

- Hydroxyurea
 action of, 103e-4, 103e-10t, 103e-14, 632
 adverse effects of, 103e-10t, 379, 649
 for chronic myelomonocytic leukemia, 135e-6
 for CML, 694
 for hyper eosinophilic syndromes, 423
 for sickle cell anemia, 636
- Hydroxyzine
 for angioedema, 2119
 for ciguatera poisoning, 2742
 for pruritus, 345
 for urticaria, 2119
- Hygiene hypothesis, 1670
- Hymen, imperforate, 335
- Hymenolepiasis diminuta*, 1434
- Hymenolepiasis nana* (dwarf tapeworm), 245e-2t, 246e-11, 765t, 1434
- Hymenoptera venom/sting, 2116, 2748–2749
- Hyoscyamine, 473e-8t, 2672
- Hypalgesia, 158
- Hyperabduction maneuver, 1647
- Hyperacute rejection, 1827
- Hyperaldosteronism
 diagnosis of, 307, 1618–1619
 familial type I. *See* Glucocorticoid-remediable aldosteronism (GRA)
 familial types II and III, 306
 genetic considerations in, 306, 307
 hyperreninemic, secondary, 321–322
 hypertension in, 1614, 1618
 hypokalemia in, 306
 idiopathic, 306
 metabolic acidosis in, 320–321
 mineralocorticoid excess in. *See* Mineralocorticoid excess
 primary, 306, 307, 1614, 1618–1619
 secondary, 306, 1614
 treatment of, 1619
 weakness in, 462e-119
- Hyperalgesia, 87, 158
- Hyperammonemia, 434e-3t, 434e-5, 435e-1t, 435e-2, 1996
- Hyperamylasemia, 2089t
- Hyperamylasuria, 2089t
- Hyperbaric medicine, 477e-1, 477e-1f
- Hyperbaric oxygen therapy, 477e-1
 for acute coronary syndrome, 477e-4t
 adverse effects of, 477e-2
 for altitude illness, 476e-2t, 476e-3, 476e-4
 for carbon monoxide poisoning, 477e-5–6
 for chronic wounds, 477e-3, 477e-4t, 477e-5, 477e-5f
 contraindications to, 477e-2
 for decompression sickness, 477e-4t, 477e-8
 for gas gangrene, 833, 994
 for idiopathic sudden sensorineural hearing loss, 477e-4t
 indications for, 477e-3, 477e-3t
 for late radiation tissue injury, 477e-3, 477e-4t
 mechanisms of, 477e-1, 477e-2f
 for radiation therapy enhancement, 477e-4t
 for soft tissue infections, 1102
 for traumatic brain injury, 477e-4t
- Hyperbilirubinemia, 2000
 in alcoholic liver disease, 2053, 2053t
 approach to the patient, 281–282, 281f
 conjugated
 in benign recurrent intrahepatic cholestasis, 284, 2003t, 2004
 differential diagnosis of, 282
 in Dubin-Johnson syndrome, 282, 2003–2004, 2003t
 with other liver abnormalities
 approach to the patient, 281f, 282–283
 in cholestatic disorders, 283–285, 284t
 in hepatocellular disease, 283, 283t
 in progressive familial intrahepatic cholestasis, 284, 2003t, 2004
 in Rotor syndrome, 282, 2003t, 2004
 in sepsis/septic shock, 1756
 isolated, 281–282, 282t
 in pancreatitis, 2093
 pathophysiology of, 280
 unconjugated
 from decreased hepatic bilirubin clearance, 2001
 differential diagnosis of, 281–282, 282t
 from hereditary defects. *See* Crigler-Najjar syndrome; Gilbert's syndrome
 from increased bilirubin production, 2000
- Hypercalcemia, 313, 2469
 in adult T-cell leukemia/lymphoma, 225e-4
 after kidney transplantation, 1831
 aluminum intoxication and, 2479
 asymptomatic, 2479
 bone turnover-associated, 2478
 chronic, 1862, 2479, 2479f
 in chronic kidney disease, 1815, 2478
 clinical features of, 96e-9t, 152, 313, 463e-4, 2469–2470
 diagnosis of, 314, 2469–2470, 2479f
 differential diagnosis of, 2469–2470, 2479–2480, 2479f
 ECG in, 269e-13f, 269e-14f, 1457, 1458f
 etiology of, 313, 313t, 2469, 2470t, 2480
 familial hypocalciuric. *See* Familial hypocalciuric hypercalcemia (FHH)
 genetic considerations in, 2475, 2476f
 in hyperparathyroidism. *See* Hyperparathyroidism, primary
 hypertension in, 1620
 hyperthyroidism and, 2478
 idiopathic, of infancy, 83e-6, 2477–2478
 immobilization and, 2478
 inpatient neurologic consultation for, 463e-4
 lithium therapy and, 2475
 malignancy-associated, 609
 clinical features of, 610, 2479–2480
 clinical syndromes related to, 2475–2477
 diagnosis of, 610, 2476–2477
 etiology of, 609–610, 609t
 mechanisms of, 2476
 pathogenesis of, 609t
 treatment of, 610, 2477
 in metastatic bone disease, 119e-4
 in milk-alkali syndrome, 313, 2458, 2479
 in multiple myeloma, 714, 717
 in nephrogenic diabetes insipidus, 303
 in Paget's disease of bone, 426e-3
 with parenteral nutrition, 98e-7t
 pNET and, 559t, 571
 renal effects of, 1862
 in sarcoidosis, 2208, 2477
 thiazides and, 2478
 treatment of, 314, 610, 2480–2482, 2480t
 vitamin A intoxication and, 2478
 vitamin D–related, 2477–2478
- Hypercalciuria
 in Bartter's syndrome, 306, 2483
 hematuria and, 294
 hypocalcemic, 2483
 loop diuretics and, 306
 nephrolithiasis risk and, 1867
 in Paget's disease of bone, 426e-3
- Hypercapnia, 315
 metabolic alkalosis following, 322
 permissive, 322, 1741
 in respiratory acidosis, 323
- Hypercholesterolemia. *See also* Lipoprotein disorders
 autosomal dominant type 2, 2442
 autosomal dominant type 3, 2442
 autosomal recessive, 2442
 familial, 436e-4f, 2440t, 2441–2442, 2449
 severe, 2446
- Hypercortisolism, 2271. *See also* Cushing's syndrome
- HyperC-VAD regimen, 704
- Hyperemesis gravidarum, 49, 259, 2300
- Hyper eosinophilic syndromes (HES)
 clinical features of, 135e-8, 1567, 1686, 2683
 diagnosis of, 135e-8, 135e-t
 diseases associated with, 422
 idiopathic, 422–423
 pathophysiology of, 372e-8, 1567
 subtypes of, 135e-7, 135e-7t, 1686
 treatment of, 135e-8, 1686
- Hyperesthesia, 158
- Hyperfiltration, glomerular, 333e-1
- Hyperfiltration hypothesis, 333e-1
- Hypergammaglobulinemia, 2050
- Hypergastrinemia, 568, 1927
- Hyperglobulinemia, 64e-6
- Hyperglycemia
 β -agonists and, 312
 in cardiogenic shock, 1760
 clinical features of, 2406
 in diabetic ketoacidosis. *See* Diabetic ketoacidosis (DKA)
 hyponatremia in, 303
 hyponatremia in, 301
 in overdose/poisoning, 473e-3
 in pancreatitis, 2092–2093
 with parenteral nutrition, 98e-7
 perioperative, 55
 in sepsis/septic shock, 1756
 with specialized nutritional support, 98e-4
 in systemic inflammatory response syndrome, 98e-4
- Hyperglycemic hyperosmolar state (HHS), 2417t, 2420
- Hypergonadotropic hypogonadism, 336–337
- Hyperhidrosis, primary, 2643
- Hyperhomocysteinemia
 cardiac manifestations of, 290e-1t, 290e-2
 clinical features of, 434e-4
 pyridoxine deficiency in, 96e-4
 risk factors for, 434e-4
 treatment of, 434e-4
 venous thrombosis risk in, 744
- Hyperhomocystinurias, 434e-1, 434e-4
- Hyperhydroxyprolinemia, 434e-2t
- Hyper-IgD syndrome, 126
- Hyper-IgE syndrome (Job's syndrome), 423
 autosomal dominant, 375e-2, 2109
 autosomal recessive, 2109
 cellular/molecular defects in, 420t, 423
 clinical features of, 375e-2, 420t, 423, 830, 2109
 diagnosis of, 420t, 2109
 monocytosis in, 421
- Hyper-IgM syndrome, 2110, 2110f, 2111
- Hyperimmune equine immunoglobulin, 1328
- Hyperimmunoglobulinemia D with periodic fever syndrome (HIDS), 2213t, 2215
- Hyperinflation, 47e-1, 1702
- Hyperinsulinemia, 98e-7, 332, 2405
- Hyperinsulinism, endogenous, 2434
- Hyperkalemia, 308
 in acute kidney injury, 1808
 after adrenalectomy, 1619
 AV conduction block in, 1471t
 in chronic kidney disease, 333e-2, 1814, 1815
 clinical features of, 310–311
 definition of, 308
 diagnosis of, 311, 311f
 drug-induced, 43, 64e-2, 310
 ECG in, 310, 1457, 1458f
 etiology of, 304, 308–310, 309t
 in HIV infection, 310
 inpatient neurologic consultation for, 463e-4
 metabolic acidosis in, 64e-2–3
 in overdose/poisoning, 473e-3
 with parenteral nutrition, 98e-7t
 rebound, 307
 renal effects of, 1862
 transfusion-related, 138e-5
 treatment of, 64e-3, 312, 463e-4
 in tumor lysis syndrome, 1795
 urinary tract obstruction and, 1872
 ventricular tachycardia in, 1489
- Hyperkalemic periodic paralysis (HyperKPP)
 channelopathies in, 444e-2t
 clinical features of, 310, 462e-3, 462e-17–18, 462e-17t
 diagnosis of, 462e-18
 early interventions for, 450t
 genetic considerations in, 444e-2t, 462e-17f, 462e-18