Ulnar head and styloid

Ulnar styroid processFights of the left forearm are visible from the front (the elbow styloid process is marked in the bottom left corner)Diagram of bones in the human handLatinProcessus styloideus ulnaeTA98A02.4.ugh.1 0 6.017TA21247FMA23628Anatomic bone terms edit on Wikidata The stilloid process of the ulnar bone is located on the distal part of the forearm, and projects from the medial and back of the bone; it falls slightly below the head, and its rounded end provides attachment to the ulnar collateral ligament of the wrist. The head is separated from the stiloid process by depression to fasten the top of the triangular joint disc, and at the back, a shallow groove for the tendon muscle extensor carpi ulnaris. Ulnar styloid fractures rarely require treatment when they occur due to a distal radius fracture. The main exception is when the joint between these bones, the distal radioulnar joint (or DRUJ), is unstable. When DRUJ is unstable, the ulnar styloid may require independent treatment. Links This article includes text in the public domain from page 218 of the 20th edition of Grey's Anatomy (1918) External references lesson4bonesofantforearm to the Lesson of Anatomy by Wesley Norman (Georgetown University) This article of the human musculoskeletal system is a stub. You can help Wikipedia by expanding it.vte extracted from 1.Viegas SF, Pogue DJ, Patterson RM, Peterson PD. Effects of radioular instability on radio carparate joint: biomechanical study. J Hand Surg (Am). 1990;15(5):728–32. (90)90144-g.CAS Article Google Scholar 2.Sharma A, Kumar A, Singh P. Anatomical Study of the Distal End of the Human Cadral Ulnar Anna: Clinical Review for The Management of Distal Radioul joint Injury. Singap Med J. 2011;52(9):673-6.CAS Google Scholar 3.zenke Y, Sakai A,, Oshige T, Moritany S. Nakamura T. 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PubMed PubMed Central Page of the Google Fellowship 2 Characteristics Group A† (N No 10) Group B (N No 21) p average age (years) 32.6 ± 11.1 32.4 ± 13.9 0.403 Sex 0.075 women 2 (20%) 9 (43%) Men 8 (80%) 12 (57%) Injured wrist 0.085 Right 5 (50%) 14 (67%) Left 5 (50%) 7 (33%) Dominant lateral injury 6 (60%) 13 (62%) 0.245 Accompanying DRF£ 1 (10%) 8 (38%) 0.034 Surgery time (months) 6.6 7.4 0.445 †Pat, who have undergone anchored seam fixation Patients who have been fixed by the voltage band £ of the DRF - a distal radial fracture of the values of the yp in bold font represent the statistical significance (r zlt; 0.05) The distal elbow muscle is an important carrier component of the wrist and an important element of forearm articulation. After injury, significant residual malalignment or deformity of the distal ulnar bone and the deficiency of its support ligaments have a detrimental effect on the strength of the grip and rotation of the forearm. Fractures of the distal part of the ulnar bone occur in isolation as a result of the rotational force applied to the wrist, or as a result of a direct blow to the ulnar part of the distal forearm (a fracture of the night stick). Isolated ulnar stenoid fractures are mostly benign and are treated with non-operational means. Isolated fractures of the joint part of the distal ulnar bone are rare and should be treated promptly only if the non-artisanal joint displacement causes a mechanical block of rotation of the forearm. Isolated fractures of the distal third of the ulnar shaft can be successfully treated by non-surgical means, if not significantly displaced and if there is no rotational defect. Fractures with significant movement or rotational fractures (displaced patterns of spiral fractures) are best treated with osteosynthesis and functional rehabilitation to prevent the loss of forearm rotation. It is important to note that fractures of the distal part of the ulnar bone associated with ligament damage to the distal radioulnar joint (DRUJ) usually occur in the concomitant distal radius of the radius These ulnar lesions may include fractures to the ulnar bone, ulnar stenoid, or rim of the sigmoid radius and/or co liaison injuries such as rupture of the triangular fibropic complex (TFCC), rupture of the ulnar ligament and, rarely, rupture of the radioulnar internal ligament. These injuries can lead to significant functional impairments if not addressed properly. Therefore, it is important that the surgeon, treating the distal radius of fractures, recognize the presence of these concomitant lesions, understand their significance and treat them accordingly. In the context of the fracture of the distal radius, the concomitant injury of the distal ulnar bone and DRUJ is the result of residual traumatic forces that have not dissipated even after the fracture of the distal radius; this injury can cause further damage after the radius has broken. We describe here in stages the most common model of the development of ulnar injury, which accompanies the distal fracture of the radius. Stage one: When a strong impact is absorbed by the hand, as when falling from a height, the hand transmits the impact energy to the carpal bone. They, in turn, transmit the load on the distal joint surface of the radius. If the amount of energy is sufficient and the dist radius is the weakest link in the upper limb of the skeletal chain, which is the most common situation, then it breaks down. Any further use of energy then gradually displaces the distal radial fragment (s) until its ligament attachments to the still intact ulnar bone are emphasized (Figure 15-1 A). Since collagen fibers and therefore ligaments cannot tolerate more than 6% strain without rupture, most of the distal radius fractures that remain in this first stage of the elbow injury are minimally displaced. FIGURE 15-1 Stages in the development of the accompanying dystral radioulnar joints (DRUJ) fracture. Oh, in the first stage of the injury, the radius broke, and the tension is straining on the ligaments attaching a distal radial fragment to the intact distal ulnar bone. B, In the second stage, the triangular fibro-cartil complex tore and extensor carpi ulnar tendon abulsed ulnar stiloid process. C, In the third stage, the dystral radial fragment has shifted further, and the distal ulnar part now absorbs the energy of injuries and fractures. Stage two: As more energy is delivered to the arm, the ligaments attaching the distal radial fragment (s) to the ulnar bone, TFCC, and the extensor extensor ulnaris (ECU) tendon rupture, allowing the distal radial fragment (s) to displace in an unlimited manner (Figure 15-1 B). If the displacement is serious enough, the ulnar can even perforate through the volar of the skin, creating a complex fracture. The deep fiber of the TFCC is inserted mainly into the ulnar fovai. Surface TFCC is variablely variable the base of the ulnar stiloid. On the other hand, the ECU tendon shell invariably comes from the middle and distral aspect of the ulnar styloid. The tendon of extensor carpi ulnaris is enclosed in an independent fibrous tunnel formed by the supradendinous retina superbly, the infrared retina below, the sixth septum on the side, and the ulnar insertion of the retina, reinforced by longitudinal fibers called linear jugata medially. The overall collateral fracture of the ulnar stenoid aulcio occurs at this stage and is usually the result of the strain applied by the extensor carpi ulnaris tendon shell and only rarely TFCC. This interpretation is supported by histological studies of the places of ligament insertion determined by the presence of Sharpie fibers (William Sharpey, 1846). In this second stage of the injury process, the only surviving DRUJ stabilizer is the distal part of the forearm neurosis, or distal atherosseous ligament (DIOL). This structure is a secondary stabilizer; its anatomy is constant, and it behaves in a isometric way during the rotation of the forearm. DIOL is inserted into the radius of proximal sigmoid not outs and proximals to the location of the fracture line in most distal radius fractures. It also comes from the ulnar bone at a much more proximal level, exactly where the forearm axis intersects with the surface of the ulnar bone. Because DIOL survives intact in most dystal radius fractures and provides enough stability in the pristine skeleton to ensure stable forearm rotation, this is of great importance in managing their accompanying ulnar injury. Stage three: The more energy is delivered to the arm, the distral elbow becomes the most visible structure on the volar aspect of the wrist and directly absorbs the energy of the injury. If there is sufficient energy, the ulnar bone now breaks down (Figure 15-1 C). This fracture can occur on its joint, neck or diaphysical parts, and may occur distal or, proximal for the ulnar origin of DIOL. However, this last structure usually remains intact. Although the model just described is the most common sequence of injuries during the fracture of the distal radius, other less common variations can lead to rupture of DIOL and therefore to THEST instability. These alternative patterns of injury can occur with or without the collateral fracture of the elbow joint. The neurotic membrane remains intact after most distal radius fractures. Anatomical contractions tighten the interosseous membrane and approach the torn edges of THE TFCC and extensor carpi ulnaris. There is no need to fix the fractures of the ulnar stenoid, as sufficient stability allows early rotation of the forearm. A retrospective was held 200 surgically treated dystral radius fractures in 194 patients. Of these patients, 182 had 6 6 minimal follow-up, in which radiological fracture assessments were made using Sarmiento-Lidstrom and Stuart-Gartland and Verley scoring systems. The distal fractures of the radius were classified in accordance with the AO/ASIF classification, and the fractures of the ulnar stenoid were classified by displacement, fragment size and non-union. Four subgroups were formed to describe ulnar stenoid fractures: (1) no ulnar stenoid fracture; (2) ulnar stenoid fracture; (3) basilar fracture of the stenoid stenoid; (4) non-union fracture of the ulnar stenoid. Of the 194 patients, 63% showed a fracture of the stiloid or ulnar bone, accompanied by a fracture of the dist radius (54% of isolated fractures of the ulnar walloid, 9% of ulnar bone fractures). The remaining 37% do not represent an ulnar stenoid fracture in the original X-rays, but 15% of these patients showed evidence of ulnar stenoid fractures in later X-rays. Of the 63% of patients with a clearly present fracture of the elbow walloids, 14% were basil and 48% were non-union. Functional, radiographic and subjective information was used in the process, and arthroscopy was not carried out. An unpaid t-test and a chi-square test were used for statistical analysis. The range of motion and grip strength was measured in all cases. Range of movement of patients with ulnar stenoid fracture (63%) showed an average flexion of 82%, an expansion of 70%, radial deviation 69%, elbow deviation 73%, pronation by 88%, supination by 84%, and strength of 85% compared to the other side. 37% of patients who had no original ulnar stenoid fractures or no at all showed flexion of 87%, an expansion of 72%, radial deviation 67%, elbow deviation 76%, pronation by 95%, supination by 89%, and a grip of 79% compared to the other. Most patients who suffered an elbow injury lost some flexion and pronation. Most dystal radius fractures treated with internal fixation represent the ulnar side of the injury. Nonunion of ulnar stenoid fractures is common. There has been no clinically significant DRUJ instability in this series. Accurate restoration of radial length can reduce the need for internal fixation of large stholyoid fragments. Internal fixation of the basilar fracture of the stenoid stenoid is not required if the DRUJ turn-shift test is negative after an anatomical decline. There was no positive result from the DRUJ pivot shift post-auction test. The positive result of this test is probably caused by either an anatomical defect of the sigmoid not outing or a rupture of the distorical aspect of the inter-earth membrane. Because the forearm is one articulation with two warts - proximal and distyl radioulnar joints-anatomical and Osteosynthesis of displaced radius fractures and/or ulnar is often recommended to correct joint malalignment and allow functional rehabilitation. Similarly, unstable fractures of fractures are significantly displaced the distal radius with the intact ulnar, which is invariably accompanied by the DRUJ sub-habit, should be treated with anatomical and stable radius osteosynthesis. The recovery of the radius usually automatically corrects any DRUJ subvables and restores the stability of the DRUJ (Figure 15-2). This is because DIOL usually remains intact and the voltage that is restored in this structure by an anatomical radius decrease is enough to stabilize the DRUJ and insert the immediate rotation of the forearm (Figure 15-3). Only golden members can continue reading. Sign in or sign up to continue working