of, 217
 - diagnostic evaluation, 218–219
 - diagnostic imaging, 219
 - pathophysiology of, 217
 - treatment of, 219–220
- Male reproduction essentials
 - neuroendocrine regulation, 203–204
 - reproductive outflow tract, 202
 - sexual differentiation, 202–203
 - testes, 201
- Males
 - hypothalamic-pituitary-testicular axis in, 209, 209
 - testosterone replacement for, 10
- Mammalian target of rapamycin (mTOR) inhibitor
 - everolimus, 360
- Mammotrophs, 6
- Maturity-onset diabetes of the young (MODY), 258
 - clinical presentation of, 267, 269*t*–270*t*
 - diagnostic evaluation, 267
 - management, 268
 - pathophysiology of, 267, 268*t*–269*t*

- Medical comorbidities,
management for
acromegaly, 23
- Medical nutrition therapy
(MNT), 312
- Medical therapy for acromegaly, 22
- Medullary thyroid cancer (MTC)
clinical features, 95
clinical presentation, 94
diagnosis, 94
epidemiology, 93
features of, 93*t*
follow-up, 96
pathophysiology, 93
staging, 95
therapy, 95–96
- Meiosis arrests, 221
- MEN. *See* Multiple endocrine
neoplasias
- Menopause, 224–226
- Menstrual abnormalities, 228
- Menstrual cycle hormones,
221–224, 223*t*–224*t*,
225–226
- Menstrual irregularity in PCOS, 231
- Metabolic syndrome
clinical presentation, 350
component of, 341
diagnosis, 350
features of, 349*t*
incidence in randomized control
trials, 351*t*
international criteria for, 350*t*
laboratory testing, 350
prevalence of, 349
treatment, 350–351
- Metanephrine (MN) testing,
interpretation of, 137
- Metformin, 230, 237, 305, 312, 346*t*
- Metyrosine, 140
- Miacalcin, 198
- Microadenomas, 16
nonfunctioning, 32–33
- Mineralocorticoid, 114, 116
antagonist, 147
replacement of AI, 119
- Mitotane effect on endocrine
function, 158–159
- MNT. *See* Medical nutrition therapy
- MODY. *See* Maturity-onset diabetes
of the young
- Molecularly targeted therapy, 360
- Monitoring serum in hospitalized
patients with SIADH,
41–42
- Motor, distal symmetrical
neuropathy, 315
- MTC. *See* Medullary thyroid cancer
- Multiple-dose insulin therapy, 264
- Multiple endocrine neoplasias-1
(MEN-1)
clinical presentation of, 365, 366
diagnosis of, 367
endocrine associations in, 366*t*
- Multiple endocrine neoplasias-2
(MEN-2)
clinical presentation of, 366, 367
diagnosis of, 367–368
endocrine associations in, 367*t*
- Multiple endocrine neoplasias
(MEN)
management of, 368
- Myxedema coma, 66
diagnosis, 67
management, 67
- N**
- Nascent HDL (nHDL), 329
- National Cholesterol Education
Program (NCEP) Adult
Treatment Panel III,
299*t*, 350
- Neoplastic cell, 196
- Nephrogenic diabetes insipidus, 43
etiologies of, 43*t*
interpretation of test results, 44
treatment, 45
- Nephropathy, diabetic. *See* Diabetic
nephropathy
- NETs. *See* Neuroendocrine tumors
- Neuroendocrine regulation,
203–204

- Neuroendocrine tumors (NETs), 355
classification of, 355*t*
liver metastases, 358
pancreatic. *See* Pancreatic neuroendocrine tumors
- Neurohypophysis. *See* Posterior pituitary
- Neurologic symptoms, 196
- Neuropathy
CN complication of, 318
distal sensory, 316
distal symmetrical, 315
- Niacin. *See* Nicotinic acid
- Nicotinic acid, 337–338
- Nonesterified fatty acids, 340
- Nonfunctioning macroadenoma
management of, 33–34
signs or symptoms of, 33
- Nonfunctioning microadenoma
management of, 33
presentation and natural history, 32
- Nonfunctioning pituitary adenomas
management of, 33–34
presentation and natural history of, 32–33
- Non-high-density lipoprotein, 332
- Noninsulin antidiabetic medications, 262*t*–263*t*
- Noninsulinoma pancreatogenous hypoglycemia syndrome (NIPHS), 323
- Nonislet cell tumors, 321
- Nonproliferative diabetic retinopathy, 281
- Non-ST elevation myocardial infarction (NSTEMI), 300
- Nonsteroidal anti-inflammatory drugs (NSAIDs), 45
- Nonthyroidal illness syndrome (NTIS)
background, 69
diagnostic evaluation, 70–71
management, 71
pathophysiology, 69–70
treatment of, 71
TSH levels, 70–71
- Normocalcemic hyperparathyroidism, 176
- NSAIDs. *See* Nonsteroidal anti-inflammatory drugs
- NSTEMI. *See* Non-ST elevation myocardial infarction
- NTIS. *See* Nonthyroidal illness syndrome
- O**
- Obesity
adipose tissue endocrinology in, 341
clinical definitions, 341
male infertility, 220
management
clinical presentation, 344–345, 344*t*
diagnosis, 343–344
pathophysiology, 343
treatment, 345–347
pharmacotherapy for, 346*t*
rapidly increasing prevalence, 341
roles of, 255
surgical treatment of, 347, 347*t*
- OCPs. *See* Oral contraceptive pills
- ODS. *See* Osmotic demyelination syndrome
- Oral contraceptive pills (OCPs), 242
reducing hyperandrogenism, 236
- Oral contraceptives, 236
- Oral salt loading, 132
- Osmoreceptors, 3
- Osmotic demyelination syndrome (ODS), 41
- Osteitis deformans. *See* Paget's disease of bone
- Osteomyelitis, 317
- Osteoporosis
bone metabolism, 190
definition, 189–190
epidemiology, 189
medical therapy for use in, 192*t*
risk factors for, 191, 191*t*
screening, 191
secondary causes of, 190*t*
treatment, 191–192

- Osteoporotic fractures, 189
- Ovarian hormones, menstrual cycle, 223
- Ovarian ultrasound, 145
- Ovary, menstrual cycle, 223
- Overnight metyrapone test, 118
- Ovulation induction, 248
- Ovulatory dysfunction, 245, 246, 248
- Oxytocin, 5
- P**
- PAD. *See* Peripheral arterial disease
- Paget's disease of bone
- assessment of therapeutic response, 197–198
 - clinical presentation, 195–196
 - diagnostic evaluation, 196
 - etiology, 195
 - management, 197–198
 - pathophysiology, 195
 - physical examination, 196
- Painful subacute thyroiditis, 53*t*
- Painless thyroiditis, 76
- Pamidronate (Aredia), 197
- Pancreas
- endocrine, 253–255
 - nonimmune causes of, 258
- Pancreatic islets, 253
- Pancreatic neuroendocrine tumors (NETs)
- clinical presentation, 356–357, 356*t*
 - diagnosis, 357–358
 - general management approach, 358
 - hepatic-predominant metastatic disease treatment, 359
 - hormonal hypersecretion treatment symptoms of, 358–359
 - pathophysiology of, 355
 - treatment of, 356*t*, 359–360
- Panretinal photocoagulation, 282
- Papillary thyroid carcinoma (PTC)
- clinical presentation and diagnosis, 87
 - definition, 85
 - epidemiology, 85
 - long-term management, 90–91
 - pathogenesis, 86
 - pathological features, 86–87
 - persistent/recurrent disease management, 91–92
 - prognosis, 87–88
 - risk factors, 85–86
 - TNM classification, 88
- Paracrine regulation, 204
- Parathyroidectomy, 96
- in asymptomatic primary hyperparathyroidism, 171, 172*t*
- Parathyroid gland anatomy, 164
- Parathyroid hormone (PTH), 164–165, 171
- Parathyroid hormone 1-receptor (PTH-1R), 164
- Parenteral feeding, 308
- Patient education of AI, 120
- PCOS. *See* Polycystic ovary syndrome
- PDTC. *See* Poorly differentiated thyroid cancer
- Pelvic ultrasound, 235, 241
- Perimenopause, 224
- Peripheral arterial disease (PAD), 315
- Peritoneal factor, female infertility, 245, 247, 249
- P450-oxidoreductase deficiency (PORD), 144, 147
- PG. *See* Plasma glucose
- Pharmacological therapy, 57–58, 192
- hirsutism, 236
 - for lipid disorders, 335–338
 - treatment goals with, 312
- Pharmacotherapy
- for obesity, 346*t*
 - for Paget's disease of bone, 197–198
- Phenoxybenzamine, 140
- Phenytoin, 74

- Pheochromocytoma, 94
adrenal incidentalomas,
149–150
clinical presentation, 136
diagnostic evaluation
anatomical imaging, 138
functional imaging, 138
genetic testing, 138, 139
screening test strategy, 137
follow-up, 141
malignant
pheochromocytomas, 141
management
operative, 140–141
postoperative, 141
preoperative, 140
pathophysiology, 135
Phosphate, hyperglycemic
emergencies
management, 274
PHPT. *See* Primary
hyperparathyroidism
Physical activity factor, energy
expenditure, 343
Pl. *See* Pituitary incidentalomas
Pituitary essentials
basic facts, 3
control of, 3–5, 4
function, 5–6
MRI, 127
Pituitary hormones, menstrual
cycle, 223
Pituitary hypofunction, hormonal
assessment for, 9f
Pituitary incidentalomas (PI)
definition of, 31
differential diagnosis, 31
evaluation, 31–32
management, 32
Plasma aldosterone/renin ratio
(ARR) testing,
131–132
Plasma calcium, 163
Plasma catecholamines, 137
Plasma chromogranin A, 137
Plasma glucose (PG), glycemia
in DM, 260
Plasma lipoproteins, 325
determined by
reverse cholesterol transport,
329, 329
transport of dietary fat,
326, 327
transport of hepatic fat,
327–328, 328
Plasma methoxytyramine, 137
Plateau response, 198
POCT glucose. *See* Point-of-care
testing glucose
POI. *See* Primary ovarian
insufficiency
Point-of-care testing (POCT)
glucose, 307
glycemia in DM, 260
Polycystic ovaries, characteristics
of, 229
Polycystic ovary syndrome
(PCOS)
background, 227
definitions, 227
hirsutism in, 230
imaging, 229
infertility in, 231
investigations, 228–229
management of, 229–230
menstrual irregularity in, 231
signs, 228
symptoms, 227–228
Poorly differentiated thyroid
cancer (PDTc)
clinical presentation, 97
diagnostic evaluation, 98–99
differences between ATC
and, 99f
external radiation therapy,
100–101
management, 100
pathophysiology, 97
surgery, 100
PORD. *See* P450-oxidoreductase
deficiency
Positron emission tomography
(PET) scanning,
pheochromocytoma, 138

- Posterior pituitary, 3
control of, 4
hormones, 5
- Postnatal care, 305–306
- Postpartum thyroiditis
clinical presentation, 109
diagnostic evaluation, 109
etiology and
pathophysiology, 109
in pregnancy, 109
treatment and monitoring, 110
- Postprandial hypoglycemia. *See* Reactive hypoglycemia
- PPI. *See* Proton pump inhibitors
- Pramlintide. *See* Amylin mimetic
- Preconception care of women with diabetes, 304
- Prediabetes
associated conditions, 311
clinical presentation, 311
diagnostic evaluation, 311*f*
management of CVD in, 312
pathophysiology, 311
treatment goals with
pharmacologic
therapy, 312
- Preexisting diabetes, women with, 304, 306
- Pregnancy, 16
diabetes in. *See* Diabetes,
in pregnancy
thyroid disorders in. *See* Thyroid
disorders in pregnancy
21OHD, 144
- Premixed insulin for
DM, 261*t*
- Pressure sores on heel, 315
- Primary AI, 117, 118
- Primary aldosteronism, 150
ARR testing, 131–132
clinical presentation, 131
confirmatory testing options,
132–133
management, 134
subtype differentiation, 133
subtypes of, 131*t*, 132*f*
unilateral vs. bilateral, 133
- Primary hyperparathyroidism
(PHPT), 94, 169, 172
clinical presentation, 176
pathophysiology, 175
symptomatic, 176
treatment in, 178
in young adults/children, 177
- Primary hypothyroidism,
causes of, 63
- Primary medical therapy for
acromegaly, 21
- Primary ovarian insufficiency (POI)
clinical presentation, 239–240
definition, 239
diagnostic evaluation,
240–241
management, 241–243
pathophysiology, 239
- Primary polydipsia, 43, 44
diagnosis, 44
treatment, 45
- Primary testicular defect
in sperm production, 217
therapies for, 219
- Progesterone, 222
- Progestins, 236
- Prolactin (PRL)
inhibition of, 13
levels during pregnancy, 16
- Prolactinemia
clinical presentation, 13–14
diagnostic evaluation, 14
follow-up, 16
pathophysiology, 13
treatment, 15
- Prolactinomas
diagnostic evaluation, 14
pathophysiology, 13
treatment, 15
- Prolia, 192*t*
- Proliferative diabetic
retinopathy, 281
- Prostate glands, 202
- Proton pump inhibitors (PPI), 73
- Provocative tests
for diagnosis of DI, 44
for GH secretion in adults, 28*t*

- Pseudogynecomastia, 205
Pseudo-Cushing's syndrome, 124
PTC. *See* Papillary thyroid carcinoma
Puberty, 203, 221
- R**
- Radiation therapy (RT)
 for acromegaly, 23
 Cushing's syndrome, 128
 external, 100–101
 for prolactinemia, 15
Radioactive iodine therapy, 58–59
Raloxifene, 74
Rapid-acting insulin for DM,
 261*t*, 265
Reactive hypoglycemia, 322
Rearranged during transfection
 (RET), 93
Reclast, 192*t*, 197
Rectal carcinoids tumors, 357*t*
Regulation of adrenal function,
 114, 115
Renal fluid excretion, increased, 40
Reproductive outflow tract, 202
Resting metabolic rate (RMR), 343
RET. *See* Rearranged during
 transfection
Retinopathy, diabetic. *See* Diabetic
 retinopathy
Reverse cholesterol transport,
 329, 329
Rifampicin, 74
Risedronate (Actonel), 192*t*, 198
RMR. *See* Resting metabolic rate
- S**
- Salmon calcitonin (Miacalcin), 198
Screening guidelines for men
 and women, 191, 191*t*
Scrotal ultrasound, 219
SCS. *See* Subclinical Cushing's
 syndrome
Secondary adrenal insufficiency
 (AI), 117, 119
Secondary hyperparathyroidism,
 175, 176
Sellar imaging, male infertility, 219
Seminal fluid analysis for male
 infertility, 218–219
Seminal vesicle, 202
Seminiferous tubules, 201
Sensory, distal symmetrical
 neuropathy, 315
Sequential gene testing, clinical
 algorithm for, 138, 139
SERM-Raloxifene (Evista), 192*t*
Sertoli cells, 201
Serum calcium, 182
Serum chromogranin A (CGA), 357
Serum 25-hydroxyvitamin D, 186
Serum osmolality and sodium, for
 diagnosis of DI, 44
Serum phosphorous, 177
Sevelamer hydrochloride, 73
17-hydroxylase/17,20-lyase
 deficiency (17OHD),
 144, 147
Sex hormone-binding globulin
 (SHBG), variations in,
 212, 212*t*
Sexual differentiation, 202–203
Sexual disorders, 217
 therapies for, 220
Short-acting insulin for DM, 261*t*
“Sick day management” of AI, 120
Silent subacute thyroiditis, 53*t*
Skeletal X-rays, 196
Sleeve gastrectomy procedure
 for obesity, 347*t*
Small intestine carcinoids
 tumors, 357*t*
Soft tissue infection (STI), 316–317
Somatostatin
 analogues, 24*t*, 359
 for acromegaly, 22
 for nonfunctioning
 macroadenomas, 34
 receptor scintigraphy, 358
Somatotrophs, 5
Sperm defect transport, 217
 therapies for, 219
Spironolactone, 147, 236
Sporadic tumors, 141

- SQ insulin
therapy, 264–265
transitioning from IV insulin to,
275, 309–310
- Standards of Medical Care in
Diabetes, 300
- ST elevation myocardial infarction
(STEMI), 300
- Steroid biosynthesis pathway, 143
- Steroidogenesis, adrenal, 114
- Steroid metabolism, enzymes
involved in, 340
- STI. *See* Soft tissue infection
- Struma ovarii, 53*t*
- Subclinical Cushing's syndrome
(SCS), 150
- Subclinical hyperthyroidism,
60–61
- Subclinical hypothyroidism, 66
- Sucralfate, 74
- Sulfonylureas, 295*t*
- Sunitinib, 360
- Superovulation, 249
- Surgery
for acromegaly, 21
ATC, 100
for DTC, 89
gynecomastia, 207
for hyperthyroidism, 59
MTC, 95
for nonfunctioning
macroadenomas, 33
persistent/recurrent
disease, 91
transsphenoidal, 15
- Syndrome of inappropriate
antidiuretic hormone
secretion (SIADH)
clinical criteria, 39
disorders associated with, 39
monitoring serum in hospitalized
patients with, 41–42
treatment
arginine vasopressin receptor
antagonists, 40
demeclocycline, 40
fluid restriction, 39
hypertonic saline, 39
isotonic saline, 39
tolvaptan, 40–41
urea, 40
- Systemic arterial blood supply, 3
- Systemic chemotherapy, 159
- T**
- TBG. *See* Thyroid hormone binding
globulin
- TC. *See* Total cholesterol
- TDD. *See* Total daily dose
- Technetium bone scan, 196
- Teriperatide (Forteo), 192*t*
- Tertiary hyperparathyroidism,
175, 176
- Testes, 201
- Testicular descent, 202
- Testing
for acromegaly, 23*t*
antibody, 260
CRH, 127
end-organ, 363*t*
fludrocortisone suppression, 133
genetic, 138
glycemic, 229
interpretation of MN, 137
plasma ARR, 131–132
- Testosterone, 212
deficiency in men
androgen replacement, risks
of, 213, 214*t*–215*t*, 215
assays/tests, 212
chronic conditions with
hypogonadism prevalence,
211–212
diagnosis, 212–213
etiology, 210*t*, 213*t*
history, 211
pathophysiology, 209
physical exam, 211
prevalence, 209
screening for, 211–212
replacement for males, 10
therapy, avoidance, 213
- Thiazide diuretics, treatment for
central DI, 45

- Thiazolidinediones, 295*t*
- 3 β -hydroxysteroid dehydrogenase deficiency (3 β HSD), 144, 147
- THRT. *See* Thyroid hormone replacement therapy
- Thyroglobulin (Tg), 49
- Thyroid absorption, drugs affecting, 73–74
- Thyroid cancer
- clinical presentation, 108
 - diagnosis and management, 108
 - etiology and pathophysiology, 107
 - history of, 109
- Thyroid disorders in pregnancy
- hyperthyroidism
 - clinical presentation, 106
 - diagnosis, 106
 - etiology and pathophysiology, 105
 - laboratory evaluation, 106
 - management, 107 - hypothyroidism
 - clinical presentation, 103
 - diagnosis, 104
 - etiology and pathophysiology, 103
 - laboratory evaluation, 104
 - management, 104–105
 - screening for, 103
- postpartum thyroiditis
- clinical presentation, 109
 - diagnostic evaluation, 109
 - etiology and pathophysiology, 109
 - treatment and monitoring, 110
- thyroid nodules and thyroid cancer
- clinical presentation, 108
 - diagnosis and management, 108
 - etiology and pathophysiology, 107
 - history of, 109
- Thyroid dysfunction, male infertility, 220
- Thyroid essentials
- anatomy of, 49
 - histology of, 49
 - physiology of, 49–50
- Thyroid FNA, decision-making for, 81*t*
- Thyroid function
- drugs affecting, 73–77
 - tests
 - anatomy of, 49
 - histology of, 49
 - physiology of, 49–50
 - use and interpretation of, 51–52*t*
- Thyroid hormone
- effect of drugs on, 71*t*
 - metabolism, drugs affecting, 74
 - resistance, 53*t*
 - therapy, 67
- Thyroid hormone binding globulin (TBG), 51*t*
- Thyroid hormone replacement therapy (THRT), 73
- Thyroid nodule
- clinical presentation, 108
 - diagnosis and management, 108
 - etiology and pathophysiology, 107
 - evaluation
 - clinical presentation, 79–80
 - diagnostic evaluation, 80–81
 - epidemiology and pathophysiology, 79
 - malignancy risk by cytologic diagnosis, 82*t*
 - management, 81–82
 - history of, 109
- Thyroid-stimulating hormone (TSH), 51*t*
- conditions of, 54–55*t*
 - deficiency, 9*t*, 10
 - manifestations of, 8*t*
 - suppression, 91
- Thyroid storm, treatment of, 60, 60*t*
- Thyrotoxicosis
- clinical presentation of, 54
 - diagnosis, 54–57

- etiology and pathophysiology
 - of, 53
 - management options of, 57–59
 - subclinical hyperthyroidism, 60–61
 - thyroid storm, 60
 - Thyrotrophs, 6
 - TNM. *See* Tumor node metastasis
 - Tolvaptan, 40–41
 - Total cholesterol (TC), 325, 331–335, 332*t*
 - Total daily dose (TDD)
 - calculation, 308
 - of insulin, 275
 - in type 1 diabetes, 264
 - Total thyroxine, 51*t*
 - Toxic adenoma/toxic goiter, 53*t*
 - Transient receptor potential channels, 166
 - Transport of dietary fat, 326, 327
 - Transport of hepatic fat, 327–328, 328
 - Transrectal ultrasound, 219
 - Transsphenoidal surgery
 - for acromegaly, 21
 - for prolactinemia, 15
 - Triglyceride
 - categories, 332*t*
 - lipoproteins carrying, 325
 - Trophoblastic disease, 53*t*
 - Trousseau's sign, 182
 - TSH-secreting pituitary adenoma, 53*t*
 - T3 resin uptake (T3RU), 52*t*
 - Tubal factors, female infertility, 245, 246, 248
 - Tumor node metastasis (TNM)
 - classification, 88
 - staging, 88*t*, 99, 100*t*
 - Tumors
 - carcinoid. *See* Carcinoid tumors
 - pancreatic neuroendocrine. *See* Pancreatic neuroendocrine tumors
 - 21-hydroxylase deficiency (21OHD), 144
 - adult, 146–147
 - child/adolescent, 146
 - newborn, 146
 - treatment principles, 145–146
 - Type 1 deiodinase (D1) catalyses, 69
 - Type 2 deiodinase (D2) catalyses, 69
 - Type 3 deiodinase (D3) catalyses, 69
 - Type 1 diabetes
 - glycemic management in, 264–265
 - TDD of, 264
 - Type 2 diabetes
 - cardiovascular disease in. *See* Cardiovascular disease, in type 2 diabetes
 - glycemic management in, 265–267
- ## U
- UA. *See* Unstable angina
 - UAE. *See* Urinary albumin excretion
 - UK Prospective Diabetes Study (UKPDS), 294
 - Ulceration, diabetic foot, 315–317
 - Unilateral primary aldosteronism, 131, 133, 134
 - Unstable angina (UA), 300
 - Urea, managing SIADH, 39
 - Urinary albumin excretion (UAE), categories of, 285, 286*t*
 - Urinary 5-Hydroxyindole acetic acid (5-HIAA), 357
 - Urine catecholamines, 137
 - Urology, 215
 - Uterine factors, female infertility, 245, 246, 249
- ## V
- VADT, 294
 - Vascular endothelial growth factor (VEGF), 86
 - Vasomotor, 315
 - Vasopressin, 5
 - Veins, 113
 - Venous drainage, 3
 - Very low-density lipoproteins (VLDL), 325, 327, 331, 332, 339
 - VIPoma, 359
 - Visual field testing for PI, 32

Vitamin D, 165–166
deficiency, 181
clinical presentation, 186
diagnosis, 186
management, 186–187
pathophysiology, 185
prevalence of, 185
risk factors for, 185
recommended intakes for, 166*t*

Vitamin D receptor (VDR), 166

VLDL. *See* Very low-density lipoproteins

W

Waist circumference, increased, 343

Water deprivation test for diagnosis of DI, 44

Weight-based insulin regimen, 308

Weight loss

from diet, 345

effect of substantial, 351

PCOS management, 229–230

Weight reduction, hirsutism, 236

Werner syndrome, 86

Whipple's triad, 321

White adipose tissue, 339

World Health Organization (WHO), 189

Z

Zoledronic acid, 192*t*, 197

Zometa, 192*t*

Zona fasciculata, 113

Zona glomerulosa, 113

Zona reticularis, 113

