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Upward rotation of scapula gif

Bone that connects the humerus (upper arm) to the bone of the clavicle (collar) This article is about bone. For the Roman Catholic sacramental pendort, see Scapular. For the Roman Governor of Great Britain, see Publi Ostorius Scapula. He's redirecting the shoulder blades here. For the community in the U.N., see Ramablade, Kentucky. Scapula The upper image is the front (front) view of the chest and shoulder bosor. The image below is a rear (rear) view of the chest (shoulder blade shown in red.) DetailsIdentifiersLatinScapula (omo)MeSHD012540TA98A02.4.01.001TA21143FMA13394Anatomical expressions of the bone [edit code On Wikidata] In anatomy, The spatula (plural spatula i scapula[1]), known as the shoulder bone, spatula, bone of the wing and scapula, is a bone that connects the upper arm (bone of the upper arm) to the bone (bone collar). Like their connected bones, the spatulas are grouped together, with each spatula on either side of the body being roughly a mirror image of the other. The name comes from the classic Latin word for trowel or a small shovel, which is said to be similar. In a composite sense, the prefix is used for a spatula in Latin medical terminology. This prefix is derived from ὦμος (ômos), an ancient Greek word for shoulder, and is kognate with Latin (h)umerus. The blade forms the back of the shoulder comma. In humans, it is a flat bone, roughly triangular, which is placed on the posterolateral aspect of the breast cage. [2] The structure of the spatula is a broad, flat bone lying on the chest wall, providing attachment to three groups of muscles: intrinsic, extrinsic, and stabilized and rotating muscles. Intrinsic shoulder blade muscles include muscle rotator cuff – subscapularis, teres smaller, supraspinatus and infraspinatus. [3] These muscles attach to the surface of the shoulder blade and are responsible for the internal and external rotation of the shoulder joint, along with the humeral abduction. Extrinsic muscles include biceps, triceps, and deltoid muscles and attach to the stepoid process and supraglenoid tubercle blade, infraglenoid tubercle blade, and spine scapula. These muscles are responsible for several acts of glenohumeral joint. The third group, which is mainly responsible for stabilizing and rotating the scapula, consists of trapezius, serratus anterior, levator scapulae, and rhomboid muscles. These fit on the mediale, deluxe and set boundaries of the spatula. The head, processes and thickening parts of the bone contain the tissue; the rest consists of a thin layer of compact tissue. The central part of the supraspinatus phoss and the upper part of the infraspinate fossa, but above all the first, are usually so thin in humans that they are semi-transparent; occasionally a bone is found that and adjacent muscles separate only fibrous tissue. The spatula has two surfaces, three borders, three angles and three processes. The surface 3d model of the spatula, along with notes showing the different parts of the scapula front or subscapular fossa the anterior part of the shoulder blade (also known as the bone or ventral surface) has a broad concudure called subscapular fossa, to which the subscaparis muscle binds. The mediala two-thirds of the fossa has 3 longitudinal poached ridges, while the other thick ridge is bound to the side boundary; outwards and upwards. Ridges give attachment to tendinos and insertion, and surfaces between them to fleshy fibers, subscapularis muscles. The side third of the fossa is smooth and covered with the fibers of this muscle. At the upper part of the fossa is transverse depression, where the bone appears to be curved on itself along the line at the right angles and through the center of the glenoid cavity, which forms a significant angle called the subskapular angle; this gives greater strength to the body bones after arched form, while the top of the arch serves to support the spine and acroma. Costal surface superior of the scapula is the source of the 1st digitization for serratus anterior origins. Figure 1: Left spatula. Bone surface. Subscapular fossaGlenoid cavityCoracoid processAcromionSuperior borderSuperior angleMedial borderInferior angleLateral borderInfraglenoid tubercle Back The back of the scapula (also called the dorsal or posterior surface) is arched from above down, i is planted on two unequal parts of kičm shovels. The part above the spine is called supraspinous fossa, and that under it infraspinous fossa. Two phoss are connected to the spinoglenoid seized, which is located side by side to the root of the spine. Supraspinous fossa, the smaller of the two, is conceived, smooth, and wider on its vertebrae than at its humeral end; its mediale two-thirds give the origin supraspinatus. Infraspinozen fossa is much larger than before; towards its vertebral edge, a shallow ancetist can be seen at its upper part; its centre represents an important convex, while near the axillary boundary there is a deep groove running from the upper to the lower part. Mediale two-thirds of the foss give the origin of Infraspinatus; the side third is covered by this muscle. There's a ridge on the back of the shoulder blade. It flows from the lower part of the glenoid cavity, down and back to the vertebrae of the border, about 2.5 cm above the lower boiling angle. Attached to the ridge is a fibrous septum that separates the infraspinatus muscles from teres major and teres smaller muscles. The upper two-thirds of the area between the ridge and the axillary boundary is narrow, and is crossed its centre with a groove for skapular circular veins; Teresa's minor attachment here. The wide and narrow proportions that are mentioned above are separated by a dried line that runs from the axillary boundary, down and back, to achieve an elevated ridge: on this is the attached fibrous septum, which separates the Teres muscles from each other. Its lower third represents a wider, slightly triangular surface, worse than the blade that gives teres' origin to the major and over which latissimus dorsi glide; often the latter muscle springs for some fibers from this part. Figure 2: Left spatula. The surface on the hull. Supraspinous fossaSpineInfraspinous fossaSuperior borderSuperior angleMedial borderInferior angleLateral borderLateral angleAcromionCoracoid processOrigin of teres major muscleOrigin of teres minor muscle side The acromion the summit of the shoulder, i is a large, retaied triangular, or ilong process, flattened from the back, projected u the first later, but then curved prema further and high on how the glenoid cavity would be overhealed. Figure 3: Left spatula. It's a dark surface. Stepoid processGlenoid cavitySuprasine fossaacromian frastin fossaInferior as Sideways peripheral angles There are 3 angles: Deluxe as a spatula or medial angle, it is covered with trapezoidal muscle. This angle is designed with the intersection of deluxe and medio mecinoly available shovel boundaries. The deluxe corner is located at about the level of the second thoracic vertebrae. The deluxe as a spatula is thin, smooth, rounded and tilted slightly sidelining, and gives a attachment to a few fiber levator blade muscles. [4] The inferior angle of the spatula is the lowest part of the spatula and is covered by the latissimus dorsi muscle. It moves forward around the chest when the arm is abducted. The inferior angle forms the connection of the medial and the side boundary of the spatula. It is thick and rough and its buttocks or dorsal surface affords attachment to the teres major and often on a few fibers latissimus dorsi. The anatomical plane that passes vertically through the inferior angle is called the skapulna line. The lateral angle of the shovel or glenoid angle, also known as the head of the shovel, is the longest part of the shovel. It is wide and carries a glenoid cavity on its articulate surface, which is forward-looking, lateral and slightly upwards, and articulates with the head of the humerus. Inferio-cubic than wider below than above and its vertical diameter is the longest. The surface is covered with cartilage in a fresh state; and its margins, slightly elevated, give attachment to the fibrocardilagino structure, the glenoid labrum that deepens the cavity. In its apex is a slight increase, supraglenoid tuberosity, to which the long head biceps brachii The anatomical neck of the spatula is a slightly thickened part that surrounds the head and is more clear below and back than the top and front. The surgical neck of the spatula passes directly mediocre on the base of the stepoid process. [5] Superior as shown by the red side angle shown in the red Anatomical neck: red, Surgical neck: purple Inferior as shown in red borders There are three border blades: The deluxe boundary is the shortest and thinnest; is conceive, and erels from the parent angle to the base of the stepoid process. It's called the cranial boundary in animals. On its side, there is a deep, semi-circular shut-off, a skapular shut-off that is partially formidable by the base of the step-by-step process. This notch is converted into a foramen by a superior oversupply ligament, and serves to pass the supraskapular nerve; sometimes the ligament is ossified. The adjacent part of the top border is a close-up of the omohyoideus. Bone surface of the left scapula. The top limit is shown in red. Left spatula. The top limit is shown in red. Animation. The top limit is shown in red. The axillary boundary (or lateral boundary) is the thickest of three. It starts above the lower edge of the glenoid cavity, and inclines down and back to a non-value angle. It's called the caudal boundary in animals. It starts above the lower edge of the glenoid cavity, and inclines down and back to a non-value angle. Immediately below the glenoid cavity is a rough impression, infraglenoid tuberosity, about 2.5 cm (1 in). in length, giving the origin of the long head triceps brachii; before that, there is a longitudinal groove that fars all the way to the lower third of this boundary and affords the origin to work subscapularis. The inferior third is thin and sharp, and serves to attach some fiber to the major teres behind, and subscapularis in front. Dorsal surface of the left spatula. The cross-border line shown in red. Left spatula. The cross-border line shown in red. Animation. The cross-border line shown in red. The medial border (also called vertebral border or medial margin) is the farthest of the three borders, and extends from the deluxe angle to the inferior angle. [6] In animals, it is called the dorsal boundary. Four muscles attach to the medial limit. Serratus anterior has a long attachment to the front lip. Three muscles insert along the dorsal lip, levator spatula (upper), rhoboid smaller (medium), and on the rhomboid major (lower middle). [6] Left spatula. The medial border appears in red. Animation. The medial border appears in red. He's still painting. The medial border appears in red. Levator scapulae muscle (red) Rhomboid smaller muscle (red) Rhomboid main muscle (red) Development Figure 5 : Plan tightening of the shoulder blade. Of the seven The spatula is ossified from 7 or more centers: one for the body, two for the stepoid process, two for acromy, one for the vertebral border, and one for the inferior angle. The ossification of the body begins about the second month of fetal life, with an irregularly quadcotic plate of bone formation, just behind the glenoid cavity. This plate extends to form the main part of the bone, a pulsaous spine that grows from its dorsal surface for about a third month. Osification begins as membrane ossification before birth. [7] After birth, the caralaginal components would be under endohondral ossification. Most of the spatula passes through membrane ossification. [9] Some of the parts of the shoulder blade are cartolygin at birth, so they would be under endohondrol ossification. At birth, much of the scapula is osseous, but the glenoid cavity, the marching process, the acromy, the vertebral boundary and the inferior as cartilaginosis. From 15 to 18 months after birth, it is in the midst of a stepoid process that usually merges with the rest of the bone around the age of 15. Between the age of 14 and 20, the remaining parts are quickly inherited and usually in the following order: first at the root of the stepoid process in the form of a wide range; secondly, near the base of the acroma; thirdly, in the inferior corner and compressed part of the vertebrae; fourthly, close outside the acroma; fifth, in the vertebral periphery. The base of the acromione is formed by extension from the spine; the two acromione dishes are joined together and then combined with an extension from the spine. The upper third of the glenoid cavity is ossified from a separate centre (sub coracoid) which occurs between the age of 10 and 11 and is combined between the age of 16 and 18. In addition, an epiphysial plaque appears for the lower part of the glenoid cavity, and the tip of the coracoid process often has separate cores. These different epiphyses are grouped to the bone until the age of 25. Sometimes there is a failure of the coagulation between the acromia and the spine (see the acromiale os), an intersection that starts with fibrous tissue or with incomplete articulation; in some cases, supposedly acromione fracture with ligament union, it is likely that the absolution segment has never merged with the rest of the bone. In terms of comparative anatomy, the human shovel represents two bones that have merged; (dorsal) spatula properly and (ventral) korakoid. The epiphysial line across the glenoid cavity is the fusion line. They are colleagues from the ilija and ischium of the pelvic runway. - R.J. Last – 'Last's Anatomy Function Next muscle attach to spatula: Muscle direction Region Pectoralis Minor inserted coracoid Coracobrachialis origin coracoid process Serratus Anterior inserting medial fringe Triceps Brachii (long head) origin of infraglenoid tubing Biceps Brachii (short head) origin of the corateroid process Biceps Brachii (long head) origins of supraglenoid tubing Subscapularis origin subscapular fossa rhossamboid Major insertion medial Border Rhomboid Minor insertion medial border Levator Scapulae insertion medial border Trapezius insertion spine of scapula Deltoid origin spine of scapula Supraspinatus origin supraspinous fossa Infraspinatus origin infraspinous fossa Teres Minor originlateral border Teres Major originlateral Latissimus Dorsi (a little border Attachment may be absent) source inferiorcy as Omohyoid origin superior border movements of the spatula have brought skapula muscles. The spatula can perform six acts: Elevation: Upper Trapezius and Levator Spatula Depression: Lower Trapezius Deterrence (Addictive): Romboids and Middle Trapezius Protraction (Abduction): serratus anterior Upward rotation: upper and lower trapezius, Serratus anterior Downward rotation: rhomboids,[11][12] Levator Scapulae, and Pec Clinical significance Scapular fractures A winged scapula (left) Left scapula, anterior surface. Anatomical neck: red, surgical neck: purple Due to its disturbed structure and protected location, breakage of the scapula is uncommon. When they occur, they are a sign that there has been severe damage to the chest. [13] Skapular fractures involving the neck of the spatula have two samples. One (rare) type of fracture is through the anatomical neck of the spatula. Another more common type of fracture is through the surgical neck of the scapula. Surgical neck exits the mediocre to the marching process. [14] An abnormal protruding inferior like a spatula is known as a winged shoulder blade and may be caused by paralysis of the an earlier serratus muscle. In this state, the sides of the spatula closest to the spine are positioned outwards and backwards. The look of the upper back is supposed to be similar to the skirts. In addition, any condition that causes weakness of the anetal muscle of the serratus can cause scapular winging. Impingement syndrome Main article: Impingement syndrome The scapula plays an important role in shoulder impingement syndrome. [15] An abnormal pulsate function is called scapular dyskinesis. One of the acts performed by the shovel while throwing or using movement is to raise the acromonium process to avoid obstructing the rotator cuff. [15] If the blade fails to lift the achromium correctly, obstruction may occur during the rooster phase and the acceleration of overhead activity. The two muscles that most often inhibit in this first part of the directional movement are serratus anterior and lower trapezius. [16] These two muscles act as a pair of forces in the glenohumeral joint to acromonic process and if there is a muscle imbalance, obstruction of the shoulders may develop. History Etymology Lopatica/Spatula The name of the spatula as a synony name for the spatula is of Latin origin. [17] It is widely used in medical English[17][18][19] and is part of the current official Latin nomenclature, Terminologia Anatomica. [20] In the classical Latin spatula, it is used only in a plural blade. Although some sources mention that spatulas are used to refer to Roman antics on the shoulders [22] or to scapulas,[22] others insist that the Romans used the spatula only to refer to the back,[21][23] as opposed to pectus,[21] the Latin name for the breast [22] or the chest. The wass latum scapularum and related Roman encyclopaediast Aulus Cornelius Celsus, who lived at the beginning of the period, also used a spatula to refer to his back. [21] He used the latum scapularum wass to apply to the spatula. [21] These terms can be translated as a broad (Latin latum[22]) bone (Latin: os[22]) of the dorsal part (Latin: scapularum[21]). A similar term in ancient Greek can be seen in the writings of the Greek philosopher Aristoteles and in the writings of the Greek doctor Galen. [21] Both use the name ὠμοπλάτη for application to the spatula. [21] [24] This compound consists of an old Greek ὦμος, ram [24] and πλτη, blade [24] or flat or wide object. [24] Πλτη in its plural πλτται without ὦμο- was also used in ancient Greek to refer to the blades. In anatomical Latin, ὠμοπλάτη latinized as omoplata. [25] The Latin word umerus is associated with ὦμος. [24] [26] The Romans used umerus to refer to what is now commonly known in English as the following 3 bones: the upper arm or upper bone, the collarbone or collarbone, and the shoulder blade or shoulder blade. The spelling of humerus is actually incorrect in classical Latin. [22] These three bones were called ossa (Latin: bones[22]) calibrated (Latin: umerus). Umerus was also used for application specifically to the shoulder. [22] This mirrors the use ὦμος in ancient Greek as if it could relate to the shoulder with the upper arm [24] or only to the shoulder [24]. From Celsus, the os can be calibrated specifically for the upper bone of the arm. 16th-century anatom andreas vesalius used humerus to refer to the collarbone. In addition, Celsus used the latum wass to refer to the spatula. [21] Similarly, Laurentius used the term latitudo calibrates (Latitudo = width, width [24]) to refer to the spatula. [21] Pala Roman doctor Caelius Aurelianus (5th century) used pala to refer to the blade of the shoulder. [21] [22] The pala name is commonly used to refer to a bobsled in Latin[21][22][27] and is therefore likely to be used by Caelius Aurelianus to describe the shoulder blade, both exhibit flat curvature. Spathula/Σπθη In the Middle Ages, a spatula was used. [21] The spate is a multiplier,[21][22] by that this originally meant a wide, two-pack of feces,[22] wide, straight, wooden mixing instrument was a tactless, stinging, spatula [22] and a palm tree blade [22] and its lacking u classical latin for remembering the foot of a sor ass [22] or a little palm tree. [22] The English word spatula is actually derived from a Latin spatula,[28] an orthographic version of the spatula. [22] It is unusual for a classic Latin non-dymutive spata to be translated as an English spatula,[22] while its Latin diminitial spatula is not translated as an English spatula. [22] Latin spata comes from ancient Greek σπσθη. [21] [22] [27] Therefore, the form of spatula is more co-determined by its origin than the spatula. [21] The ancient Greek σπσθη has a similar meaning to the Latin spata as any wide blade,[24] and may also refer to a spatula[24] or a wide blade of the sword.[24] but also to an oak blade. [24] The blades on the shoulders were also used earlier. [26] σπσθη was also used for application to shoulder blades. [21] [29] The English word spade,[28][30] as well as the Dutch equivalent of a bob [31][32] is a cognac with σπσθη. Please note that the received term pala, as used by roman doctor Caelius Aurelianus, also means bob. Pala is probably associated with the Latin verb pandere,[27] to expand[27] and expand. [27] This verb is said to be derived from a previous form of spandere,[22] with a root spa.[22] [22] Σπθη actually derives from a similar root spē(i),[26] which means extension. [26] The wass latum scapularum, ὠμοπλάτη, πλτται, pala, spathula and σπσθη all appear to refer to the same aspect of the shoulder blade, that is, it is a flat, wide blade, with the latter three words, etymological, connected to each other. After the Middle Ages, the name of the spatula for the spatula became dominant. [21] The word scapula can be etymologically explained by its affinity with the ancient Greek verb σκκπτειν,[27][28] for bathing. [24] This affinity gives rise to several possible explanations. First, the name σκκπετοτ, trench [24] derives from this verb,[24] and the scapula associated name σκαφη,[25] similarly derived from the aforementioned verb,[24][25] it could associate the spatula with the concept of (con)cavity. [21] The name of the spatula may be related to the existence of a spine spatula in the spatula. Otherwise, the designations scapulae are also seen as a syconown of ancient Greek συννμα,[33] space between the blades,[24] which is clearly conceived. Συννμα consists of σσν, total and ὦμος, shoulder. Secondly, the blade could have originally meant a shovel because of its affinity with σκτπτειν. Similar to the Latin pala (spatula) and spatula, there may be a similarity between the shape of the shovel and the spatula. [28] Alternatively, the shoulder blade is used originally for bathing and shoveling. [28] The blade on the shoulder The blade on the shoulder is the colloquial name for this bone. Rama is the skin of the German and Dutch equivalents of Schulter and schouder. [28] There are some etymological explanations for the shoulder. The first assumes that the shoulder can literally be translated as the one that protects or protects,[30] as it may be associated with the Icelandic skioldr, shield and skyla, for coverage, for defence. The second explanation refers to the ancient Greek σκολορ,[32] leg. [24] The latter notices a possible root skel-,[26] which means bending, curve. [26] [32] The third interpretation links the root to the cleave. [31] This meaning could refer to the shape of a spatula. [32] In other animals, Scapulae, the spine and ribs eptesicus fuscus (Big Brown Bat). In the course of fish, the scissor blade is a structure attached to the upper surface of the articulation of the thoracic fine, accompanied by a similar koracoid plate on the lower surface. Although in the case of cartilage fish, both plates are generally small in most other fish and may be partially cartolyyogenic or consist of several bone elements. [34] In the early tetrapods, these two structures became a spatula and bone called procorakoid (usually called simply a korakoid, but not a homologous with the susal structure of that name). In the case of doubles and crawls (birds included), these two bones are separated and together they form a single structure that carries numerous muscle attachments for forelimb. In such animals, the spatula is usually a relatively simple plate, which lacks the projections and spine that it has in mammals. However, the detailed structure of these bones varies considerably in living groups. For example, in frogs, prokocoid bones on the underside of the animal can be used to absorb the shock of landing, whereas in turtles the combined structure forms a Y shape to allow the blade to connect to the clavicle (which is part of the shell). In the birds, the prokorakoids help to support the wing at the top of the intersea. In fossil therapies, the third bone, the real stepoid, is constructive for prokorakoids. The resulting tricoid structures are still seen in modern monotres, but in all other living mammals the procorakoid disappeared, and the coracoid bone was shuttered with a spatula to become a step-by-step process. These changes are related to the upright boundary of mammals, compared to a more reptiles and free-from-hearts; muscles previously attached to the procorakoid are no longer necessary. The modified musculature is also responsible for the change in the form of the remaining spatula; the anterior edge of the original bone became the spine and acromia, from which the main shelf of the shoulder blade emerges as a new structure. In the dinosaurs, the main bones of the thoracic pasho were a spatula (spatula) and a korakoid, both of which were directly articulated with a clavicle. The collarbone was present in saurischian dinosaurs, but largely absent in ornithischian dinosaurs. The site on the scapula, where articulating with humerus (upper bone forelimba) is called glenoid. The spatula serves as a attachment site for dinosaur back and forelimb muscles. Gallery 3D image Position of the spatula (shown in red). Animation. Shape of a spatula (left). Animation. Thorax visible from behind. Diagram of the human shoulder joint, the front view Diagram of the human shoulder joint, the look at the back of the Skapular and the circacuvous artery. Left spatula. The surface on the hull. (Top limit with mid-top mark.) Scapula. Medial view. Scapula. Front face. Scapula. Poster face. Computer Generated turn around Image of scapula Also See This article uses anatomical terminology. Scapulimancy/Oracle Bone Reference This article contains text in the public domain from page 202 of the 20th edition of Gray's Anatomy (1918) ^ O.D.E. 2nd Ed. 2005 ^ Spatula (spatula) Anatomy, muscles, location, function | EHealthStar. www.ehealthstar.com. Retrieved 2016-03-17. ↑ Marieb, E. (2005). Anatomy & Physiology (2nd ed). San Francisco, CA: Pearson Benjamin Cummings. ^ Gray, Henry (1918). Anatomy of the Human Body, 20th ed. / thoroughly rev. and re-edited by Warren H. Lewis. Philadelphia: Lea & Febiger. P. 206. OL 24786057M. ^ Frich, Lars Henrik; Larsen, Morten Schultz (2017). 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Zunanje povezave Wikimedijina zbirka nudi več predstavnostnega gradiva o temi: Scapula Anatomija photo:10:st-0301 na SUNY Downstate Medical Center - Sklepi zgornjega okončina: lopatica rama/kosti/kosti 2 na Oddelku za anatomijo Medicinske šole Dartmouth Rame/površina/površina2 na Dartmouth Medicinska fakulteta Odsek anatomije radiograf na Anatomiji Lekcija od Wesley Norman (Georgetown University) (xrayleftshoulder) Retrieved from

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