

- Ischemic heart disease (IHD) (*Continued*)
 transmural, 540, 543
 triphenyltetrazolium chloride in, 544-545, 544f
 pathogenesis of, 539
 sudden cardiac death due to, 539, 551-552
- Ischemic necrosis, in hypopituitarism, 1081
- Islet cell tumors, 1121, 1122f
- Islets of Langerhans, 1105
- Isochromosome, 160, 160f
- Isotype switching, in humoral immunity, 198
- “Itai-Itai” disease, 413
- J**
- Jagged1, in congenital heart disease, 533
- Jaundice, 852
 causes of, 853t
 due to fetal hydrops, 462
 due to hemolytic anemia, 632
 obstructive, due to pancreatic carcinoma, 894-895
 pathophysiology of, 853
 in pregnancy, 865
- JC virus, in AIDS, 253
- Joints, 1207-1219
 crystal-induced arthritis of, 1214-1217
 infectious arthritis of, 1213-1214
 juvenile idiopathic arthritis, 1212
 osteoarthritis of, 1208-1209, 1208b, 1209f, 1210f
 rheumatoid arthritis of, 1209-1212, 1210f, 1211f, 1212f, 1211b
 seronegative spondyloarthropathies, 1212-1213
 solid, 1207
 synovial, 1207
 in systemic lupus erythematosus, 222b-225b
 tumors and tumor-like conditions of, 1218-1219
- Joubert syndrome, 1258
- Junctional epidermolysis bullosa, 1173f
- Juvenile hemangiomas, 516
- Juvenile idiopathic arthritis, 1212
- Juvenile laryngeal papillomatosis, 739
- Juxtacortical chondromas, 1201
- K**
- Kallikreins, in inflammation, 89
- Kaposi sarcoma (KS), 518, 519f
 in AIDS, 253-254, 518
 orbital, 1322
- Kaposi sarcoma herpesvirus, 254, 518
- Kartagener syndrome, 683
- Karyotyping, 158
- Kasabach-Merritt syndrome, 664
- Kawasaki disease, 510, 510b
- Kayser-Fleischer rings, 850b
- KCNJ2, mutations of, 1246
- Kearns-Sayre syndrome, 1245
- Keloid, 109, 110f
- Keratic precipitates, 1329
- Keratinizing squamous cell carcinomas, 997
- Keratinizing squamous metaplasia, 1046b
- Keratinocyte growth factor (KGF), 19t
- Keratinocytes, 1141, 1168f
- Keratoconjunctivitis sicca, in Sjögren syndrome, 226
- Keratoconus, corneal degenerations, 1326, 1326b, 1326f
- Keratomalacia, 437f, 438
- Kernicterus, due to fetal hydrops, 462, 463f
- Kernohan notch, 1255
- Keshan disease, 443t
- Ketone bodies, 1114
- Ketonemia, 1114
- Ketoneuria, 1114
- Kidney(s)
 amyloidosis of, 260b-261b, 261f
 grafts, rejection of, 233, 233b-234b, 235f
 injury, acute, 898
 in left-sided heart failure, 529
 myeloma, 937-938
 neoplasms, 956b
 in systemic sclerosis, 229b
- Kidney grafts, rejection of, 233, 233b-234b, 235f
- Kidney injury, acute, 898
- Kimmelstiel-Wilson disease, 1117b-1119b
- Kininogens, in inflammation, 89
- Kinins, in inflammation, 89
- KIT*, in seminoma, 976
- Klatskin tumors, 874
- Klebsiella*, in pyogenic osteomyelitis, 1195
- Klinefelter syndrome, 165-166
- Koilocytic atypia, in condyloma acuminatum, 997, 997f
- Koplik spots, 355b
- Korsakoff syndrome, 1304
- Krabbe disease, 1302, 1303f
- KRAS gene, due to pancreatic carcinoma, 892-893
- Krukenberg tumor, 1034
- KS. *See* Kaposi sarcoma (KS).
- Kupffer cell activation, 825f
- Kuru plaques, 1282b
- Kussmaul breathing, 1114-1115
- Kwashiorkor, 433, 434f
- Kyphoscoliosis, in Ehlers-Danlos syndromes, 146
- L**
- Labile tissues, 101
- Lacerations, of brain, 1259-1260
- Lactation, breast during, 1043-1044
- Lactational adenomas, 1048
- Lactic acidosis, due to shock, 133-134
- Lactiferous ducts, squamous metaplasia of, 1046, 1047f
- Lactoferrin, in phagocytosis, 81
- Lactotroph adenoma, 1076t, 1078-1079
 clinical course of, 1079
 morphology of, 1078b
- Lactotroph hyperplasia, 1079
- Lacunar infarcts, 1267, 1268f
- Lacunes, in hypertensive cerebrovascular disease, 1267
- Lafora bodies, 1253
- Lambert-Eaton myasthenic syndrome, 719, 1236
 in paraneoplastic syndrome, 1316
- Lamb excrescences, 525, 576
- Laminar blood flow, 123
- Laminin, 24, 24f
- Langerhans cell(s), 191-192, 1142
- Langerhans cell histiocytosis, 586, 621-622, 622f
 multifocal multisystem, 622
 pulmonary, 622
 unifocal/multifocal unisystem, 622
- Langhans giant cells, 98, 98f
- Large cell change, in liver, 871, 872f
 morphology of, 872b-873b
- Large granular lymphocytes. *See* Natural killer cells.
- Large granular lymphocytic leukemia, 591t, 606, 606b
- Laryngeal carcinoma, 739-740, 739f
- Laryngeal chemoreceptors, in sudden infant death syndrome, 473
- Laryngeal papillomatosis, 739
- Laryngotracheobronchitis, 707b
- Larynx, disorders of, 738-740
- Laser-assisted in situ keratomileusis (LASIK), 1324-1325
- Late-onset adrenal virilism, 1128
- Late phase reaction, after allergen exposure, 204
- Latency-associated viral RNA transcripts (LATs), 357
- Latent membrane protein-1 (LMP-1) gene, 327
- LDL. *See* Low-density lipoprotein (LDL).
- Lead
 in environmental pollution, 410-411
 poisoning, 410, 410f, 411f, 411b-412b
- Leber hereditary optic neuropathy, 171-172, 172f
- Lectin pathway, in complement system, 88
- Left anterior descending (LAD) arteries, 525
- Left bundle branches, 525
- Left circumflex (LCX) arteries, 525
- Left shift, in inflammation, 99
- Left-sided heart failure, 529-530
- Left-sided hypertensive heart disease, 552-553, 553f
- Left-to-right shunts, 533-535, 534f
 due to atrial septal defect, 534-535, 534f
 due to patent ductus arteriosus, 534f, 535
 due to patent foramen ovale, 534-535
 due to ventricular septal defect, 534f, 535f, 535
- Left ventricular hypertrophy, 528f
- Legionnaires' disease, 703-704
- Leigh syndrome, 1304
- Leiomyoma(s), 1019-1020, 1020b-1021b, 1020f, 1223
 benign metastasizing, 1020b
 of bladder, 968
 uterine, 1019-1020
- Leiomyosarcomas, 275f, 1223, 1223b
 uterine, 1020-1021, 1020b-1021b, 1021f
- Leishmania donovani*, 393f
- Leishmania* species, 393, 393b-394b
- Lens, 1320f
- Lentiginous, 1143t
- Lentigo, 1144, 1144b
- Lepromin, 377
- Leprosy, 377-378, 377b-378b
 lepromatous (multibacillary), 377b-378b, 378f
 peripheral neuropathy in, 1232
 tuberculoid (paucibacillary), 377b-378b, 378f
- Leptin, in energy balance, 444, 445f, 446f
- Lesch-Nyhan syndrome, 1215
- Leser-Trélat sign, 1151
- Lesions simulating primary neoplasms, 1204-1207
- Lethal factor (LF), in anthrax, 366-367
- Letterer-Siwe disease, 622
- Leukemia, 588
- Leukemoid reactions, in inflammation, 99