THE MULTIDISCIPLINARY TREATMENT OF THE PATIENT WITH ORAL CANCER: a literature review.

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REVIEW ARTICLE

ABSTRACT

The objective of this article is to carry out a survey of the current medical literature on the relationship between interdisciplinarity in the care of patients with oral cancer. A search was performed on the Google Scholar database using the keywords "Oral cancer, Multidisciplinary treatment, Dentistry, Medicine, Nursing, Physiotherapy, Nutrition". Articles with more than 20 years of publication or that did not fit the scope of the research were excluded. In all, 17 articles that fit the search patterns were selected. It is concluded that multi and interdisciplinary treatment is the best option for the treatment of patients with oral cancer.

Keywords: Oral cancer, Multidisciplinary treatment, Dentistry, Medicine, Nursing, Physiotherapy, Nutrition.

INTRODUCTION

In Brazil, mortality from chronic degenerative diseases has shown a progressive rise, with malignant neoplasms standing out as the second cause of death, responsible for almost 17% of deaths for known reasons notified in 2007 in the Mortality Information System. Among them and among the ten most frequent types is oral cancer, whose national estimate for 2010/2011 points to it as the 7th most incident, showing an expectation of 10,330 new cases in men and 3,790 in women; while, in Paraná, 1010 new cases are expected.[1]

Oral cancer has a predominance in developing countries, especially in the social class with lower socioeconomic levels, that is, in patients who have greater difficulties in accessing the private health system, therefore dependent on the public system, where there is usually a wait long for care, favoring a late diagnosis, whose treatment is more aggressive, with an unfavorable prognosis, thus reducing their quality of life and increasing mortality rates. [two]

Depending on the degree of evolution and location of the lesion, oral cancer becomes one of the most mutilating lesions for human beings, since after being diagnosed with it, they are submitted to radical surgical therapies and/or complementary techniques, such as radiotherapy and chemotherapy, in general, promoter of local and systemic complications. [3]

These sequelae include aesthetic and functional changes in a socially exposed area; in most cases permanent. On the other hand, some of these implications, such as xerostomia, dental caries, osteoradionecrosis, atrophy of the oral mucosa and muscle and tendon fibrosis, justify the need for special care with oral hygiene, as well as preventive and curative dental treatment. [4]

The treatment of patients with oral cancer involves a multidisciplinary team that must work together with the aim of eliminating the disease, while maintaining the patient's quality of life. This team of professionals comprises: dentists, physicians (head and neck surgeons, plastic surgeons, oncologists, radiotherapists), nurses, psychologists, speech therapists, nutritionists, social workers, without highlighting any of these figures - all, in their areas of expertise. competence, who work and cooperate in patient care.

[5]

For INCA 2010, understanding and controlling malignant diseases requires scientific knowledge and experiences ranging from knowledge of the complex mechanisms of intracellular molecular regulation to individual lifestyle choices. Competent management and the best use of available resources for the planning, execution and evaluation of disease control strategies are also required. Cancer prevention and control are among the most important scientific and public health challenges of our time.[6]

Based on the importance and relevance of this subject, this article aims to review the current literature on inter and multidisciplinary care for patients with oral cancer.

METHODOLOGY

This article carried out a search in Google Scholar, Scopus and Web of Science indexes for the selection of articles, using the keywords "Cancer, oral cancer, multidisciplinary treatment". Articles with more than 10 years of publication or that did not fit the scope of the research were excluded. In all, 17 articles that fit the search patterns were selected.

REVIEW AND DISCUSSION

Oral cancer considerations

When oral neoplasms are located in the posterior third, they are classified as oropharyngeal neoplasia, the distinction of these structures is important, as they contain different cells and tissues, which can cause different types of cancer and thus intervene directly in the treatment and prognosis of the patient [7]

Its etiology is multifactorial and is mainly related to environmental factors. The literature states that cancer is the result of a sum of genetic alterations produced throughout life, that is, the sooner this process begins, the sooner the state of neoplasia can be reached. Important environmental factors such as alcoholism, smoking and ultraviolet radiation are the main causes and must be considered during the patient's anamnesis. In addition, the intense use of industrialized foods, with chemical products,

preservatives, most of which have not even been tested in laboratories for use. Addictions and their variables, such as cigarettes and electronics, smokeless tobacco, hookah, alcohol and many other situations that began to act on the oral mucosa at an earlier age, including children [8]. In addition, the association of the human papilloma virus (HPV) with oral and oropharyngeal cancer is still being studied, it is known that there are 200 subtypes, with some being oncogenic. [9]

Another factor to be considered is also the lifestyle adopted nowadays, psychosomatic stress represents one of the 13 factors that are most associated with the high number of cases of cancer and autoimmune diseases. [10]

According to Volkweis et al. (2014), oral cancer is more frequent in leucoderma men, in an age group of 50 to 60 years. The ratio between males and females is 3:1 in patients older than 60 years; and 8:1 before age 60. However, there is an increase in the incidence of oral cancer in women, due to the increased exposure of this age group to tobacco. When alcoholism and smoking are absent, the incidence of oral cancer occurs at a later age. The presence of tobacco alone does not affect the distribution by age group, while alcohol alone or in association with tobacco leads to an earlier incidence of oral cancer [11]

In the work developed by Andrade and collaborators in 2015, social variables such as marital status and education were highlighted. It was shown that education was mainly associated with oral cancer, as individuals with a lower level of education are more likely to develop oral cancer, due to the fact that they have more contact with tobacco and alcohol, precarious oral health conditions and nutritional. The association of tobacco and alcohol is the main cause of oral cancer [12].

In tobacco, more than 60 carcinogenic agents are present, for example, nitrosaminase and polycyclic hydrocarbons, such as benzopyrene, which, in contact with the oral mucosa, generates thermal aggression, causing chronic inflammation that favors the appearance of predisposing lesions [12]. The high temperature at the tip of the cigarette is one of the processes that can often compromise the oral cavity, causing an increase in aggression to the mucosa. Alcohol, in turn, helps to dissolve the substances present in cigarettes, increasing their concentration. However, isolated alcoholism is little observed as a cause of oral cancer; however, associated with smoking,

it is the most common etiological form [12]

Squamous cell carcinoma (SCC) in Brazil accounts for 90% to 95% of oral malignant tumors. And according to Ferreira Filho et al, (2021) Maranhão is among the states in Brazil with the lowest prevalence of neoplasms, with a percentage of 3% according to research, second only to Sergipe (SE), with 5.7% of cases ; Paraíba (PB), 7.4%; Alagoas (AL) 7.6% in an age group more prevalent in these states from 45 to 80 years old. According to the Pan American Health Organization (OPAN), approximately one third of all cancer cases can be avoided, taking into account the main risk factors such as: smoking and alcoholism. One of the main causes of preventable death in the world is smoking and research shows that about 45% of the male population and 12% of the female population smoke. However, a significant amount of cancer can be cured when diagnosed early. [13]

Gabialti (2013) states that contact with carcinogens, formation of bacterial plaque, oral hygiene, chronic irritation of the lining of the mouth, low body mass index, family history and exposure to ultraviolet light, also individually or jointly influence the development of head and neck cancer as they may modulate toxin and carcinogenic metabolism [14]

As a factor resulting from poor oral hygiene, infections with consecutive release of inflammatory mediators, such as reactions against inflammation and cytokines, can trigger the development of cancer, and individual oral health can be a relevant factor in the development of oral cavity carcinoma. orally (FELLER et al., 2013). Any stimulus that results in alteration of the oral flora favoring the reduction of nitrates and nitrites and the production of acetaldehydes can contribute to the development of oral cancer. Therefore, knowledge of carcinogenic factors allows acting on the cause-effect relationship of causal agents, as well as selecting which patients are more likely to develop a specific tumor and acting at an early stage [15].

Information about these factors forms the basis for effective prevention of the disease, which needs to be targeted at young people, the elderly and the less educated ((GOMES et al., 2018). Regarding the clinical characteristics, it can be reported that at the beginning it is painless, and there may or may not be bleeding. However, during its development, symptoms are late, in addition to difficulty speaking, chewing and

swallowing, severe weight loss, presence of cervical lymphadenopathy, which characterizes oral cancer in the stage advanced [16]

The high number of deaths from this pathology, in the period of six to twelve months from the time of diagnosis, represents a late identification of the problem. This could be easily detected in the oral cavity without the need for special techniques, in view of the easy access for direct examination. Therefore, the dentist assumes an important role in the early diagnosis, 16 because although the process of carcinogenesis is complex and difficult, there are lesions said to be cancerous or potentially malignant that are evidenced, in some cases, in this way, by the clinical examination carried out by the dentist. training, linked to patient guidance, are seen as the best ways to reduce the incidence and morbidity and mortality of the disease. [17]

The main cancerous lesions described in the literature are: leukoplakia, erythroplakia, and actinic cheilitis and lichen planus, the latter of which has its malignant potential still unclear and for some studies there is no relationship with oral cancer. They consist of changes in the epithelium lining the oral cavity, with leukoplakia being the most frequent lesion[17]

Oral leukoplakia clinically presents characteristics that define it as a white plaque adhered to the mucosa that is not removed by scraping, and cannot be diagnosed clinically or histopathologically like any other lesion. [18] (figure 1).

Source: Paraguassu et al. 2019

However, although OL is not linked to a specific anatomopathological diagnosis, it is generally considered as a lesion with potential for malignant transformation (RUIZ et al., 2016). The frequency of this transformation is higher than the risk associated with

normal mucosa. Microscopically, OL may or may not present epithelial dysplasia, as well as it may already determine the presence of an in situ carcinoma, which is when the entire epithelium is already involved. [6]

Clinically, leukoplakias can be classified as verrucous, proliferative verrucous, granular and homogeneous. When in the presence of a histological diagnosis of dysplasia, it is classified according to severity, as follows mild, moderate and severe epithelial dysplasia (in situ). Erythroplakia, on the other hand, is a tissue change in the oral epithelium and presents itself in the form of a plaque or macule with a reddish color, is asymptomatic and histologically cannot be identified as another lesion [9] (Figure 2).

This lesion has a lower incidence than leukoplakia, which has a higher malignancy rate of around 14 to 50%. In 90% of cases it is characterized as moderate or severe dysplasia. [9]

Source: Paraguassu et al. 2019

Finally, actinic cheilitis, which preferentially affects the lower lip. It is characterized by pale areas with loss of red lip color. This condition is mostly prevalent in fair-skinned people. It is due to prolonged and chronic exposure to sunlight. The lesions are generally asymptomatic, and may be white, red, white with red areas and also ulcerated (Figure 3). It is reported that the rate of malignant transformation is low,

however, existing [12].

Source: Paraguassu, et al 2019.

Given this context, oral cancer is a disease that could be controlled through less exposure to risk factors and early diagnosis, in addition to producing a high social cost, generating very high annual expenses worldwide. Therefore, it is a public health problem worldwide. [9]

Considerations about diagnosis and treatment of oral cancer

The diagnosis of oral cancer starts from the detection and previous knowledge of individuals and health professionals about the initial lesions, that is, the potentially malignant lesions previously mentioned in this work. In addition to associating with carcinogenic factors, as it allows acting on the cause-effect relationship of causal agents, as well as selecting which patients are more likely to develop a specific tumor and acting at an early stage. Information about these factors forms the basis for effective disease prevention, 20 which needs to target the young, the elderly, and the less educated.[17]

Self-examination is extremely important in this process, considering that the lack of knowledge of people and professionals causes a delay in diagnosis, inducing more invasive approaches resulting in an unfavorable prognosis [15]

As the incidence of oral cancer has increased in recent times, it becomes relevant that health professionals are prepared to recognize the lesion and trained to identify the risk factors for the disease, seeking to develop prevention and early detection activities. The high number of deaths from this pathology, in the period of six to twelve months from the time of diagnosis, represents a late identification of the problem. This could be

easily detected in the oral cavity without the need for special techniques, in view of the easy access for direct examination [14]

Among the causes of late diagnosis, there is the unpreparedness of health professionals as well as the population's misinformation on the subject. This delay makes the chances of cure very low, reaching a mortality rate of over 60% [9].

For a differential diagnosis, it is necessary to carry out a clinical oral examination, according to the semiotechnical maneuvers: inspection, palpation, percussion, smell and auscultation, and which should be done mainly in all individuals with risk characteristics for neoplasia. The purpose of the exam is to detect lesions at an early stage or malignant lesions; It begins with a general inspection of the structures of the oral cavity, observing the color, movement of the tongue, 21 upper and lower regions of the oral cavity, the texture of the mucous membranes and the lips. It is palpation that is extremely important to assess the lesions, helping to detect their limits, the degree of impairment and adjacent structures. Palpation of cervical lymphatic structures is also necessary to complement the examination, being important to determine the size of lymph nodes, their mobility and their relationship with neighboring structures. [two]

For the treatment of oral cancer, an early diagnosis in the early stages is essential, as it allows a better prognosis, with less invasive interventions and with a lower degree of mutilation and, consequently, a longer survival. The dental surgeon has an important role in the early diagnosis of oral cancer, as this is the professional with frequent contact with the oral cavity and must be trained to identify the first lesions, not only identify them but also instruct patients to self-examination. Several factors can influence the quality of care for patients with cancer, such as: speed of care, availability of resources and professionals, however, nothing is more important than early diagnosis. [9]

The method used to confirm the diagnosis is biopsy, where part of the lesion or the entire lesion is removed, depending on the size and degree of involvement. After confirmation of the diagnosis through anatomopathological examination, the treatment plan for these cases depends on their location, clinical behavior and evolution. In addition to the biopsy, it is important that the patient undergo imaging tests to verify the size of the lesion, such as computed tomography, magnetic resonance imaging, and

ultrasound to observe involvement with adjacent structures. end [8].

If the diagnosis is positive for cancer, it is necessary to verify the stage of the neoplasm to start treatment. It is also essential to assess whether the cancer cells have reached other organs (this is called metastasis when the carcinoma reaches beyond where it started. Once oral cancer is found, treatment must be carried out by a multidisciplinary team - head and neck physician, oncologist and speech therapist and treatments such as surgery, radiotherapy, and chemotherapy should be considered.[11]

Surgery and radiotherapy associated or isolated are therapeutic methods for oral cancer, surgery being the most frequent approach, which generates temporary or permanent mutilations for the patient. In initial lesions, surgery and radiotherapy proved to be the most effective treatments for these types of cancer, followed by chemotherapy, with good results and their indication depends on the location of the tumor and the functional alterations caused by the treatment (cure in 80% of cases). cases). [13]

Radiation therapy uses electromagnetic or particle ionizing energy, which can cause chemical and biological effects to stop cancer cells from replicating, causing cancer cells to repeatedly lose their ability to reproduce and die. This therapy is extremely important in the treatment of head and neck tumors, but despite its benefits, 23 it can also destroy healthy cells, resulting in side effects. These complications occur in almost 90% of patients affected by head and neck cancer, and this happens, in addition to the specific circumstances of each patient, but also depends on the daily dose of radiotherapy and the area of irradiation. As a therapeutic dose, it is usually used between 50 Gy and 70 Gy for 5 to 7 weeks, divided into 2 Gy per day, 5 days per week, but the dose and frequency depend on the specific clinical situation and tumor stage. [16]

On the other hand, it is considered the treatment of choice for head and neck neoplasms and has been used to treat malignant head and neck lesions, inhibit metastasis and significantly improve patient survival. When surgery is not possible, in more advanced cases, chemotherapy is associated with radiotherapy. When the cells of the oral mucosa are highly proliferative, they are easily affected by chemotherapy and its effects, due to its immunosuppressive capacity, several manifestations can occur,

leaving the organism more susceptible to infections, which can result in a decrease in salivary flow and other reactions. leading to a poor prognosis.[18]

Some of the oral complications described in the literature after oral cancer treatment are: mucositis (burning ulceration, removable white plaques, erythema and changes in salivary flow) and lip dryness. Angular cheilitis and candidiasis are manifested by favoring opportunistic infections with a decrease in the body's defense conditions. [6]

Given the above, it is clear the importance of early diagnosis of oral cancer and the role of the dentist. Therefore, care for patients with head and neck cancer should be multidisciplinary, consisting of a team of doctors, dentists, physiotherapists, nurses, speech therapists, among other professionals [14].

FINAL CONSIDERATIONS

The rate of oral cancer as a head and neck neoplasm has been growing over the years and needs to be a recurrent issue. Because if not diagnosed early, it causes difficulties in the treatment and may cause unfavorable prognoses, significantly influencing the individual's quality of life.

Prevention through the modulation of risk factors is essential, including knowledge on the part of individuals about oral cancer associated with self-examination.

The multidisciplinary team has a relevant and necessary role in the early diagnosis of oral cancer, based on knowledge of the predisposing lesions during dental care and also the means of treatment for oral cancer

It is also important that the dentist and the doctor know all the phases of oral cancer, from the treatment to the prognosis, in order to be able to assist the treatment together with the multidisciplinary team, which in its majority is composed of Doctors, Dentists, Nurses, Physiotherapists and Nutritionists.

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