

Morphologic/morphometrics alterations in mice's heads jaw after decrease of occlusion dimensionManuel Eduardo Moioli-Rodrigues¹, K Faltin Jr², A Chelotti², C I F Otolani², S De Paoli³ and G A Presta⁴¹Universidade Veiga de Almeida, Brazil²Universidade Paulista, Brazil³Universidade Estácio De Sá, Brazil⁴Universidade Federal do Estado do Rio de Janeiro, Brazil

Objective: Our objective was to verify the pathological decrease of the vertical dimension of occlusion in adult rodents is capable to produce morphologic alterations and/or morphometrics in their heads of the jaw and in case they happen in that area would prevail.

Method: Twenty-four (24) mice were divided in 3 experimental groups and of each group they were separate three animals that served as control. Wear and tear occlusals and incisals were preceded until that if it reproduced a significant decrease of the vertical dimension of occlusion. The animals were sacrificed and they had their heads of the jaw, measured and analyzed morphometric and histologically, in the following intervals: 07 days for the 1st group, 14 days for the 2nd group and 28 days for the 3rd group.

Result: The analysis through the stereoscopic magnifying glass demonstrated that there were significant form alterations and size in the heads of the jaws studied in comparison with the one of the animals control and that the area that more alterations suffered during the whole experimental period was the central area. The histological sheets showed great areas of bone reabsorption in images of degeneration of the head of the jaw in the 07 days experimental group; however, we identified areas of bone neoformation starting from the 14 days experimental group with strong presence of trabeculated bone in the 28 days experimental group.

Conclusion: The pathological decrease of the vertical dimension of occlusion in mice provoked morphologic and morphometrics modifications in the studied areas of the heads of the jaw and after an initial period the happened adaptation if it completes with a remodeling process that, it takes to the re-establishment of the masticatory functions.

Biography

Eduardo moioli graduated in dentistry in july 1982 by the school of dentistry of campos, concluded the postgraduate studies in orthodontics and facial orthopedics by the pontifical university catholic of rio de janeiro in 1988 and the master in orthodontics and facial orthopedics by the university paulista in 2007. He is also a specialist in functional orthopedics, public health and health management. Teacher and coordinator of the postgraduate studies in orthodontic of the school of dentistry from the university salgado de oliveira, teacher and coordinator of the postgraduate studies in functional orthopedics of the school of dentistry from the university veiga de almeida and coordinator of the advanced research group in functional ortopedics from the brazilian institute of postgraduate health, is president of the brazilian association of dentists in the state of rio de janeiro, was also president of the maintainer of the iguaçu university, director-president of the brazilian institute of post-graduation in health, general director of the center for treatment of craniofacial anomalies of the state of rio de janeiro and ead coordinator of corporate university. Published different articles in specialized newspapers and works in congress proceedings. Participated in 164 events in brazil and other countries. Received 18 awards. Act in the area of education and in the clinical care of patients, with orthodontics, functional ortopedics and temporomandibular dysfunction.

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