

THE MORPHOLOGICAL STRUCTURE AND BIOMECHANICS OF THE TEMPOROMANDIBULAR SYSTEM

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ABSTRACT:

Time lag is a sliding body that undergoes the process of crushing chains and crushing food blocks, in other words it is a multi-layered galaxy that grinds its teeth with anger and rage. NPZHB - complex and coordinated, according to the description of movements, the hinges are locking [1.3.5]. Other authors [2.4.6.8] believe that the superficial area of the flange of the Chin lower jaw exhibits a saddle joint, the surface of which is similar to the surface of the wrist-toe core joints of the big toe. From a biomechanical point of view, the junction of the lower jaw (p / j) with the skull consists of four synergistic moving joints, so some authors propose to call the CHIN LOWER JAW "Chin lower jaw complex". According to the author (Yu. Simanovskoy) [7.9.10], Chin lower jaw is a complex musculoskeletal carcass with many components, involved in the connection of the upper jaw (y / j) and the rows of teeth of the p / j, providing the movement of the p / j in different directions. block. Motions are an example of motion around instantaneous and variable axes, which is a condition in biomechanics. The authors (O.G. Bugrovetskaya and Hammual [11.13.15.16] divide the network of types of motion around different axes as follows; a horizontal arrow involved in the opening and closing of the mouth and between the arrows; slip planes lying at the level of the p / j tongue and varying in p / j protrusion and retrusion; a side-sliding bullet at the end of the bullet; the whole p / j slides and moves laterally; axis of rotation around the vertical,

located in the center of the right or left joint; a curved axis located at the center of one or the other joint for the combined movements of deviation and opening of the mouth.

INTRODUCTION

By analyzing the processes of formation and activity of CHIN LOWER JAW, a number of authors observed the determining role of increasing loading, first under the influence of sucking movements and then the act of chewing after childbirth [10.12.14.17.18]. The formation of the first Chin lower jaw base skeleton is completed by the age of 16, at which time a permanent bite is determined. The determining position of the changing load is reflected in the formation of Chin lower jaw and morphological changes occur in the head of the joint, which in turn leads to changes in the p / j body, ie the entire bone-muscle block. The interactions between the bone skeletons occur due to the transfer of formation to hard and soft tissues. The tongue and masticatory muscles play a special role in this, hard palate and alveolar tumors are formed at different levels. During anthropogenesis, the skull becomes thinner, and foods become more diverse. Thin bones would not be able to withstand the increasing load relative to the Chin lower jaw if it did not decrease. During anthropogenesis, as the size of the brain increases, the size of the skull cannot increase indefinitely, it must be in a state of stable equilibrium, and the cervical vertebrae could not withstand all the increasing load. The thickness of the skull bones decreases, but at the same time the chewing loads increase, which should have led to an increase in the load on the

Chin lower jaw as well. This is not the case because the masticatory muscles have shifted the line of motion to the *kie* position.

The authors emphasize that the activity of TTT is related to the structure of its blocks, the suction activity should end in the eighteenth month of the period of postnatal ontogeny. Defects of dental arches and occlusion disorders were observed if suction was continued later; i.e., disorders in jaw articulation, morphological changes of joint heads, followed by deep structural changes in the upper jaw (*yu / j*), hard palate, temporal bone. These changes, in turn, adversely affect hemocirculation, hearing, respiration, and impaired chewing and facial muscle function in the cranial cavity. Studies have not been sufficiently studied in terms of human masticatory muscles and the force factors that produce CHIN LOWER JAW: One author suggests that Chin lower jaw is not formed at all, while another suggests that it produces several hundred Newtonian reactions. The displacement of the *p / j* from the central occlusion to the anterior part is accomplished by the right and left lateral wing muscles, directed by the incisors, and the displacement of the *p / j* in the horizontal plane is manifested in the form of a "gothic angle; when the *p / j* moves laterally from the central occlusion (MO) position, the Bennett motion is observed to rotate around the vertical axis in the *p / j* groove on the laterotrusive side of the convex growth; The authors emphasize that the shape mechanism of *p / j* in the form of a spatial frame, i.e. it can rotate freely around the hinge axis until some restriction is formed.

Any opposite tooth that interacts with the tooth in question, either directly or through a piece of food, acts as a restriction of movement and primarily determines the function of all multi-rooted teeth - molar teeth during the chewing phase. The performance of the Chin lower jaw under load is largely determined by the condition of the joint disc. It exhibits the

complex structure of collagen fibers and chondrocytes located in isolated or isogenic groups. The articular disc appears in its central part in the form of an "avascular organ" (V.M. Tvere and E.Yu. Simanovskaya . A number of studies have also shown significant differences in the histological structure of the CHIN LOWER JAW disc in different animals: rabbits, dogs, rats, sheep, and pigs.

The matrix of disc fibrous cartilage is formed by thick collagen fibers of type I oriented according to the applied load. Ensuring the structural integrity of the cartilage matrix depends entirely on the chondrocytes that synthesize all the polymers that make up collagen. In turn, collagen fibers are immersed in giant molecules secreted by macromolecular aggregates - chondrocytes. The main function of proteoglycans is to form water in the cartilage matrix. It is the water that gives the cartilage matrix a gel state and its density and flexibility, the diffusion of nutrients and gases into the disc within the joint provides water. Fluid can pass from the joint disc to the synovial fluid and back into it. Under experimental conditions, the permeability coefficient of the Chin lower jaw disc was greater than that for the hyaline cartilage, but smaller for the knee joint flange, and in the experiment it was recommended to use a Berlin laser mixture to assess water mobility within the joint disc.

CONCLUSION:

Wang MQ in modern notions about the macro and microstructure of the disc, if the disc is attached to the lateral and medial poles of the lower jaw bulge with intracapsular ligaments, they cannot move independently, only move along the joint surface of the bulge, hence several questions firstly, the upper head of the lateral hemorrhagic muscle is attached to the anterior pole of the disc and the joint capsule. Whether or not it is attached; second, whether intra-articular ligaments can control the

condition of the joint disc; and third, whether the eccentric placement of the disc can lead to the formation of a diverticulum of the joint capsule. The lack of data on morphopolitical changes in the "internal structure" of CHP makes it difficult to assess their condition by non-invasive research methods.

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