

## **The mouth opening limitation in radiotherapy and chemotherapy-treated patients**

### **Abstract**

Cancer is the main cause of death worldwide and 550 thousand new cases are estimated per year. The use of drugs, tobacco and alcohol, as well as the papilloma virus infection are among the risk factors associated with head and neck cancer. Radiotherapy and Chemotherapy are the most effective therapies used to treat such disease. The side or secondary effects of these therapeutic modalities comprise cutaneous reactions, oral infections, xerostomia, dysgeusia, mucositis, dysphagia and mouth opening limitation, which negatively affect the patients' masticatory function and quality of life. The aim of the current study was to address the effects of radiation on the mastication muscles, the impact of such secondary effect on the patients' quality of life, as well as the methods used to prevent and treat such muscle morbidity. We have searched for studies published in the Pubmed and Scielo databases and used the following meshes as search strategy: Radiotherapy, Antineoplastic Agents, Masticatory Muscles, Temporomandibular Joint Dysfunction Syndrome and Quality of Life. The literature review allowed concluding that the mouth opening reduction negatively affects the patients' quality of life. The patients who present such morbidity should be assisted immediately, either through the stretching, relaxation, elongation and/or strengthening of the masticatory muscles so that they may resume their life routine with health and welfare.

**Descriptors:** Radiotherapy, Antineoplastic Agents, Masticatory Muscles, Temporomandibular Joint Dysfunction Syndrome, Quality of Life.