

- Thrombosis (*Cont.*):
 in inflammation, 276–277, 742
 laboratory evaluation of, 405–407
 in liver disease, 739–740, 739f, 739t
 pathophysiology of, 274–275, 275f, 740–741, 741f
 in polycythemia, 399
 renal vein, 1866
 risk factors for, 404, 405f, 405t
 venous. *See* Venous thromboembolism (VTE)
- Thrombotic microangiopathy, renal, **1863**
 in antiphospholipid antibody syndrome, 1865
 drug-related, 1864
 in HELLP syndrome, 1865
 in hemolytic-uremic syndrome. *See*
 Hemolytic-uremic syndrome (HUS)
 HIV-related, 1864
 HSCT-related, 1864, 1864t
 pathophysiology of, 1863
 radiation-related, 1864
 in sickle cell disease, 1865–1866. *See also*
 Sickle cell anemia
 in systemic sclerosis, 1864–1865. *See also*
 Systemic sclerosis (scleroderma)
 in thrombotic thrombocytopenic purpura.
See Thrombotic thrombocytopenic
 purpura
- Thrombotic thrombocytopenic purpura (TTP),
729
 diagnosis of, 729
 drug-induced, 1864
 epidemiology of, 133t
 genetic considerations in, 1848
 vs. hemolytic-uremic syndrome, 729, 1863
 in HIV infection, 1262
 idiopathic, 729, 1863–1864
 inherited, 729
 pathology and pathogenesis of, 265e-2, 729,
 729f, 1848, 1863
 peripheral blood smear in, 729
 renal involvement in, 1806t, 1848
 risk factors for, 1848
 skin manifestations of, 133t, 135, 368
 in SLE, 2133–2134
 treatment of, 729–730, 1848, 1864
- Thromboxane A₂
 in arterial thrombosis, 745, 746f
 in myocardial infarction, 1599
 in shock, 1745, 1746
- Thrush
 in cancer patient, 487
 clinical features of, 46e-1f, 46e-5f, 233, 240t,
 351, 1342
 etiology of, 233
 in HIV infection, 1255, 1256f
 treatment of, 233, 240t, 1344t
- “Thumbprint sign,” 234, 235f
- Thunderclap headache, 1785, 2597
- Thunderstorm asthma, 1671
- Thymectomy
 for myasthenia gravis, 123e-2, 2704
 for pure red cell aplasia, 123e-2
 for thymoma, 123e-2, 2704
- Thymic neuroendocrine tumors (carcinoids),
 564
- Thymic stromal lymphopoietin (TSLP), in
 asthma, 1672
- Thymidine, 426
- Thymidine phosphorylase deficiency, 431e-5t
- Thymidylate synthase, in lung cancer, 519–520
- Thymoma, **123e-1**
 in autoimmune diseases, 2348
 clinical features of, 123e-1, 664
 diagnosis of, 123e-1, 2703
 EBV infection and, 123e-2
 etiology of, 123e-2
 hypogammaglobulinemia in, 2111
 in myasthenia gravis, 123e-2, 2701, 2703
 paraneoplastic syndromes in, 372, 614t, 619
 pathology of, 123e-1–2, 123e-2t
 pemphigus and, 371, 372
 pure red cell aplasia and, 123e-2, 668
 staging of, 123e-1, 123e-1t
 treatment of, 123e-2
- Thymus
 cancer, paraneoplastic syndromes in, 609t
 in HIV infection, 1235, 1236
 in myasthenia gravis, 2701, 2703, 2704t
 primary defects of, 375e-1, 2108
- Thymus- and activation-regulated chemokine.
See TARC (CCL17)
- Thymus expressed chemokine (TECK), 372e-12t
- Thyroglobulin (Tg)
 in autoimmune thyroiditis, 372e-24t
 in carcinoma of unknown primary, 120e-2
 in congenital hypothyroidism, 2283, 2284t
 reference values for, 2763t
 in thyroid cancer follow-up, 2306–2307
 in thyrotoxicosis, 2288
- Thyroid acropachy, 2245, 2295, 2295f
- Thyroid and eye muscle shared protein, 372e-24t
- Thyroid cancer, **2303**
 anaplastic, 2304t, 2307
 carcinoma of unknown primary and, 120e-2t
 classification of, 2303t, 2304, 2304t
 deaths from, 467t
 diagnosis of, 2254t, 2289, 2289t
 follicular, 2304t, 2305–2307, 2305t
 genetic considerations in, 101e-3t, 2304–2305,
 2305t
 incidence of, 467t, 468f, 2254t, 2303, 2303t
 medullary. *See* Medullary thyroid carcinoma
 (MTC)
 papillary, 2303t, 2304t, 2305–2307, 2306f
 pathogenesis of, 2304–2305
 in patients with thyroid nodule, 2303, 2303t
 during pregnancy, 124e-1t, 124e-4
 radiation therapy-related, 623
 risk factors for, 2303, 2303t
 staging of, 2304, 2304t
 survival rates, 2306f
 treatment of, 2306–2307
- Thyroid cysts, 2303
- Thyroid dermatopathy, 2295, 2295f, 2297–2298
- Thyroidectomy
 for diffuse nontoxic goiter, 2301
 for Graves’ disease, 2297
 prophylactic, in *RET* mutations, 2341, 2341t
 for thyroid cancer, 2306, 2342
- Thyroid gland, **2283**
 amiodarone effects on, 2300
 anatomy and development of, 2283
 disorders of
 cancer. *See* Thyroid cancer
Candida infection, 489
 in HIV infection, 1259–1260
 hypertension in, 1620
 hyperthyroidism. *See* Hyperthyroidism
 hypothyroidism. *See* Hypothyroidism
 lymphoma, 2307
 nodular. *See* Thyroid nodule
 during pregnancy, 48–49, 124e-4, 124e-5t
 radiation-induced, 623
 thyroiditis. *See* Thyroiditis
 thyrotoxicosis. *See* Thyrotoxicosis
- hormones of. *See* Thyroid hormone(s)
- laboratory studies of
 radioiodine uptake and thyroid scanning,
 2288
 Tg levels, 2288
 thyroid hormone measurement, 2288
 TPO antibodies, 2288
 ultrasonography, 2289, 2289f, 2289t
- pain in, differential diagnosis of, 2298
 physical examination of, 2287
 regulation of, 2283–2284, 2284f
- Thyroid hormone(s). *See also* Thyroxine (T₄);
 Triiodothyronine (T₃)
 action of, 2286–2287, 2287f
 half-lives of, 400e-2
 laboratory evaluation of, 2288, 2763t
 receptor binding of, 2286–2287, 2286f
 resistance to, 435, 2286t, 2287
 structure of, 2283f
 synthesis of, 2284–2285, 2284f, 2285f
 transport and metabolism of, 2285–2286,
 2286t
 unbound, 2288
- Thyroid hormone binding proteins, 2286
- Thyroid hormone binding ratio (THBR), 2288
- Thyroid hormone receptors (TRs), 2286–2287,
 2286f
- Thyroiditis, **2298**
 acute, 2298, 2298t
 atrophic, 2290
 autoimmune. *See* Hashimoto’s thyroiditis
 (autoimmune hypothyroidism)
 chronic, 2298t, 2299
 destructive, 2298
 drug-induced, 2299
 etiology of, 2298t
 postpartum, 2299
 radiation therapy-related, 623
 Riedel’s, 391e-1t, 2299
 silent (painless), 2299
 subacute (de Quervain’s), 239, 2298–2299,
 2298f, 2298t
- Thyroid nodule
 approach to the patient, 2307–2308, 2308f
 benign, 2303, 2303t
 evaluation of, 2254t, 2288–2289, 2289f,
 2289t
 prevalence of, 2254t
 solitary, hyperfunctioning, 2302–2303,
 2303f
 thyroid cancer and, 2303, 2303t. *See also*
 Thyroid cancer
- Thyroid peroxidase (TPO)
 in autoimmune hypothyroidism, 372e-24t
 in thyroid development, 2283, 2284t
 in thyroid hormone synthesis, 2285
- Thyroid peroxidase (TPO) antibodies, 2288,
 2294
- Thyroid response elements (TREs), 2287, 2287f
- Thyroid scintigraphy, 2288
- Thyroid-stimulating hormone (TSH), **401e-4**
 action of, 401e-4
 assessment of, 400e-6
 autoantibodies to, 377e-4
 deficiency of, 2259t
 ectopic production of, 609t
 expression and regulation of, 401e-1t
 laboratory evaluation of, 2258t, 2288, 2763t
 pituitary adenoma secretion of, 2274, 2298
 in pregnancy, 124e-4, 124e-5t
 secretion of, 401e-4
 suppression therapy, 2306
 synthesis of, 401e-4
- Thyroid-stimulating hormone receptor (TSH-R)
 in congenital hypothyroidism, 2284t
 in hyperfunctioning thyroid solitary nodule,
 2302–2303, 2302f
 mutations of, 2284t, 2302–2303, 2302f
 in thyroid cancer, 2305t
 in thyroid development, 2283
- Thyroid-stimulating immunoglobulins (TSI),
 2288, 2294
- Thyroid storm (thyrotoxic crisis), 48, 2297
- Thyroid transcription factor-1 (TTF-1)
 in carcinoma of unknown primary, 120e-2
 in congenital hypothyroidism, 2283, 2284t
 in lung cancer, 120e-2, 508
- Thyrotoxicosis, **2293**. *See also* Graves’ disease
 amiodarone-induced, 2300
 apathetic, 2294
 clinical features of, 2294–2295, 2294t, 2295f
 definition of, 2293
 diagnosis of, 2295–2296, 2295f
 etiology of, 2293t, 2298
 fetal/neonatal, 2297
 hypoxia in, 248
 palpitations in, 254
 primary hyperthyroidism and, 2293
 subclinical, 2301
 without hyperthyroidism, 2293
- Thyrotoxicosis factitia, 2288, 2298
- Thyrotoxic periodic paralysis (TPP). *See*
 Hypokalemic periodic paralysis
 (HypoKPP)
- Thyrotropin-binding inhibitory immunoglobulin
 (TBII), 2290, 2294
- Thyrotropin receptor, 372e-24t