

COMMON TESTS WITH DESCRIPTIONS

Name/Synonyms	Indication(s)	Description/Specimen
Abdominal aorta sonogram; ultrasonography	To detect and measure suspected abdominal aortic aneurysm	Ultrasound waves sent into the body with a small transducer; sound waves are transformed into a visual display on a monitor
Acid-fast bacilli (AFB)	To identify mycobacteria in sputum specimens	Sputum sent for Gram stain
Adrenocorticotrophic hormone (ACTH); corticotropin	To evaluate adrenal cortical dysfunction	Blood sample
Alanine aminotransferase (ALT); formerly serum glutamic-pyruvic transaminase (SGPT)	To monitor liver damage	Blood sample
Aldosterone	To diagnose primary and secondary aldosteronism	Blood and urine samples
Alkaline phosphatase (ALP)	To measure serum levels of alkaline phosphatase, an enzyme that is increased in bone growth, liver disease, biliary obstruction, osteogenic sarcoma, or breast or prostate cancer with metastases to the bone	Blood sample
Allergen-specific IgE antibody; radioallergosorbent test (RAST); allergy screen	To test for allergies to allergens	Blood sample
Alfa-fetoprotein (AFP)	To test for neural tube defects in the fetus such as spina bifida and anencephaly	Blood sample
Ambulatory electrocardiography; latory monitoring; event monitoring; Holter monitoring	To monitor electrical activity of the heart and to detect arrhythmias that occur sporadically	Electrodes are applied to the skin monitor; and case are ambu-positioned; and the recorder is turned on
Ammonia	To assess for accumulation of ammonia in the bloodstream	Blood sample
Amylase	To assess for pancreatitis, diabetic ketoacidosis, cirrhosis, hepatitis, cholelithiasis, hyperthyroidism, or other conditions	Blood or urine sample
Angiotensin-converting enzyme (ACE); serum angiotensin-converting enzyme	To assess for diabetic retinopathy, Gaucher disease, hyperthyroidism, liver disease, or sarcoidosis	Blood sample
Anion gap	To determine causes of metabolic acidosis including those associated with renal failure, diabetic ketoacidosis, or lactic acidosis	Blood sample
Anti-DNA antibody test	Detects presence of antibodies to native or double-stranded DNA, indicating some type of autoimmune disease	Blood sample
Antinuclear antibody test (ANA)	Used to rule out systemic lupus erythematosus, endocarditis, cirrhosis, connective tissue diseases, and chronic autoimmune hepatitis	Blood sample
Arterial blood gas (ABG) analysis; blood gases the patient	For information regarding the acid-base status of	Blood sample
Arteriography of the lower extremities; lower extremity angiography	Visualization of blood vessels	Contrast dye is injected through a catheter into an artery; radiographic films are then taken of the artery
Arthrocentesis; synovial fluid analysis	To diagnose arthritis, to investigate joint effusion, or to remove excess fluid from the joint	Synovial fluid sample
Arthrogram	To assess for joint damage and/or cartilage tears	Injection of radiopaque dye or air into the joint; radiographs are taken as the joint is manipulated
Arthroscopy	To directly visualize joint structures and to perform biopsy and simple repairs	The arthroscope is inserted into the joint spaces; the joint is manipulated as it is visualized
Aspartate aminotransferase (AST); formerly serum glutamic oxaloacetic transaminase (SGOT)	To assess for heart muscle damage as in myocardial infarction; to assess for liver damage	Blood sample
Barium enema; large bowel study; lower GI series	Fluoroscopic examination of the large intestines for lower abdominal pain, changes in bowel habits, stools containing blood or mucus, visualizing polyps, diverticula or tumors	The entire intestine is filled from the rectum to the ileocecal valve; the area is observed on a fluoroscopic screen with films taken periodically
Barium swallow; esophageal radiography; esophagography	To evaluate dysphagia or regurgitation, hiatal hernia, diverticula, achalasia, esophagitis, polyps, and/or strictures	Patient swallows a thick barium mixture for fluoroscopic examination of the pharynx and esophagus; part of upper GI series

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Name/Synonyms	Indication(s)	Description/Specimen
Bilirubin, direct (conjugated); indirect bilirubin (unconjugated); total bilirubin	To assess for choledocholithiasis, cirrhosis, hepatitis, myocardial infarction, pernicious anemia, and/or septicemia	Blood sample
Bleeding time; aspirin tolerance test; Duke bleeding time; ivy bleeding time; modified ivy; template bleeding time	To screen for disorders involving platelet function and vascular defects that interfere with clotting	A standard skin incision is made usually just below the crease of the elbow; blood drops are blotted every 30 seconds; time is stopped when bleeding ceases
Blood alcohol; ethanol; ethyl alcohol (ETOH)	To screen for alcohol ingestion	Blood sample
Blood culture and sensitivity	To screen for bacteria in the blood	Blood sample
Blood smear; peripheral blood smear; red blood cell smear (RBC smear)	Examines cells in terms of size, shape, color, and structure	Blood sample
Blood typing; ABO typing; ABO red cell groups; blood groups; Rh typing; type and crossmatch (T&C); type and screen	To determine a patient's blood type, Rh factors in the blood, and compatibility in donor blood	Blood sample
Bone marrow biopsy; bone marrow aspiration	To screen for cancer, depressed hematopoiesis, granuloma, infection, iron-deficiency anemia, leukemia, multiple myeloma, polycythemia vera, or thalassemia	A large-bore needle is advanced through the subcutaneous tissue cortex of bone to aspirate a sample of bone marrow
Bone scan	To detect metastatic cancer of the bone and monitor the progression of degenerative bone disorders; to detect fractures in patients with continued pain when x-rays	A radionuclide is injected intravenously; scintillation camera takes radioactivity reading from the body and transforms them into two-dimensional pictures of the skeleton
Brain scan (cerebral blood flow)	To assess for brain abscess, tumors, contusions, hematomas or cerebrovascular accidents (CVAs); interruption of the blood-brain barrier	A radionuclide is injected intravenously; scintillation camera takes radioactivity reading from the head and transforms them into two-dimensional pictures of the brain
Breast biopsy	To assess for malignancy	Needle biopsy: a sample of tissue is aspirated into a syringe for examination Open biopsy: an excision is made over the breast mass, which is excised in its entirety for testing
Bronchoscopy	To visualize abnormalities found on radiography, obtain sputum specimens, remove foreign bodies, conduct endobronchial radiation, or obliterate neoplasticobstruction	The bronchoscope is introduced through the mouth or nose; the anatomy of the trachea and bronchi are inspected
CA 15-3, CA 19-9, CA-125, tumor markers/antigens	To assess for the presence of cancer	Blood sample
Calcitonin; thyrocalcitonin	To assess for hypercalcemia	Blood sample
Calcium	To assess calcium level	Blood or urine sample
Candida antibody test	To assess for Candida infection	Blood sample
Carboxyhemoglobin; carbon monoxide (CO)	To assess for carbon monoxide poisoning	Blood sample
Carcinoembryonic antigen (CEA)	To assess carcinoembryonic antigen levels for malignancy	Blood sample
Cardiac catheterization; angiocardiography, coronary angiography; coronary arteriography; heart catheterization	Visualization of the blood vessels to assess for heart size, structure, movement, wall thickness, blood flow, valve motion, and/or coronary vasculature	A catheter is inserted through an artery into the correct position and dye is inserted; radiographic films are taken of the artery
Carotid duplex scanning; carotid phonoangiography (CPA)	To assess for plaque, stenosis, or partial occlusion of arteries	A transducer is placed on the skin; sound waves are transformed into a visual display on a monitor
Cerebral angiography; cerebral arteriography	To detect cerebrovascular abnormalities such as aneurysm or arteriovenous malformation, to study vascular displacement, or to evaluate postoperative status of blood vessels	A catheter is inserted through an artery into the correct position and dye is inserted; radiographic films are taken of the artery
Cerebrospinal fluid (CSF) analysis; cisternal puncture; lumbar puncture (LP); spinal tap; ventricular puncture	To assist in the diagnosis of a wide variety of central nervous system diseases, including infectious diseases	A sample of cerebrospinal fluid is collected using a spinal needle
Chemistry profile	To assess multiple organ systems to determine overall health and wellness	May include alanine aminotransferase; alkaline phosphatase; aspartate aminotransferase ; bilirubin; calcium; carbon dioxide; chloride; cholesterol; creatinine kinase; creatinine; gamma-glutamyl transferase; glucose; lactic dehydrogenase; phosphorus; potassium; protein; sodium; urea nitrogen;and uric acid tests

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Chest x-ray (CXR); chest radiography	To identify abnormalities of the lungs and other structures of the thorax including heart, ribs, and diaphragm	Radiograph of the chest
Chlamydia	To assess for <i>Chlamydia trachomatis</i> or trachoma	Titer: Blood sample Eye culture: Swab of inner canthus or lower conjunctiva Cervical culture: Swab of the cervix
Chloride	To evaluate chloride levels in the blood or kidneys	Blood or urine sample
Cholecystography; gallbladder radiography; gallbladder series; oral cholecystogram	To assess for gallbladder disease	After ingestion of a contrast medium, films are taken of the right upper quadrant in three positions
Cholesterol	To evaluate low density lipoprotein and high density lipoprotein and risk potential for atherosclerosis and heart disease	Blood sample
<i>Clostridium difficile</i> (<i>C. difficile</i>) toxin assay; clostridial toxin assay	To evaluate for pseudomembranous colitis	Stool specimen
Coagulation factor assay; factor assay; clotting factors	To assess for congenital or acquired deficiency of blood clotting factor	Blood sample
Coagulation studies	To evaluate coagulation disorders	Include antithrombin III; bleeding time; clot retraction; coagulation factors; D-dimer; euglobulin lysis time; fibrin degradation; fibrinogen; partial thromboplastin time; plasminogen; protein C; protein S; prothrombin time; and thrombin clotting time tests
Colonoscopy	To assess lower gastrointestinal bleeding, change in bowel habits, high risk for colon cancer due to polyps, or ulcerative colitis or history	Direct visualization of the large intestine through the use of a flexible fiberoptic endoscope
Colposcopy; endometrial biopsy	To identify the area of cellular dysplasia	Direct visualization of the cervix and vagina with a colposcope with magnifying lens and light
Complete blood cell count with differential (CBC with diff)	To evaluate red blood cell counts, white blood cell counts, and platelets	Includes blood smear; hematocrit; hemoglobin; platelets; red blood cell count; red blood cell indices (mean corpuscular volume, mean corpuscular hemoglobin, mean corpuscular hemoglobin concentration); white blood cell count; and differential
Computed tomography (CT) of the abdomen; CT scan of the abdomen; computerized axial tomography (CAT) of the abdomen	To diagnose pathologic conditions of the abdominal organs including inflammation, cysts, tumors of the liver, gallbladder, pancreas, spleen, kidneys, and pelvic organs	Contrast dye is given by intravenous injection; films are taken in the body scanner
Computed tomography (CT) of the brain; CT scan of the head; computerized axial tomography (CAT) of the head	To diagnose pathologic conditions such as neoplasms, cerebral infarctions, aneurysm, and intracranial hemorrhage	Contrast dye is given by intravenous injection; films are taken in the body scanner
Computed tomography (CT) of the chest; CT scan of the chest; computerized axial tomography (CAT) of the chest	To diagnose pathologic conditions, including inflammation, cysts, and tumors of the lungs, esophagus, and lymph nodes	Contrast dye is given by intravenous injection; films are taken in the body scanner
Coombs test, direct; direct anti-globulin test; red blood cell (RBC) antibody screen	To assess whether antibodies are attached to the red blood cells, indicating infectious mononucleosis or systemic lupus erythematosus; to detect red blood cell sensitization to drugs or blood transfusions	Blood sample
Coombs test, indirect; antibody screening test	To detect unexpected circulating antibodies that may react against transfused red blood cells, other than those of the ABO groups	Blood sample
Cortisol	To assess for normal function of the anterior pituitary gland	Blood or urine sample
C-reactive protein test (CRP)	To assess for inflammatory process	Blood sample
Creatine kinase (CK) and isoenzymes; formerly creatine phosphokinase (CPK)	To assess for myocardial infarction	Blood sample
Creatinine; creatinine clearance	To evaluate renal function	Blood and/or urine sample
Cystometry; cystometrography (CMG)	To evaluate detrusor instability and cause of bladder dysfunction	Instillation of fluid and/or air into the bladder, assessment of neurologic and muscular responses to this filling, and assessment of patient's voiding for abnormalities
Cystourethrography	To evaluate chronic urinary tract infections (UTIs)	Instillation of contrast medium into the bladder through a urethral catheter; x-ray films are taken as the bladder fills and as the patient voids

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Cystourethroscopy; cystoscopy; urethroscopy	Calculi removal, diagnosis; therapeutic procedures other than calculi removal: obstruction, urothelial carcinoma, filling defects, unilateral gross hematuria, malignant cytology, surveillance, passage of ureteral catheter for obstruction of fistula, foreign body, resection/fulguration of selected tumors, and dilation/incision of strictures	Passing of cystoscope into the bladder to visualize the urinary tract
Disseminated intravascular coagulation screening (DIC screening)	To assess when both clotting and bleeding occur at abnormally high levels	See entry for coagulation studies
Doppler study; Doppler ultrasonography	To evaluate blood flow in the major veins and arteries of the legs, arms, and neck	Ultrasound waves are sent into the body with a small transducer pressed against the skin
Echocardiography; echo; heart sonogram	To assess heart chambers, valves, blood flow or muscle	Ultrasound waves are sent into the body with a small transducer pressed against the skin
Electrocardiography, electrocardiogram (ECG, EKG)	To record the electrical current generated by the heart	Monitoring electrodes are placed on the body
Electroencephalography (EEG)	To record the electrical activity of the brain	Monitoring electrodes are placed on the scalp
Electromyography, electromyology (EMG)	To record the electrical activity in the skeletal muscle groups	Insertion of needle electrodes into the muscle
Electroneurography, electromyoneurography (ENG)	To assess for peripheral nerve disease or injury	Electrodes over a nerve initiate electrical impulse at the proximal site; time is recorded for the impulse to reach a distal site on the same nerve
Endoscopic retrograde cholangiopancreatography (ERCP)	To assess for obstructive jaundice, cancer, calculi, or stenosis	Radiographic viewing of the pancreatic ducts and hepatobiliary tree through an endoscope
Erythrocyte sedimentation rate (ESR), sedimentation rate (sed rate); Westergren; Wintrobe	To assess for inflammatory and necrotic conditions	Blood sample
Esophageal manometry; acid reflux test; Bernstein test; esophageal function studies	To assess the esophagus for normal contractile activity	Manometric catheter is placed at various levels in the esophagus; baseline pressure measurements are taken as the patient swallows
Esophagogastroduodenoscopy (EGD); esophagoscopy; gastroscopy; upper gastrointestinal (GI) endoscopy	To assess the esophagus, stomach, and upper duodenum via direct visualization	The endoscope is inserted through the mouth to inspect anatomy, remove tissue specimen, and/or remove foreign bodies
Estradiol receptor and progesterone receptor (ER/PR) in breast cancer; ER/PR assay	To assess whether breast cancer tissue would respond to treatment to reduce the hormone level	Specimen of breast tissue is removed by excision or needle biopsy
Estrogen; estrogen total; estrogen fractions; estradiol; estriol	To evaluate adrenal cortex, ovaries, and testes function	Blood sample
Evoked potential studies (EP studies); evoked responses; auditory brainstem-evoked potentials; somatosensory evoked potentials; visual evoked potentials	To diagnose lesions of the nervous system by evaluating integrity of the visual, somatosensory, and auditory nerve pathways	Electrodes are placed in appropriate positions and recordings measured
Exercise electrocardiography (exercise ECG); graded exercise tolerance test; stress testing; treadmill test	Measures the efficiency of the heart during physical activity	Electrocardiography and blood pressure monitoring while the patient walks a treadmill; pharmacological stress through adenosine, dipyridamole and dobutamine rather than exercise
Fecal fat	To evaluate for steatorrhea in Crohn disease, cystic fibrosis, or Whipple disease	Stool samples for 3 days
Ferritin	To evaluate the size of iron storage compartments; to diagnose anemia	Blood sample
Folic acid; folate	To diagnose macrocytic anemia	Blood sample
Follicle-stimulating hormone (FSH)	To diagnose hypogonadism, infertility, menstrual disorders, or precocious puberty	Blood sample
Free erythrocyte protoporphyrin (FEP)	To detect iron-deficiency anemia	Blood sample
Gallbladder scan; hepatobiliary imaging; dimethyl amino diacetic acid (HIDA scan)	To assess for cholecystitis or obstruction of the cystic duct	Injection of a radionuclide compound; visualization of the biliary system using a scintillation camera
Gallium scan; body scan	To detect primary neoplasms, metastatic lesions, and inflammatory processes	Injection of radioactive gallium citrate; a scintillation camera is used to scan the entire body
Gamma-glutamyl transferase (GGT); gamma-glutamyl transpeptidase (GGTP)	To assist in the diagnosis of liver problems	Blood sample
Glucose tolerance test (GTT); oral glucose tolerance test (OGTT)	To assess the rate at which glucose is removed from the bloodstream	Blood and urine sample

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Glucose, postprandial; 2-hour postprandial blood sugar (2-hour PPBS); 2-hour p.c. glucose	To assess response of the body to ingestion of a meal with a standard amount of carbohydrates; to assess for effectiveness of insulin therapy	Blood sample
Glucose; blood sugar; fasting blood sugar (FBS); fasting plasma glucose (FPG)	To assess for problems with glucose metabolism	Blood sample
Glycosylated hemoglobin (G-Hb); glycated Hgb; glycohemoglobin; hemoglobin A1c (HbA1c, HgbA1c)	To determine the average blood glucose level for the previous 2 to 3 months	Blood sample
Gonorrhea culture	To test for <i>Neisseria gonorrhoeae</i>	Endocervical culture: swab of cervical mucus Urethral culture: swab from 2–3 cm within the urethra Rectal culture: swab from 1 inch within the anal canal Oral culture: swab of the pharynx and tonsillar crypts
Heart scan; cardiac nuclear scanning; multiple gated acquisition (MUGA) scan; myocardial scan; nitroglycerin scan; pyrophosphate (PYP) heart scan; thallium scan; thallium stress testing	To assess for occurrence, extent, and prognosis of myocardial infarction; to monitor effectiveness of angioplasty coronary artery grafts; to assess myocardial wall abnormalities; to assess effect of nitroglycerin on ventricular function	Injection of radiopharmaceutical followed by nuclear imaging
Hematocrit (Hct); crit; packed cell volume (PCV)	To assess the extent of blood loss and of normal hydration levels	Blood sample
Hemoglobin electrophoresis (Hgb electrophoresis)	To identify abnormal types or amounts of hemoglobin	Blood sample
Hepatitis antigens and antibodies; hepatitis A; hepatitis B; hepatitis C; Deltavirus	To assess for inflammation of the liver caused by virus, bacteria, or toxic substance	Blood sample
Herpes simplex antibody; herpes genitalis; herpes simplex virus (HSV); herpesvirus	To assess for the herpes simplex virus	Blood sample
High-density lipoprotein (HDL)	To assess for high-density lipoprotein in the blood	Blood sample
Human immunodeficiency virus (HIV) testing; acquired immunodeficiency syndrome (AIDS) test; AIDS serology; enzyme-linked immunosorbent assay for HIV and antibody; HIV antibody test; Western blot for HIV and antibody	To assess for human immunodeficiency virus	Blood sample
Human leukocyte antigen test (HLA test); HLA typing; tissue typing	To determine tissue compatibility (organ transplantation) and paternity testing	Blood sample
5-Hydroxyindoleacetic acid (5-HIAA)	To identify the presence of carcinoid tumors of the intestine	Urine sample
Immuno-electrophoresis; antibodies; gamma globulins; immunoglobulins (IgA, IgD, IgE, IgG, IgM)	To measure immunoglobulins in the blood	Blood sample
Immunoglobulin light chain; Bence Jones protein	To assess for multiple myeloma and amyloidosis	Urine sample
Insulin; insulin assay; serum insulin	To assess the level of insulin in the serum	Blood sample
Iron (Fe)	To assess for anemia	Blood sample
Kidneys, ureters, and bladder (KUB) radiography; flat plate x-ray of the abdomen; scout film	To provide an overall view of the lower abdomen; to assess for renal enlargement or displacement, congenital anomalies, renal or ureteral calculi, or ascites and gas in the intestine	Radiographic film
Lactic acid; blood lactate	To assess for liver disease	Blood sample
Lactic dehydrogenase and isoenzymes; lactate dehydrogenase (LDH, LD)	To assess for myocardial infarction, biliary obstruction, bone metastases, cancer of prostate, hepatitis, liver damage, macrocytic anemia, pneumonia, muscular dystrophy, shock, or trauma	Blood sample
Lactose tolerance test	To assess for lactose intolerance	Blood sample
Laparoscopy; gynecologic laparoscopy; pelvic endoscopy; pelviscopy; peritoneoscopy	To assess pelvic pain for carcinoma, ectopic pregnancy, endometriosis, pelvic inflammatory disease (PID), and pelvic masses; to view fallopian tubes; to perform lysis of adhesions, ovarian biopsy and tubal ligation	Insertion of a laparoscope through a small subumbilical incision for visualization and performance of procedures
Lipase	To assess abdominal pain	Blood sample
Lipid profile	To evaluate coronary heart disease risk	Usually includes high-density lipoprotein cholesterol, low-density lipoprotein cholesterol, triglycerides, and total cholesterol tests

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Liver and pancreatobiliary system ultrasonography; gallbladder and biliary system sonogram; liver sonogram; pancreas sonogram	To assess for jaundice, hepatomegaly, abdominal trauma, cholecystectomy, metastatic tumors of the liver, or pancreatic carcinoma; to guide needle biopsy	Ultrasound waves are sent into the body with a small transducer pressed against the skin
Liver biopsy; percutaneous liver biopsy; percutaneous needle biopsy of the liver	To assess for disease of the liver, elevated liver enzymes, jaundice, hepatomegaly, or possible rejection of a transplanted liver	An aspirated sample of liver tissue
Low-density lipoprotein (LDL)	To assess for low-density lipoprotein in the blood	Blood sample
Lung biopsy	To determine malignancy of a lung mass	An aspirated sample of lung mass tissue
Lung scan; lung perfusion scan; lung ventilation scan; ventilation/perfusion scanning	To detect pulmonary emboli and assess arterial perfusion of the lungs	Perfusion: A radiopharmaceutical is injected; scintillation camera is positioned over the chest Ventilation: Radioactive gas is inhaled through a face mask and the chest is scanned
Lupus erythematosus test (LE test); LE cell prep	To assess for lupus erythematosus	Blood sample
Luteinizing hormone (LH)	To determine whether ovulation occurred; to assess amenorrhea and infertility	Blood sample
Lyme disease antibody test	To evaluate for Lyme disease	Blood sample
Lymphangiography; lymphography	To detect and stage lymphomas and assist in diagnosis	Injection of contrast medium, fluoroscopic visualization, and radiographic films
Magnesium	To assess magnesium level in the blood	Blood sample
Magnetic resonance imaging (MRI)	To evaluate cerebral infarct, abnormalities of the brain and spine, knee injuries, arteriovenous malformation, congenital heart disease, dementia, glomerulonephritis, hydronephrosis, multiple sclerosis, osteomyelitis, seizures, or spinal cord injuries	Imaging while in the MRI cylinder
Mammography	Routine screening for tumors	X-ray film of the breast
Mediastinoscopy	To assess for lymphoma, sarcoidosis, staging of lung cancer	Direct visualization of the contents of the mediastinum via a mediastinoscope inserted at the suprasternal notch
Mononucleosis test; Epstein-Barr virus (EBV) antibody test; heterophil antibody titer (HAT); infectious mononucleosis testing; Monospot test	To assess for infectious mononucleosis	Blood sample
Myelography	To assess the subarachnoid space of the spinal column for tumors, bone structure changes, or herniations of intervertebral disks	Injection of contrast dye; visualization via fluoroscopy
Osmolality; serum/urine osmolality	To assess fluid and electrolyte imbalance, fluid requirements, urine concentration, and antidiuretic hormone (ADH) secretion, and for toxicology workups	Blood or urine sample
Oximetry; ear oximetry; pulse oximetry; oxygen saturation (SaO ₂)	To monitor the oxygen saturation of arterial blood	A sensor emits beams of light through the skin tissue; rate and amount of absorption is converted to percentage of oxygen saturation present in the blood and is shown on monitor
Papanicolaou smear (Pap smear); exfoliative cytologic study; Pap test	To detect cervical cancer	Vaginal speculum is used to collect secretions from the cervix and endocervical canal
Paracentesis; abdominal paracentesis; abdominal tap; peritoneal fluid analysis; peritoneal tap	To determine cause of ascites or to remove ascites; to check for abdominal bleeding	Sample of fluid obtained through incision or needle
Parathyroid hormone (PTH); parathormone	To assist in differential diagnosis of parathyroid disorder	Blood sample
Partial thromboplastin time (PTT); activated partial thromboplastin time (APTT)	To detect bleeding disorders	Blood sample
Phosphorus (P); phosphate (PO ₄)	To assess phosphorus level	Blood sample
Platelet count; thrombocyte count	To assess for thrombocytopenia, thrombocytosis, and platelet production	Blood sample
Pleural biopsy	To determine the nature of pleural tissue	Pleural tissue aspirated through a needle
Positron emission tomography (PET); single photon emission computed tomography (SPECT)	To study blood flow and metabolic changes in organs or regions of body tissues	A radionuclide is administered intravenously or by inhalation while the patient is in the positron emission topographic scanner
Potassium, blood/urine	To assess potassium levels in the blood	Blood or urine sample
Pregnancy test; human chorionic gonadotropin (hCG)	To determine pregnancy	Blood sample

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Proctosigmoidoscopy; anoscopy; proctoscopy; sigmoidoscopy	To assess lower abdominal pain, change in bowel habits, and passage of blood, mucus, or pus in the stool	The sigmoidoscope is inserted into the anus and advanced into the distal sigmoid colon; the sigmoid colon, rectum, and anus are visualized
Progesterone	To assess the level of progesterone in the blood	Blood sample
Prostate-specific antigen (PSA)	To assess for prostate cancer, monitor its progression, or monitor response to prostate cancer treatment	Blood sample
Protein C (PC)	To evaluate severe thrombosis	Blood sample
Protein electrophoresis; serum protein electrophoresis (SPEP)	To evaluate albumin and each of the globulins	Blood sample
Protein; total protein (TP); albumin; alpha globulins; beta globulins; gamma globulins	To assess level of protein in the blood	Blood sample
Prothrombin time (PT); PT ratio/INR; pro time	To evaluate the coagulation process	Blood sample
Pulmonary function tests (PFTs); spirometry	To measure pulmonary volume and capacity	Mouth-breathing into a spirometer as directed for readings of lung capacity and volume
Pyruvate kinase (PK)	To assess the level of pyruvate kinase in the blood; to assess for hemolytic anemia	Blood sample
Red blood cell count (RBC count); erythrocyte count	To measure the number of red blood cells per cubic millimeter of blood	Blood sample
Red blood cell indices (RBC indices); blood indices; mean corpuscular hemoglobin (MCH); mean corpuscular hemoglobin concentration (MCHC); mean corpuscular volume (MCV)	To determine normal size and amount of red blood cells	Blood sample
Renal biopsy; kidney biopsy	To assist in diagnosis of renal parenchymal disease	Renal tissue sample obtained through surgical incision or needle aspiration
Renal scan; kidney scan	To detect renal infarct, renal arterial atherosclerosis, renal trauma, renal tumor or cyst, or primary renal disease	Radiopharmaceutical administered by injection; scintillation camera is positioned over the right upper quadrant
Reticulocyte count (retic count)	To assist in differential diagnosis of anemia	Blood sample
Retrograde pyelography; pyelography	To assess for bladder tumor, hydronephrosis, polycystic kidney disease, ureteral calculi, or renal cysts	Radiopaque iodine-based contrast medium is injected through a catheter into each kidney; radiographic films are taken of the ureters
Rheumatoid factor (RF); rheumatoid arthritis (RA) factor	To assess for rheumatoid arthritis	Blood test
Scrotal ultrasound; ultrasound of testes	To assess for scrotal masses and infection; to evaluate scrotal pain; to locate undescended testicles	A transducer is placed on the skin and moved as needed to provide visualization of the scrotal contents
Semen analysis; seminal cytology; sperm count	Used in fertility workup	Semen specimen
Skeletal x-ray; bone x-ray; sella turcica x-ray; skeletal radiography; skull x-ray; spinal x-ray; vertebral x-ray	To assess for bone deformities, fractures, dislocations, tumors, or metabolic abnormalities	Radiographic films of specific area
Sodium	To assess sodium levels in the blood	Blood or urine sample
Sputum culture and sensitivity (sputum C&S)	To diagnose bacterial, fungal, or nonbacterial lower respiratory tract pneumonia	Sputum sample
Stool culture; stool for ova and parasites	To identify pathogens in the gastrointestinal tract	Stool sample
Stool for occult blood; Hematest; Hemoccult (guaiac)	To identify blood in the gastrointestinal tract	Stool sample
Syphilis serology; fluorescent treponemal antibody absorption (FTA-ABS); microhemagglutination- <i>Treponema pallidum</i> (MHA-TP); rapid plasma reagin (RPR); Venereal Disease Research Laboratory (VDRL)	To assess for <i>Treponema pallidum</i>	Blood sample
T- and B-cell lymphocyte counts; acquired immunodeficiency syndrome (AIDS) T-lymphocyte cell markers; CD4 marker; T- and B-cell lymphocyte surface markers	To assess for Graves disease, viral infection, human immunodeficiency virus (HIV) infection, risk of AIDS, measles, or Hodgkin disease	Blood sample
Testosterone	To assess testosterone levels in blood	Blood sample
Thoracentesis; pleural fluid analysis; pleural tap	To determine the cause of fluid production in the lungs	Aspiration of pleural fluid using a needle

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Throat culture and sensitivity	To assess for pathogens	Swab of the tonsillar area and posterior pharynx
Thyroid scan	To assess size, shape, position, and function of the thyroid gland	IV administration of radioactive trace; scanning with scintillation camera
Thyroid-stimulating hormone (TSH); thyrotropin	To assess thyroid hormone levels	Blood sample
Thyroxine (T ₄); total T ₄	To assess thyroid hormone levels	Blood sample
Thyroxine, free; free T ₄ (FT ₄)	To assess thyroid hormone levels	Blood sample
Total carbon dioxide content; carbon dioxide content (CO ₂ content)	To assess carbon dioxide level in the blood	Blood sample
Total iron-binding capacity (TIBC)	To assess the maximum amount of iron that can be bound to transferrin	Blood sample
Toxicology screen; drug screen	To determine cause of drug toxicity, monitor compliance, and detect presence of drugs for employment or legal purposes	Blood or urine specimen
Transesophageal echocardiography (TEE)	To evaluate thoracic, aortic, and cardiac disorders	Gastroscope introduced into the mouth and advanced to the level of the right atrium of the heart; sound waves from the transducer on the gastroscope are transformed into a visual display
Transferrin; iron-binding protein; siderophilin	To assess the level of transferrin	Blood sample
Triglycerides	To assess triglyceride levels	Blood sample
Triiodothyronine (T ₃); total T ₃	To assess thyroid hormone levels	Blood sample
Triiodothyronine uptake test (T ₃ uptake); T ₃ resin uptake	To assess thyroid hormone levels	Blood sample
Tuberculin (TB) skin test; Mantoux test; purified protein derivative (PPD) skin test; tine test	To screen for previous infection by tubercle bacillus	Intradermal injection of purified protein derivatives (PPDs)
Upper gastrointestinal and small bowel series; gastric radiography; small bowel study; stomach x-ray; upper gastrointestinal series	To assess dysphagia, regurgitation, burning epigastric pain, hematemesis, melena, or weight loss	Barium is ingested while fluoroscopic films are taken of the esophagus, stomach, and small intestine
Urea nitrogen; blood urea nitrogen (BUN); urinary urea nitrogen	To assess the level of urea nitrogen	Blood or urine sample
Uric acid	To assess for uric acid	Blood or urine sample
Urinalysis (UA); routine urinalysis	Routine screening in physical examination, preoperative testing, hospital admission for diagnosis of infection of the kidneys and urinary tract, and diseases unrelated to the urinary system	Urine sample
Urine culture and sensitivity (urine for C&S)	To identify the specific bacterial organism present in the urine	Urine sample
Uroflowmetry; urine flow studies; urodynamic studies	To detect dysfunctional voiding patterns	Urination into a flowmeter to measure duration, amount, and rate
Urography; infusion pyelogram; intravenous pyelogram (IVP)	To demonstrate normal anatomy and wide range of abnormalities involving the urinary tract	Intravenous administration of contrast material, which is excreted by the kidneys; radiographs are exposed for evaluation of the morphology and function of the urinary tract
Vanillylmandelic acid and catecholamines (VMA); dopamine; epinephrine; norepinephrine; metanephrine; normetanephrine	To assess for neuroblastoma, stress, idiopathic orthostatic hypertension, and pheochromocytoma	Urine sample
Vitamin B12; cyanocobalamin; extrinsic factor	To assess for macrocytic anemia	Blood sample
White blood cell (WBC) count and differential; basophil count; eosinophil count; leukocyte count; lymphocyte count; monocyte count; neutrophil count	To assess the total number of white blood cells and percentage of differentiation	Blood sample
Wound culture and sensitivity	To identify the specific bacterial organism present in the wound	Swab of the wound site