METHODS OF FUNCTIONAL DIAGNOSIS OF THE TEMPOROMANDIBULAR JOINT WITH THE ELECTRONIC FACE BOW

Zofia Annusewicz-Kot, Grzegorz Kot

Non-public Health Care Center Dentistry Center Avidental Kot in Olsztyn

Introduction. Increasing numbers of patients reporting symptoms associated with the temporomandibular joint force dentists to seek equipment that offers precise diagnostics and repeatability of tests. Disorders of the spatial relationship between the upper and lower jaws can affect all age groups: toothed patients, patients with residual dentition and edentulous individuals.

Aim. To present the current diagnostic methods concerning the temporomandibular joint with an application of the electronic Arcus Digma 2 face bow.

Results and discussion. The use of the face bow makes it possible to determine the current condition of the spatial relationship between the upper and lower jaws, to design the therapeutic procedure in order to improve this relationship, and to assess the effectiveness of treatment, within a shorter time period and with much greater precision than other methods.

Due to modern equipment, traditional methods of determining the height of occlusion and recording the centric occlusion in edentulous patients, such as: the anatomophysiological, anthropometric, or intraoral recording of mandibular positions become less effective. These methods should be treated as auxiliary ones. A comprehensive functional test with the application of the face bow allows one to determine the range and symmetry of jaw movements and the correct centric occlusion as defined by the location of the head of the mandible with relation to the articular tubercle.

Currently, temporomandibular joint disorders concern a growing number of young people. Fast-paced lifestyles and lack of control over stress affect the entire stomatognathic system. Frequently, the method of choice is occlusion splint therapy. Planning the treatment with the assistance of the electronic functional test equipment allows for a precise determination of the therapeutic construction bite.

The possibility of transferring the obtained data to the dental lab enables one to perform dental work in individual articulator settings.

Conclusions. The use of the electronic face bow facilitates diagnostic procedures and the monitoring of patients within an ever increasing number of people with a dysfunctional temporomandibular joint.