

Medical Terminology

Flashcard Study Guide

Chapter 20: The Skeletal System

47 terms

Each card contains:

Term | Syllables | *Pronunciation* | Definition | 🌱 *Memory trick*

Chapter 20 — The Skeletal System

Abduction

ab · duc · tion *ab-DUK-shun*

Movement of a limb or body part away from the midline of the body. The opposite of adduction.

🌱 'Ab' = away. *ABduction = moving AWAY from the body's center. Think of being ABducted — taken away.*

Adduction

ad · duc · tion *ad-DUK-shun*

Movement of a limb or body part toward the midline of the body. The opposite of abduction.

🌱 'Ad' = toward. *ADDuction = ADDing the limb back toward the body.*

Amphiarthrotic joint

am · phi · ar · throt · ic *AM-fee-ar-THROT-ik*

A slightly movable joint that allows limited movement. Examples include the joints between the vertebrae and the pubic symphysis.

🌱 'Amphi' = on both sides, 'arthr' = joint. *These joints go both ways — not fully fixed, not fully free. Think of them as 'halfway' joints.*

Appendicular skeleton

ap · pen · dic · u · lar *ap-en-DIK-yoo-lar*


The portion of the skeleton that includes the bones of the upper and lower extremities, shoulder girdle, and pelvic girdle. It consists of 126 bones.

🌱 *Appendicular = your APPENDages (arms and legs). Everything that hangs off the axial skeleton.*

Arthritis

ar · thri · tis *ar-THRY-tis*

Inflammation of one or more joints, causing pain, swelling, and stiffness. There are many types, including osteoarthritis and rheumatoid arthritis.

 'Arthr' = joint + 'itis' = inflammation. Arthritis = inflamed joints. The most common joint disease.

Articulation

ar · tic · u · la · tion *ar-tik-yoo-LAY-shun*


The place where two or more bones meet; a joint. Articulations vary in structure and degree of movement.

 Articulation = where bones 'articulate' or connect. Just like articulating words connects sounds — articulations connect bones.

Atlas

at · las *AT-las*

The first cervical vertebra (C1) that supports the skull. It allows the nodding (yes) motion of the head.

 Named after the Greek god Atlas who held the world on his shoulders — C1 holds your skull (your world) on top of your spine.

Axial skeleton

ax · i · al *AK-see-ul*


The central portion of the skeleton consisting of the skull, vertebral column, ribs, and sternum. It consists of 80 bones and forms the body's central axis.

 Axial = the AXIS or central line of the body. Think of an axle running through the center of a car — the axial skeleton is your body's central axle.

Axis

ax · is *AK-sis*

The second cervical vertebra (C2). It has a tooth-like projection (dens or odontoid process) that allows the atlas to rotate, enabling the head to turn side to side (no motion).

 The axis is the pivot point for head rotation — your head rotates around C2 like a wheel turns around an AXIS.

Bursa

bur · sa *BUR-sah*

A small, fluid-filled sac located between tissues such as bone, muscle, tendon, and skin. Bursae reduce friction and cushion pressure points near joints.

 *Think of a bursa as a tiny water balloon cushion between bones and tendons — it keeps things sliding smoothly.*

Bursitis

bur · si · tis *bur-SY-tis*


Inflammation of a bursa, causing pain and swelling near a joint. Commonly affects the shoulder, elbow, and hip. Often caused by repetitive motion or prolonged pressure.

 *'Bursa' + 'itis' = inflamed bursa. When the cushion gets angry, the joint hurts. Common in people who kneel a lot (housemaid's knee).*

Cancellous (spongy) bone

can · cel · lous *KAN-sel-us*

Lightweight bone tissue with a lattice-like structure found inside bones. It contains red bone marrow and helps absorb shock. Also called trabecular bone.

 *Cancellous = looks like it was 'cancelled out' — full of holes like a sponge. The Swiss cheese of bone tissue.*

Chondrocyte

chon · dro · cyte *KON-droh-syte*

A mature cartilage cell responsible for maintaining the cartilage matrix. Found in small cavities (lacunae) within the cartilage.

 *'Chondro' = cartilage + 'cyte' = cell. A chondrocyte is a cartilage cell — the worker that builds and maintains cartilage.*

Circumduction

cir · cum · duc · tion *sir-kum-DUK-shun*

A circular movement of a limb that combines flexion, extension, abduction, and adduction. The limb traces a cone shape. Common at the shoulder and hip joints.

 *'Circum' = around + 'duction' = movement. CIRCUMduction = moving in a CIRCLE. Think of winding up to throw a ball.*

Compact bone

com · pact bone *KOM-pakt bone*

Dense, hard bone tissue that forms the outer layer of bones. It provides strength and protection. Contains the Haversian system (osteons) for blood supply.

 *Compact = tightly packed. The outer shell of bone is compacted together for maximum strength — like a protective armor.*

Diaphysis

di · aph · y · sis *dy-AF-ih-sis*

The shaft or long, main portion of a long bone. It is composed mainly of compact bone and contains the medullary (marrow) cavity.

 *The DIaphysis is the long DIAmeter part of the bone — the straight shaft running through the middle.*

Diarthrotic joint

di · ar · throt · ic *dy-ar-THROT-ik*

A freely movable joint, also called a synovial joint. Examples include the knee, shoulder, hip, and elbow. These joints allow the greatest range of motion.

 *'Di' can mean 'through/across' + 'arthr' = joint. Diarthrotic joints let you move freely — they are the most mobile joints in the body.*

Dislocation

dis · lo · ca · tion *dis-loh-KAY-shun*


The displacement of a bone from its normal position at a joint. Causes severe pain, swelling, and loss of function. Requires medical reduction (repositioning).

 *'Dis' = apart + 'location' = place. The bone is DIS-located — out of its proper location. It needs to be put back.*

Dorsiflexion

dor · si · flex · ion *DOR-sih-FLEK-shun*

Bending the foot upward at the ankle, decreasing the angle between the top of the foot and the shin. The opposite of plantar flexion.

 *'Dorsi' = back/top + 'flexion' = bending. You bend the top (dorsal surface) of the foot UP toward the shin — like pulling your toes toward your nose.*

Endosteum

en · dos · te · um *en-DOS-tee-um*

The thin membrane that lines the inner surface of bones, specifically the medullary cavity. It contains cells involved in bone growth and repair.

 'Endo' = within + 'osteum' = bone. The endosteum is the INNER lining of the bone — while periosteum is the OUTER covering.

Epiphysis

e · piph · y · sis *eh-PIF-ih-sis*

The rounded end of a long bone. Each long bone has two epiphyses (proximal and distal) made of spongy bone covered by a thin layer of compact bone.

 'Epi' = upon/above + 'physis' = growth. The epiphysis sits at the END of the bone — the knobby caps on each end of a long bone.

Etiology

e · ti · ol · o · gy *ee-tee-OL-oh-jee*


The study or science of the causes or origins of disease. In clinical use, it refers to the specific cause of a particular disease or condition.

 Etiology = the 'why' behind a disease. Think of it as the 'origin story' of an illness.

Eversion

e · ver · sion *ee-VER-zhun*

Turning the sole of the foot outward, away from the midline. The opposite of inversion.

 'E' = out + 'version' = turning. Eversion = turning the foot outward. Your sole faces AWAY from the other foot.

Extension

ex · ten · sion *ek-STEN-shun*


A movement that increases the angle between two body parts, straightening a joint. The opposite of flexion. Example: straightening the elbow.

 'Ex' = out + 'tension' = stretch. Extension = EXTENDING or straightening a limb outward. Think of extending your arm to reach something.

Flexion

flex · ion *FLEK-shun*

A movement that decreases the angle between two body parts, bending a joint. The opposite of extension. Example: bending the elbow.

 *Flexion = FLEXing your muscles by bending. When you flex your bicep, your elbow bends — that's flexion.*

Gout

gout *gowt*

A form of arthritis caused by the buildup of uric acid crystals in joints, most commonly the big toe. Causes sudden, severe pain, redness, and swelling.

 *Gout = the 'OUCH' disease of the big toe. Uric acid crystals are like tiny needles stabbing the joint. Historically called the 'disease of kings' from rich diets.*

Hallux valgus

hal · lux val · gus *HAL-uks VAL-gus*

A deformity of the big toe (hallux) in which it angles laterally toward the other toes. Commonly known as a bunion.

 *'Hallux' = big toe + 'valgus' = angled outward. The big toe leans sideways creating a bump — that painful bunion your grandmother warned you about.*

Hammertoe

ham · mer · toe *HAM-er-toe*


A deformity in which a toe bends abnormally at the middle joint, resembling a hammer. Most often affects the second through fifth toes. Can be caused by tight shoes.

 *The toe bends down like the head of a HAMMER. It gets stuck in a bent position.*

Inversion

in · ver · sion *in-VER-zhun*


Turning the sole of the foot inward, toward the midline. The opposite of eversion.

 *'In' = inward + 'version' = turning. Inversion = turning the foot INward. Your sole faces toward the other foot.*

Kyphosis

ky · pho · sis *ky-FOH-sis*

An excessive outward curvature of the thoracic spine, resulting in a rounded or hunched upper back. Sometimes called a dowager's hump in older adults.

 *Kyphosis = the 'hunchback' curve. Think of someone who is 'KY-ned' over — hunched forward in the upper back.*

Lordosis

lor · do · sis *lor-DOH-sis*

An excessive inward curvature of the lumbar spine (lower back), sometimes called swayback. Common during pregnancy and in individuals with weak abdominal muscles.

 *Lordosis = 'LORD-oh-sis' — imagine a Lord leaning back with an arched lower back showing off. Swayback = the lower back sways inward.*

Medullary canal

med · ul · lar · y ca · nal *MED-yoo-lair-ee kah-NAL*

The hollow center of the diaphysis (shaft) of a long bone that contains yellow bone marrow (fat storage) in adults. Also called the marrow cavity.

 *'Medullary' comes from 'medulla' = marrow. The medullary canal is the CANAL through the middle of bone filled with MARROW.*

Orthopedic physician

or · tho · pe · dic *or-thoh-PEE-dik*

A physician who specializes in the diagnosis and treatment of conditions involving the musculoskeletal system, including bones, joints, ligaments, tendons, and muscles.

 *'Ortho' = straight/correct + 'pedic' = child (originally about straightening children's bones). Now it covers bones and joints for all ages.*

Osteoarthritis

os · te · o · ar · thri · tis *OS-tee-oh-ar-THRY-tis*

A degenerative joint disease caused by the breakdown of cartilage. The most common form of arthritis, often affecting weight-bearing joints. Also called 'wear and tear' arthritis.

 *'Osteo' = bone + 'arthr' = joint + 'itis' = inflammation. OA is the 'old age' arthritis — cartilage wears away over time until bone rubs on bone.*

Osteomalacia

os · te · o · ma · la · ci · a *OS-tee-oh-mah-LAY-shee-uh*


Softening of the bones due to a deficiency of vitamin D, calcium, or phosphate. The adult equivalent of rickets. Results in weak, flexible bones prone to fractures.

 *'Osteo' = bone + 'malacia' = softening. Osteomalacia = SOFT bones. 'Malacia' sounds like 'malice against your bones' — they become too soft.*

Osteoporosis

os · te · o · po · ro · sis *OS-tee-oh-poh-ROH-sis*

A condition of decreased bone density and mass, making bones fragile and prone to fractures. Most common in postmenopausal women. A major cause of fractures in the elderly.

 'Osteo' = bone + 'porosis' = porous. Osteoporosis = POROUS bones — bones become full of tiny holes like a sponge that's drying out.

Periosteum

per · i · os · te · um *per-ee-OS-tee-um*

The dense, fibrous membrane covering the outer surface of bones (except at joint surfaces). It contains blood vessels, nerves, and cells essential for bone growth and repair.

 'Peri' = around + 'osteum' = bone. The periosteum is the wrapping AROUND the bone — like plastic wrap covering the outside.

Pronation

pro · na · tion *proh-NAY-shun*

Rotation of the forearm so the palm faces downward or backward. Also refers to inward rolling of the foot during walking.

 PRONation = palms go face DOWN (prone position). When you're PRONE (lying face down), your palms face down too.

Protraction

pro · trac · tion *proh-TRAK-shun*


Forward movement of a body part in a horizontal plane. Example: pushing the jaw or shoulder blades forward. The opposite of retraction.

 'Pro' = forward + 'traction' = pulling. PROtraction = moving forward — like PROjecting your jaw outward.

Reduction

re · duc · tion *ree-DUK-shun*

The procedure of restoring a bone to its normal position after a fracture or dislocation. Can be closed (manual manipulation) or open (surgical).

 Reduction = REDUCing the fracture back to normal alignment. You're reducing the displacement — putting the bone back where it belongs.

Retraction

re · trac · tion *ree-TRAK-shun*

Backward movement of a body part in a horizontal plane. Example: pulling the shoulder blades together or pulling the jaw back. The opposite of protraction.

🌱 'Re' = back + 'traction' = pulling. *RETRAction = pulling back — like RETREATing or RETRACTing your jaw.*

Rheumatoid arthritis

rheu · ma · toid ar · thri · tis *ROO-mah-toyd ar-THRY-tis*

A chronic autoimmune disease in which the body's immune system attacks the synovial membrane of joints, causing inflammation, pain, swelling, and eventual joint destruction.

🌱 *RA is when the immune system goes ROGUE and attacks its own joints. Unlike osteoarthritis (wear and tear), RA is an autoimmune war against your joints.*

Rickets

rick · ets *RIK-ets*

A childhood disease caused by vitamin D deficiency, leading to soft and deformed bones. Characterized by bowed legs and other skeletal deformities. The childhood form of osteomalacia.

🌱 *Rickets = RICKETY bones in children. Like a rickety old chair with wobbly legs — the bones are too soft to hold straight.*

Rotation

ro · ta · tion *roh-TAY-shun*

Turning a bone around its own axis. Can be medial (inward) or lateral (outward). Example: turning the head from side to side.

🌱 *Rotation = ROTATing like a wheel on its axis. Shaking your head 'no' is rotation of your neck.*

Scoliosis

sco · li · o · sis *skoh-lee-OH-sis*


An abnormal lateral (sideways) curvature of the spine, often appearing as an S-shape or C-shape. Commonly detected during adolescence. Treatment ranges from bracing to surgery.

🌱 *Scoliosis = the 'S-curve' of the spine. Think of a SNAKE (S-shape) curving sideways through the spine.*

Supination

su · pi · na · tion *soo-pih-NAY-shun*


Rotation of the forearm so the palm faces upward or forward. Also refers to outward rolling of the foot. The opposite of pronation.

 *SUPination = palms face UP (supine position). When you're SUPINE (lying face up), your palms face up. Think: SUPination = holding a bowl of SOUP — palm up.*

Synarthrotic joint

syn · ar · throt · ic *sin-ar-THROT-ik*

An immovable joint. Examples include the sutures between the bones of the skull. These joints are fused together by dense fibrous connective tissue.

 *'Syn' = together + 'arthr' = joint. Synarthrotic joints are fused TOGETHER — locked in place with no movement, like the puzzle pieces of your skull.*