

***МОРФОЛОГИЧЕСКИЕ ОСОБЕННОСТИ СВЯЗОЧНОГО АППАРАТА
КИСТИ ЧЕЛОВЕКА***

Терещенко А. А. , Шиян Д. Н., Бердак И. И., Рубан А. А. , Котелевец И. А.
Харьковский национальный медицинский университет
Харьков. Украина

***MORPHOLOGICAL FEATURES OF THE LIGAMENOUS
APPARATUS HUMAN HAND***

Tereshchenko A., Shiyan D., Berdak I., Ruban A. , Kotelevets I.
Kharkiv National Medical University
Kharkiv Ukraine

Hand of a human, as a body of work, has a very delicate and important function. Minor violations of the integrity of the due to its disease or injury leads to disruption or loss of its function, which in its turn leads to the disability of the patient. Hand Surgery - Surgery is a very difficult . Damage and deformation need special treatment. This leads to the fact that hand surgery in a separate new special area requiring highly skilled surgeon. That's why we are want to dedicate this work ligamentous apparatus of the human hand , as detailed knowledge of the characteristics of anatomy of the human hand is extremely important ...

Studying the radiocarpal, we found that in formation of this joint take part a beam bone and bones of a proximal number of a wrist: boatshaped, semi-lunar and trihedral. The elbow bone a beam - a carpal joint doesn't reach a surface (it "is supplemented" with an articulate disk). Thus, in formation of an ulnar joint the greatest role from two bones of a forearm is played by an ulnar bone, and in formation of a radiocarpal joint - a radial bone.

We found that in the radiocarpal joint having an ellipse form, the flexion and an extension, reduction and brush abduction are possible. The pronation and supination of a brush occurs together with the movements of bones of a forearm of the same name. Small passive movement of rotary character also possibly in a radiocarpal joint (on 10 - 12 °), however it happens due to elasticity of a joint cartilage. The provision of a cleft of a radiocarpal joint is defined from a dorsum where it is without effort found through soft tissues; besides, its situation is defined from the radial and ulnar parties. From the radial party in the field of the bottom radial fossa, it is possible to palpate a cleft between a lateral styloform process and a navicular. From the ulnar party the excavation between a head of an ulnar bone and the trihedral bone, corresponding to an ulnar site of a cavity of a radiocarpal joint is palpated.

Movements in a radiocarpal joint are closely bound to movements in a middlecarpal joint, which is between proximal series of bones of a wrist. This joint has a difficult surface of the wrong form. The total amount of mobility at a flexion of a brush reaches 85 °, at an extension also about 85 °. Brush reduction in these joints is possible on 40 °, and abduction - on 20 °. Besides, in a radiocarpal joint the roundabout is possible.

Beam-carpal and middle wrist joints are strengthened by numerous sheaves. The copular device of a brush is very difficult. Sheaves is on a palmar, back, medial and lateral surfaces of a wrist, and also between separate bones of a wrist. The most important are collateral ligaments of a wrist - beam and elbow. The first goes from lateral awl-shaped shoot to the boatshaped bone, the second - medial awl-shaped shoot - a trihedral bone.

Between osteal eminences on the radial and ulnar parties of a palmar surface of a brush the ligament - a retinaculum of flexor is thrown. It hasn't a direct bearing on brush joints, and is, as a matter of fact, a fascia thickening. Being thrown through a wrist sulcus, it turns it into the wrist canal where pass tendons of flexor of fingers and a median nerve.

We found that carpal and metacarpal joints of a brush represent bonds of a distal series of bones of a wrist with the bases of metacarpal bones. These joints, except for a carpal and metacarpal joint of a thumb of a brush, have a flat form and are inactive. The volume of movements in them doesn't exceed 5 - 10 °. Mobility in these joints, and also between bones of a wrist is sharply limited to well developed ligaments.

The ligaments located on a palmar surface of a brush, make the strong palmar copular device. It bridges wrist bones among themselves, and also to metacarpal bones. On a brush it is possible to distinguish the ligaments going arcually, radially and cross. The central bone of the copular device is capitate to which the larger number of ligaments, than it is attached to any other bone of a wrist. Back ligaments of a brush are developed much more weakly, than palmar. They bridge among themselves wrist bones, making thickenings of the capsules covering joints between these bones. The second row of bones of a wrist besides palmar and back ligaments has also interosseous ligaments.

Because of the fact, that bones of a distal series of a wrist and four (II-V) bones of a metacarpus are inactive from each other and strongly bound in a whole formation which is the central osteal center of a brush, they are designated as a firm basis of a brush.

The carpal and metacarpal joint of a thumb of a brush is formed by a polygonal bone and the basis of the first metacarpal bone. Joint surfaces have a saddle-like form. In a joint the following movements are possible: reduction and abduction, opposition (opposition) and return movement (reposition), and also roundabout (circumduction). Thanks to thumb opposition to all other fingers volume of the grasping movements of a brush considerably increases. Mobility size in a carpal and

metacarpal joint of a thumb makes 45 - 60 ° at abduction and reduction and 35 - 40 ° at opposition and the return movement.

Metacarpophalangeal joints of a brush are formed by heads of metacarpal bones and the bases of proximal phalanxes of fingers. All these joints have a ball-shaped form and respectively three mutually perpendicular axes of rotation round which there are a flexion and an extension, reduction and abduction, and also a roundabout (circumduction). The flexion and extension are possible on 90 - 100 °, abduction and reduction - on 45 - 50 °.

Metacarpophalangeal joints are strengthened by the collateral ligaments located on each side from them. From the palmar party of a capsule of these joints are the additional ligaments called by - the palmar. Their fibers intertwine with fibers of deep transversal metacarpal ligament which interferes a divergence of heads of metacarpal bones in the parties.

Interfalangeal joints of a brush have a trochleariform form, their axes of rotation pass cross. It is possible flexion and extension round these axes. Their volume in proximal interfalangeal joints is peer 110 - 120 °, while the distal - 80 - 90 °. All interfalangeal joints are strengthened by well expressed collateral ligaments. joints is peer 110 - 120 °, while the distal - 80 - 90 °. All interfalangeal joints are strengthened by well expressed collateral ligaments.

Использованная литература

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