The influence of pharmacotherapy in chronic diseases on the severity of painful symptoms of temporomandibular disorders

Objectives: Temporomandibular disorders (TMD) constitute a heterogeneous group of disorders affecting the temporomandibular joints, surrounding muscles, and bone structures. The etiology of these anomalies has been the subject of scientific debate for years due to their multifactorial and diverse nature, yet the influence of many factors remains ambiguous. Symptoms can manifest as painful conditions in the perijoint tissues or as painless symptoms characterized by the presence of acoustic manifestations in the joints or functional disturbances. The aim of the study was to verify the existence and evaluate the correlation between the use of pharmacotherapy in chronic disorders and the occurrence and severity of painful symptoms in temporomandibular disorders.

Materials and methods: Retrospective studies were conducted based on the analysis of 252 questionnaires completed by patients who had reported to the Prosthetic Clinic of the University Dental Clinic in Krakow due to symptoms of TMD. The group was divided into four subgroups, depending on the type of medications used: endocrinological (24% of patients), cardiological (11% of individuals), psychotropic (7% of individuals), and others (18%). The data were subjected to statistical analysis using the R program, with a p-value < 0.05 considered significant.

Results: It was observed that in the group of patients taking endocrinological medications, there is an increased risk of experiencing headaches. No correlation was found between the use of any of the investigated medication groups and the severity of painful symptoms in TMD, both currently experienced and their average values from the preceding two months.

Conclusions: Statistically significant differences were not found between the types of medications used and the severity of painful symptoms in TMD. However, a correlation was demonstrated between the use of endocrinological medications and the risk of experiencing headaches.

Keywords: temporomandibular disorders, TMD, chronic diseases, pharmacotherapy, headache.