

Glossary of Orthopaedic Terms:

Abduction: Movement of a limb away from the middle of the body.

Achilles tendonitis: Inflammation of the Achilles tendon, the tough sinew that attaches the calf muscle to the back of the calcaneus, or heel bone.

ACL: Anterior cruciate ligament.

Active Motion: Joint motion carried out by the patient.

Adduction: Movement of a limb toward the midline of the body.

Ankylosing spondylitis: A type of arthritis that causes chronic inflammation of the spine and the sacroiliac joints. Chronic inflammation in these areas causes pain and stiffness in and around the spine. Over time, chronic spinal inflammation (spondylitis) can lead to a complete cementing together (fusion) of the vertebrae, a process called ankylosis. Ankylosis causes total loss of mobility of the spine.

Anterior cruciate ligament (ACL): A ligament in the knee that crosses from the underside of the femur (the thigh bone) to the top of the tibia (the bigger bone in the lower leg). Injuries to the ACL can occur in a number of situations, including sports, and can be quite serious, requiring surgery.

Arthritis: Inflammation of a joint. When joints are inflamed they can develop stiffness, warmth, swelling, redness and pain. There are over 100 types of arthritis.

Arthrodesis: A bone fusion done to relieve pain, usually in the ankles, wrists, fingers, and thumbs. The two bones forming a joint are joined together so that the resulting fused joint loses flexibility. However, a fused joint can bear weight better, is more stable, and is no longer painful.¹

Arthrogram: An x-ray to view bone structures following an injection of a contrast fluid into a joint area. When the fluid leaks into an area that it does not belong, disease or injury may be considered as a leak would provide evidence of a tear, opening, or blockage.

Arthroscopy: A surgical technique whereby a tube-like instrument is inserted into a joint to inspect, diagnose and repair tissues. It is most commonly performed in patients with diseases of the knees or shoulders.

Arthroplasty : Reconstructive surgery of a joint or joints to restore motion because of ankylosis or trauma or to prevent excessive motion.

Atrophy: Wasting away or diminution. Muscle atrophy is decrease in muscle mass.

Avulsion: Tearing away. A nerve can be avulsed by an injury, as can part of a bone.

Bankart lesion: Avulsion of the anterior glenoid labrum that is usually associated with anterior shoulder dislocations.

Bennet lesion: Posterior glenoid defect associated with overhead throwing injuries.

Bone cysts: A sac containing liquid or semisolid material on a bone.

Bunion: A bunion is a localized painful swelling at the base of the big toe (the great toe). The joint is enlarged (due to new bone formation) and the toe is often misaligned. It is frequently associated with inflammation. It can be related to inflammation of the nearby bursa (bursitis) or degenerative joint disease (osteoarthritis).

Bursa: A closed fluid-filled sac that functions to provide a gliding surface to reduce friction between tissues of the body.

Bursitis: Bursitis is inflammation of a bursa.

CT scan (Computed tomography scan): Pictures of structures within the body created by a computer that takes the data from multiple X-ray images and turns them into pictures on a screen. The CT scan can reveal some soft-tissue and other structures that cannot even be seen in conventional X-rays.

Carpal tunnel syndrome: Loss of sensation and sometimes motor control if the median nerve is cut off at the wrist because of compression of the nerve at the carpal ligament.

Cartilage: Firm, rubbery tissue that cushions bones at joints

Cast: A protective shell of plaster and bandage molded to protect a broken or fractured limb as it heals.

Cerebral palsy: An abnormality of motor function (the ability to move and control movements) that is acquired at an early age, usually less than a year of age, and is due to a brain lesion that is non-progressive.

Cervical Spine Degeneration: The deterioration of quality of the seven segments of spinal tissue between the base of the skull and the thoracic spine.

Chondromalacia: Abnormal softening or degeneration of cartilage.

Clubfoot: A common malformation of the foot that is evident at birth. The foot is turned in sharply so that the person seems to be walking on their ankle. The medical term for the common ("classic") type of clubfoot is talipes equinovarus.

Comminuted Fracture: A fracture in which bone is broken, splintered or crushed into a number of pieces.

Compound Fracture: A fracture in which the bone is sticking through the skin. Also called an open fracture.

Congenital: Present at birth.

Contusion: Another name for a bruise. What is a bruise ? A bruise, or contusion, is caused when blood vessels are damaged or broken as the result of a blow to the skin (be it bumping against something or hitting yourself with a hammer). The raised area of a bump or bruise results from blood leaking from these injured blood vessels into the tissues as well as from the body's response to the injury. A purplish, flat bruise that occurs when blood leaks out into the top layers of skin is referred to as an ecchymosis.

Crepitation: A grating or crackling sound or sensation, as that produced by the fractured ends of a bone moving against each other.

Decompression: A procedure to remove pressure on a structure, as in decompression of the spinal cord.

Degenerative Disc Disease: Gradual or rapid deterioration of the chemical composition and physical properties of the disk space.

Desensitization: Treatment of hypersensitivity and pain secondary to nerve injury, partial nerve injury, nerve compression, and soft –tissue injuries.

Diskectomy: The excision of intervertebral disk material that may be described as herniated, implying "bulging" or "ruptured" through the ligaments.

Dislocation: Displacement of one or more bones at a joint.

Dorsal: Relating to the back or posterior of a structure. Some of the dorsal surfaces of the body are the back, buttocks, calves, and the knuckle side of the hand.

Dorsiflexion: Bending toward the dorsal aspect, as the wrist refers to lifting the wrist up.

Dupuytren contracture: A localized formation of scar tissue in the palm of the hand. The scarring accumulates in a tissue called the fascia beneath the skin of the palm that normally covers the tendons that pull the fingers grip.

DVT (deep vein thrombosis): Blood clotting in the veins of the inner thigh or leg. In air travel, DVT is the "economy-class syndrome." Even in young, health travelers the long stretches immobilized in cramped seats in cabins with very low humidity set the stage for the formation of a thrombus (blood clot) in the lower leg. Blood clots can break off (as emboli) and makes their way to the lung where they have the potential of causing respiratory distress and respiratory failure.

Edema Control: Methods and devices used to minimize persistent swelling in the hand or upper extremity.

Electromyogram (EMG): A test used to record the electrical activity of muscles. When muscles are active, they produce an electrical current that is usually proportional to the level of muscle activity.

Extension: The process of straightening or the state of being straight.

External fixation: A procedure that stabilizes and joins the ends of fractured (broken) bones by a splint or cast.

Femur: The femur is the bone in the leg that extends from the hip to the knee.

Fibromyalgia: A syndrome characterized by chronic pain, stiffness, and tenderness of muscles, tendons, and joints without detectable inflammation.

Fibrous dysplasia: A progressive and usually lethal process in which multiple muscles form bone.

Fibula: The lateral (outside) and smaller of the two long bones in the lower leg between the knee and ankle.

Flatfoot: A foot in which the arch of the instep is flattened and the entire sole touches the ground.

Flexion: The process of bending or the state of being bent.

Fracture: A break in a bone.

Humerus: The long bone in the arm that extends from the shoulder to the elbow.

Inflammation: A basic way in which the body reacts to infection, irritation or other injury, the key feature being redness, warmth, swelling and pain.

Ganglion cysts: Non-cancerous, fluid-filled cysts are common masses or lumps in the hand and usually found on the back of the wrist.

Guillain-Barre syndrome: A disorder characterized by progressive symmetrical paralysis and loss of reflexes, usually beginning in the legs. The paralysis characteristically involves more than one limb (most commonly the legs), is progressive, and is usually proceeds from the end of an extremity toward the torso.

Greenstick Fracture: A fracture in which one side of a bone is broken while the other is bent.

Hammer toe: A flexed (curled) but not abnormally rotated toe. May require surgical correction.

Herniated disc: Rupturing of the tissue that separates the vertebral bones of the spinal column.

Hill-Sachs lesion: Bony defect in the humeral head caused by a shoulder dislocation.

Hip Dysplasia: Failure of normal bony modeling of the hip socket.

Inflammation: A normal reaction to injury or disease, which results in swelling, pain, and stiffness.

Internal fixation: A surgical procedure that stabilizes and joins the ends of fractured (broken) bones by mechanical devices such as metal plates, pins, rods, wires or screws.

Internal Glenoid Impingement: Pain syndrome caused by abrasion of the posterior labrum and rotator cuff (usually in baseball pitchers).

Intradiscal therapy: Introduction of either steroid or other medication into the disc space to relieve pain caused by a degenerated disc, or introduction of a catheter that allows heating of the disc and the annulus to ablate nerves that may be responsible for pain.

Joint: Where the ends of two or more bones meet.

Kyphoplasty: A procedure similar to vertebroplasty but with the intent of expanding the vertebra. A surgical instrument is introduced into the spine. Once this instrument is withdrawn, the space created is then filled with the bone cement mixture. By creating space in this way, kyphoplasty procedures may correct deformity or restore body height.

Kyphosis: Outward curvature of the spine, causing a humped back.

Lateral: The side of the body or a body part that is farther from the middle or center of the body. Typically, lateral refers to the outer side of the body part, but it is also used to refer to the side of a body part. For example, when referring to the knee, lateral refers to the side of the knee farthest from the opposite knee. The opposite of lateral is medial.

Lateral Collateral Ligament (LCL): The ligament that gives stability to the outer knee.

Lateral Epicondylitis (Tennis Elbow): A painful injury to the tendon that is attached to the outer part of the elbow, due to repetitive twisting of the wrist or forearm which causes irritation and inflammation of the extensor tendon.

Ligaments: A ligament is a tough band of connective tissue that connects the bones and keeps joints stable.

Little Leaguer's Elbow: Overuse injury to the lateral aspect of the elbow (capitellum).

Little Leaguer's Shoulder: Separation of the proximal humeral growth plate.

Lumbar: Pertaining to the part of the back which extends from the lowest ribs down to the upper border of the pelvis.

Medial: Pertaining to the middle; in or toward the middle; nearer the middle of the body. For example, the medial side of the knee is the side closest to the other knee. The opposite of medial is lateral.

Medial Collateral Ligament (MCL): The ligament that gives stability to the inner knee.

Medial Epicondylitis (Golfer's Elbow, Baseball Elbow, Suitcase Elbow, Forehand Tennis Elbow): Pain caused by damage to the tendons that bend the wrist toward the palm.

Malunion: State of healing of the bone in which bone unites but in abnormal position and/or alignment.

Menisci: Two crescent-shaped discs of connective tissue between the bones of the knees that act as shock absorbers to cushion the lower part of the leg from the weight of the rest of the body.

Morton's Neuroma: A swollen inflamed nerve in the ball of the foot, usually between the base of the second and third toes, caused by chronic compression of a branch of the plantar nerve between the ends of the metatarsal bones.

MRI (Magnetic Resonance Imaging): A special radiology technique designed to image internal structures of the body using magnetism, radio waves, and a computer to produce the images of body structures. The image and resolution is quite detailed and can detect tiny changes of structures within the body, particularly in the soft tissue, brain and spinal cord, abdomen and joints.

Multiple Sclerosis: Slowly progressive disease of nervous system in which scattered areas of degeneration of the myelin (lipid substance forming a sheath around certain nerve fibers) occur.

Muscular Dystrophy: A group of degenerative disorders of muscle resulting in atrophy and weakness.

Musculoskeletal system: The complex system that includes: bones, joints, ligaments, tendons, muscles, and nerves.

Myelogram: A specific X-ray study that uses an injection of a dye or contrast material into the spinal canal to allow careful evaluation of the spinal canal and nerve roots.

Myofascial treatment: Treatment of a hyperirritable spot, usually within a taut band of skeletal muscle or fascia.

Nerve block: A procedure in which an anesthetic agent is injected directly near a nerve to block pain.

Nonunion: State of healing of the bone in which there is no healing.

Open Fracture: A fracture in which the bone is sticking through the skin. Also called a compound fracture.

Orthopaedic surgeon (or orthopaedist): The physician who diagnoses, treats, manages the rehabilitation process, and provides prevention protocols for patients who suffer from injury or disease in any of the components of the musculoskeletal system.

Orthopaedic surgery (or orthopaedics): The medical specialty devoted to the diagnosis, treatment, rehabilitation, and prevention of injuries and diseases of the body's musculoskeletal system.

Orthotics: A support, brace, or splint used to support, align, prevent, or correct the function of movable parts of the body.

Osteoarthritis: A type of arthritis caused by inflammation, breakdown, and eventual loss of cartilage in the joints. Also known as degenerative arthritis.

Osteomyelitis: Inflammation of the bone due to infection, for example by the bacteria salmonella or staphylococcus.

Osteonecrosis: Death of bone tissue.

Osteoporosis: Thinning of the bones with reduction in bone mass due to depletion of calcium and bone protein.

Osteotomy: Surgical procedure that changes the alignment of bone with or without removal of a portion of that bone.

Paget's Disease: A chronic bone disorder that typically results in enlarged, deformed bones due to excessive breakdown and formation of bone tissue that can cause bones to weaken and may result in bone pain, arthritis, deformities or fractures.

Passive Motion: Movement of a patient's joint by a person who is examining or treating the patient.

Patella: The kneecap.

Peripheral nerve disorders: Problems involving numbness, tingling and weakness in the upper extremity.

Post Polio Syndrome: A syndrome of increasing weakness, fatigue and pain appearing decades after an acute infection of poliomyelitis.

Posterior Cruciate Ligament (PCL): The ligament, located in the center of the knee, that controls backward movement of the tibia (shin bone).

Pronation: A turning of the forearm and hand so that the palm faced downward. The opposite of supination.

Radius: The shorter of the two bones of the forearm, on the thumb side of the forearm.

Resection: The removal of part of all of a bone.

Revision Joint Surgery: The replacement of artificial joints and damaged bone with special plastic and metal parts. This surgery is necessary when a previous joint replacement wears out.¹

Sacrum: The lower five vertebrae fused together and joined with the pelvis.

Spinal Fusions: A surgical procedure in which two or more of the vertebrae in the spine are united together so that motion no longer occurs between them.

Supination: A turning of the forearm and hand so that the palm faces upward. The opposite of pronation.

Synovectomy: The removal of the synovium or tissues lining the joints.

Synovium: The lining of a joint.

Prosthetics: The art and science of developing artificial replacements for body parts.

Reflex Sympathetic Dystrophy (RSD): A condition characterized by diffuse pain, swelling and limitation of movement that follows an injury such as a fracture in an arm or leg, The symptoms are way out of proportion to the injury and may linger long after the injury has healed.

RICE treatment - rest, ice, compression, and elevation.

Rotator Cuff Disease: Damage to the rotator cuff, a group of four tendons that stabilize the shoulder joint and move the shoulder in various directions.

Rotator Cuff Impingement Syndrome: Painful RTC abrasion by an overhanging acromion, AC joint, or coraco-acromial ligament.

Rotator Cuff Tear: Tear of the rotator cuff tendons. (Supraspinatus, Infraspinatus, Teres Minor, or Subscapularis)

Rotator Cuff Tendinosis: Degenerative changes in rotator cuff tendon that occur with age and with overuse.

Rotator Cuff Tendinitis: Inflammation of the rotator cuff and associated bursal sac.

Scoliosis: Sideways (lateral) curving of the spine (the backbone).

SLAP Lesion: Superior labral lesion in the shoulder.

Soft-tissue: Generally, the ligaments, tendons, and muscles in the musculoskeletal system.

Spina bifida: A birth defect (a congenital malformation) in which there is a bony defect in the vertebral column so that part of the spinal cord, which is normally protected within the vertebral column, is exposed.

Spiral Fracture: A fracture, sometimes called a torsion fracture, in which a bone has been twisted apart.

Spondylolisthesis: Forward movement of one of the building blocks (vertebrae) of the spine in relation to an adjacent vertebra. Also called a slipped vertebra or slipped spine.

Sprain: An injury to a ligament that results from overuse or trauma. Sprains occurs when there is a stretch or tear in one or more ligaments, slightly elastic bands of tissue that keep the bones in place while permitting movement at a joint.

Strain: An injury to a tendon or muscle resulting from overuse or trauma.

Stress Fractures: A fracture caused by repetitive stress, as may occur in sports, strenuous exercise, or heavy physical labor.

Tendon: The tissue by which a muscle attaches to bone. A tendon is somewhat flexible, but fibrous and tough

Tendonitis: Inflammation of a tendon.

Tennis elbow: A painful injury to the tendon that is attached to the outer part of the elbow, due to repetitive twisting of the wrist or forearm which causes irritation and inflammation of the extensor tendon. This tendon attaches to the lateral epicondyle of the humerus. The condition is therefore also known as lateral epicondylitis.

Tibia: The shin bone, or larger bone of the lower leg.

Torn Anterior Cruciate Ligament: Tear in one or both of the two deep ligaments within the knee that are crossed.

Torn Medial Collateral Ligament: A tear in the strong fibrous ligament on the medial side of the knee connecting the femur with the tibia.

Torn Meniscus: A tear in the crescent-shaped fibrocartilaginous disk between the two joint surfaces.

Torn Rotator Cuff: Tear in one or more of the tendons that lie deep in the shoulder and bridge the glenohumeral joint.

Total Hip Replacement: Surgery in which the diseased ball and socket of the hip joint are completely removed and replaced with artificial materials.

Total Knee Replacement: A surgical procedure in which damaged parts of the knee joint are replaced with artificial parts.

Traction: The use of a system of weights and pulleys to gradually change the position of a bone. It may be used in cases of bone injury or congenital defect, to prevent scar tissue from building up in ways to limit movement, and to prevent contractures in disorders such as cerebral palsy or arthritis.

Transverse Fracture: A fracture in which the break is across the bone, at a right angle to the long axis of the bone.

Trigger Finger: Catching or locking of a finger.

Ulna: The longer of the two bones in the forearm.

Viscosupplementation Injections: Injection of viscous fluid onto a synovial joint in order to treat a painful, arthritic joint.

¹ From www.arthritis.org