Clinical and pathological aspects of lower lip squamous cell carcinoma

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ABSTRACT

Squamous cell carcinoma of the lower lip is one of the most common malignant neoplasms of the oral and maxillofacial region. When diagnosed in the early stages, the prognosis for this injury is considered good, with more than 90% of patients showing a 5-year survival. However, for cases with metastasis in cervical lymph nodes at the time of diagnosis, the 5-year survival rate of patients can reach only 30%, configuring a worse prognosis. The aim of the present study is to perform a literature review on the clinical and pathological aspects of lower lip squamous cell carcinoma. The findings in the literature highlight the importance of a correct diagnosis and highlight the importance of a thorough clinical examination, and it is necessary to correlate the clinical, radiographic and histopathological data for the correct diagnosis of this malignant lesion.

Keywords: Squamous Cell Carcinoma, Oral Neoplasms, Diagnosis and Oral Pathologies.
INTRODUCTION

Head and neck cancer are malignant neoplasms that start in the lining epithelium of the mouth by disordered cell multiplication that affects the upper aerodigestive pathways. The most common type is oral squamous cell carcinoma, which corresponds to 90% to 95% of oral cancer cases (BASULTO et al., 2010; DOMINGOS et al. 2014). Oral cancer is related to risk factors known as alcoholism and smoking, as they present synergism and are promoters and initiators of carcinogenesis, along with supporting causes such as: poor hygiene, immunosuppression, viral infections by papilloma, herpes-viruses and nutritional deficiencies (BRENER et al., 2007; PASSARELLI et al. 2011).

Oral carcinogenesis represents a multi-step process, characterized by the occurrence of several genetic events that promote imbalances in crucial regulatory molecular pathways. Disorders in the mechanisms that control the processes of differentiation, migration and cell death by apoptosis, as well as changes in mesenchymal epithelial interactions found at the interface between normal host tissue and malignant neoplastic parenchyma, contribute to the establishment and development of squamous cell carcinoma of oral cavity (DE-PAULA et al. 2006).

Squamous cell carcinoma is derived from stratified squamous epithelium similar to other neoplasms, and it predominates in individuals between the sixth and seventh decades of life. In relation to their clinical aspects, initially, they exhibit a white or erythematous macula which may be ulcerated, and with the progression of the pathology, they may present an exophytic, endophytic, leukoplasic, erythroplastic or erythroleucoplasic lesion (PASSARELLI et al. 2011).

The leukoplakic and erythroplastic types in the initial stages have the same characteristics as the cancerizable lesions of leukoplakia and erythroplasia, being able to perform an inaccurate diagnosis, for this reason it is important to perform biopsies when it comes to the intraoral region, it needs the evaluation of the surgeon- dentist, due to the familiarity with the structures and the difficulty to be visualized, mainly when located in the posterior third of the tongue, which corresponds to 25% to 40% of the cases, because it has a silent initial development and is a restricted area (MENDONÇA et al., 2015; MAMANL et al., 2017). The aim of the present study is to perform a literature review on the clinical and pathological aspects of lower lip squamous cell carcinoma.

MATERIAL AND METHODS

For the development of this research, an extensive search was carried out on the platforms: PubMed, SciELO, MedLine and Google Scholar, with the aim of collecting information...
about the studied pathology and thus promoting a review of squamous cell carcinoma of the lower lip. During the research, only articles that dealt with the topic of this research, as well as its clinical, radiographic and census aspects were selected.

## RESULTS

<table>
<thead>
<tr>
<th>Authors / year Publishing</th>
<th>Kind of Study</th>
<th>Amount From patients</th>
<th>Age range of patients</th>
<th>Gender of Patients</th>
<th>Type of treatment Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>SASSI et al. (2010)</td>
<td>Clinical case report</td>
<td>1</td>
<td>21 years</td>
<td>Male</td>
<td>Radiotherapy and Chemotherapy</td>
</tr>
<tr>
<td>PASSARELLI et al. (2014)</td>
<td>Clinical case report</td>
<td>1</td>
<td>43 years</td>
<td>Male</td>
<td>Emptying Cervical</td>
</tr>
<tr>
<td>MENDONÇA et al. (2015)</td>
<td>Clinical case report</td>
<td>1</td>
<td>73 years</td>
<td>Male</td>
<td>Unilateral neck dissection</td>
</tr>
<tr>
<td>SANTOS et al. (2010)</td>
<td>Clinical case report</td>
<td>1</td>
<td>80 years</td>
<td>Female</td>
<td>Performing partial glossectomy with neck dissection. Allied to ten radiotherapy sessions.</td>
</tr>
<tr>
<td>DE-PAULA et al. (2006)</td>
<td>Analyze Sampling</td>
<td>35</td>
<td>60 years</td>
<td>Both sexes</td>
<td>Procedure Surgical</td>
</tr>
<tr>
<td>HIROTA et al. (2006)</td>
<td>Clinical case report and literature review</td>
<td>1</td>
<td>25 years</td>
<td>Female</td>
<td>Performing partial glossectomy with neck dissection, followed by radiotherapy and chemotherapy</td>
</tr>
<tr>
<td>MORAIS et al. (2019)</td>
<td>Clinical case report</td>
<td>1</td>
<td>22 years</td>
<td>Female</td>
<td>Procedure Surgical</td>
</tr>
<tr>
<td>PINTO et al. (2018)</td>
<td>Clinical case report</td>
<td>1</td>
<td>50 years</td>
<td>Male</td>
<td>Performing neck resection and emptying</td>
</tr>
</tbody>
</table>

## DISCUSSION

DOMINGOS et al. (2014) states that between 90 to 95% of head and neck cancers are oral squamous cell carcinoma. The National Cancer Institute (INCA) estimates that by 2020 there will be 11200 cases of oral cancer for men, with a mortality rate of 4.2%, demonstrating a low death rate compared to Prostate Cancer, which has a high rate of death. mortality rate higher than 13%. In relation to women, it is observed that different from what the INCA estimated for 2008, where this type of neoplasia appeared as the seventh most frequent among women, in the projection for 2020 it does not even appear among the ten main types of cancer.

The data collected from the INCA website affirms the disposition by LEDESMA-MONTES et al. (2018), in which the authors state that the aforementioned carcinogen is among the main types in terms of involvement in male patients and shows that the conception adopted by HANNA (2011) became obsolete since in the year of publication the oral cavity cancer ranks seventh in the projection table for female patients.

Regarding the color or race of the patients MAIA et al. (2006) reports that research points to a great prediction of neoplasia by white-skinned men, aged between the 4th and 8th decade of life. It also argues that 76.3% of the patients examined were from rural areas and that 23.7% came from urban areas, however, he argues that no occupation is directly associated with the appearance of oral squamous cell carcinoma.
It is vast in the literature to point out factors that favor the appearance of head and neck cancer, authors such as PASSARELLI et. al (2011), LEDESMA-MONTES et al. (2018) and MORAIS et al. (2019), list smoking, alcohol consumption, human papilloma virus (HPV) infection and age in their research as predisposing factors for the onset of carcinogenic formations. When consulting the website of the National Cancer Institute (INCA), other factors are also noted, such as: betel chewing - a bullet derived from the mixture of herring seed (a species of palm), betle leaves (a type of pepper), and tobacco -, the excess of body fat that, despite not having significant studies on this topic, it is known that the self BMI index (body mass index) affects the metabolism and causes endocrine changes, such as phiperinsulinemia and the increase in estrogen levels, thus increasing cell multiplication and decreasing apoptosis.

Still regarding the predisposing factors, HANNA et al (2011) points out factors such as the use of contrast substances such as thorium dioxide, which was widely used in the 1920s and 1940s, in imaging tests, and reaffirm that the prolonged use of alcohol and smoking are correlated with the development of this type of cancer.

The diagnostic process is carried out by performing a clinical examination, with confirmation by biopsy, which can be performed by a properly trained professional, in an outpatient setting, right after the application of local anesthesia, as described by the INCA website, and also the researchers, LEVI et al. (2005) and REGE (2013) that still affirm that the early diagnosis as well as the correct clinical staging is of fundamental importance, since in this way it is possible to adapt the most effective means of treatment.

Still with regard to clinical staging, computed tomography is a very important element due to its clarifying character, it allows the distinction of inflamed tissues of the tumor, in addition to externalizing through the image the form in which bone lesions are found, in more advanced stages of the disease. neoplasms, according to REGE (2013). Regarding the diagnosis by image VANINI (2019), it is argued that computed tomography and magnetic resonance imaging provide a broad view of the bone situation and the soft parts of the lesion, in addition to the areas adjacent to them, he complements by stating that ultrasound and bone scintigraphy can be used as complementary exams.

LEMOS-JUNIOR et al. (2013) informs that “patients who are submitted to radiotherapy for tumors in the head and neck region and in large part those who receive chemotherapy treatment may develop changes in the oral cavity”. ROHDE (2014) argues that the clinical care provided by a specialized doctor can provide an increase in survival of 5 to 10% for these patients and complements by stating that the therapeutic modality that proves to be the most effective is surgery.

MAIA et al. (2006) brings in his research an exposition taken from the American Cancer Society in which he states that some doctors use radiotherapy and chemotherapy concurrently,
although this practice may give rise to side effects that are not always acceptable to patients. In the same line described by MAIA et al. (2006) and SASSI et al. (2010) confirms an identical practice in his case report, which at the time treated a male patient aged 21 years.

Another therapeutic procedure used to treat squamous cell carcinoma of the lower lip consists of neck dissection as described by PASSARELLI et al. (2011) in a research published in the aforementioned year, a research that discusses the clinical case of a patient who was in the 4th decade of life. MENDONÇA et al. (2015) also makes use of neck dissection as described in a clinical case report, where he treated a male patient who was in the 7th decade of life.

SANTOS et al. (2010) describes in his research the performance of neck dissection and the performance of partial glossectomy in addition to the performance of ten radiotherapy sessions for the treatment of a female patient in the 8th decade of life. The same procedure was used by HIROTA et al. (2016) in the treatment of a 25-year-old young patient. PINTO et al. (2018) reports that he used neck dissection combined with resection for the treatment of a 50-year-old patient. LEDESMA-MONTES et al. (2010) when carrying out a literary review together with an analysis in medical records, analyzed 45 cases with patients after the 6th decade of life, where Wide excision and Hemiglossectomy were used as a form of treatment.

CONCLUSION

Regarding the predisposing factors, it can be concluded that alcoholism and smoking are among the main agents that cause squamous cell carcinoma of the lower lip. It is also observed that in patients who use these substances synchronously, the chances of developing a more serious type of the disease considerably increase.

REFERÊNCIAS


