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TABLE OF CONTENT

LIFE QUALITY IN PATIENTS WITH HEAD AND NECK CANCERS

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Abstract

Introduction: The face represents the basis of relationships, being the most caracteristic part of an individual. Head and neck cancers encompasses a wide range of tumors that occur in several areas of the head and neck. The quality of life is a complex concept that must be very well defined for clinical use. The main purpose of this paper is to

identify major problems of patients diagnosed with head and neck cancers that undergo radical surgery. Matherial and method: We carried out a descriptiv study by collecting existent data from medical literature and from the authors' clinical experience. We syntesized the main problems that interfere with the quality of life of these patients in four domains: pain, eating and deglutition, dry mouth and physiognomic issues. An important aspect is the role of the patients' families in improving the quality of their lives.

Key words: quality of life, tumor, head and neck

Introduction

The face is the most unique and characteristic segment of our body, the part that individualizes us and also helps us integrate in society by creating different types of relations.

The cervico-facial teritory is special not only from the esthetic point of view, but it is also a segment that helps us relate through speaking - a characteristic that differentiates us from animals.

The tongue is a muscular organ, very mobile, covered by oral mucosa formed of a stratified squamos tissue. The tongue has a variety of important functions represented mainly by speaking – through the synchronized movements of the muscles of the tongue but also with the help of other muscle groups namely the geniohiodian muscle, genioglos muscle, milohiodian muscle and also the digastric muscle. Beside its role in speaking the tongue has many other important roles being involved in the process of deglution, which allows the food to move from the oral cavity to the esophagus. Tongue also plays an important role in taste perception, being a sensory organ due to papillas covering its dorsal part.

Another important part of the cervico- facial teritory is represented by the lips. Lips are soft, movable organs that present five major functions namely: food intaken, the articulation role, being also a tactile organ and an erogenous zone. The lips contribue also substantially to facial expressions. The lips visibly express emotions such as a smile or frown, iconically by the curve of the lips forming an up-open or down-open parabola. Human lips are a tactile sensory organ, and can be an erogenous zone when used in kissing. The skin of the lip, with three to five cellular layers, is very thin compared to typical face skin, which has up to 16 cellular layers. With light skin color, the lip skin contains fewer melanocytes (cells which produce melanin pigment, which give skin its color). Therefore, the blood vessels appear through the skin of the lips, determining their red coloring.

The nose and and the ears are very important organs involved in smelling and breathing but also in perception and capturing of sounds (de Graeff et al., 2000).

The aim of this paper is to identify the major problems faced by the patients diagnosed with head an neck cancers that undergo radical surgery, namely the aesthetic outcomes after the surgery and also the patiens' expectations, the pain that the patient will endure immediatly after surgery and also on long term and also the functional disorders after radical surgery (fonetic and deglutition problems).

Regardless of different treatment regimens and reconstruction procedures, improving health-related quality of life remains essential for these patients (Davudov et al., 2019).

Pain

The cervico-facial area is very sensitive to pain which can be acute or chronic. Therefore, pacients with head and neck cancer (HNC) most commonly experience pain which is associated with poor general condition. Pain is a a major issue in these patients before, during and after the specialized treatment (Bossi, Ghiani, Argenone, & Depenni, 2020).

The etiology of pain in patients with HNC is multifactorial and may be nociceptive, in direct relation with the tumor invasion in bones and soft tissues or may be perineuronal, due

to the presence of chronic inflammation or associated infection. Also, pain may have neuropathic origin due to the involvement of the cranial nerves or it may be related to the sequelaes following radical neck dissection, resection of the mandible with sacrifice of the mandibular nerve or following radiotherapy (Chua, Reddy, Lee, & Patt, 1999).

Chronic pain predominates in patients with incurable HNC who generally survive for several months or years. The pain can be directly related to cancer, or associated with therapeutic procedures or it may represent a side effect of the treatment. Advanced HNC cases require a multimodal treatment and a multidisciplinary approach and the treatment itself can induce a painful symptomatology (Bossi et al., 2020).

Major surgical interventions such as resection or partial resection of the tongue, palate or jaw, radical neck dissection or nerve sacrifice produce important changes in anatomical and functional structure. Radiotherapy as an adjuvant or even single-intentioned treatment is often the cause of mucositis, xerostomia, loss of taste and late complications such as fibrosis of the skin and soft tissues that can lead to dysfunctions of the temporo-mandibular joint and myofascial pain syndromes. All these are directly involved in the dramatic decrease of the patients' quality of life (Chua et al., 1999).

Mirabile et al. (2016) showed that the most frequent cause of pain is chemo/radiation related oral mucositis, which affects 80% of the patients and worsens their quality of life by inhibiting speaking, eating, drinking or swallowing and sometimes reducing the treatment compliance, the maximum dose intensity and thus the potential efficacy of treatment. Pain in patients with HNC may be a distressing symptom with an important impact on quality of life and may influence their general health status by favoring the onset of depression, fatigue, or cognitive impairment. Therefore, early management of the painful symptomatology in HNC patients plays an important role in improving the patients' quality of life (Mirabile et al., 2016).

Eating and deglutition disorders

Patients with HNC have functional masticatory and deglutition impairments mainly determined by the disease but also by the radical and adjuvant treatments. The surgical treatment produces important changes in the anatomical and functional structure, requiring, at a later stage, the patient to learn to eat and swallow. Adjuvant treatment represented by radiotherapy is frequently involved in the onset of mucositis, xerostomia and loss of taste followed by severe chewing and swallowing impairments with a strong impact on the patient's quality of life (Onakoya, Nwaorgu, Adenipekun, Aluko, & Ibekwe, 2006).

The quality of life is generally correlated with the physical dysfunction and the loss of autonomy. A particular situation is represented by the patients who have a gastrostomic catheter who have mainly emotional problems than problems linked to the actual technical complications that the catheter may induce such as leakage from the catheter, infections or diarrhea. Furthermore, the presence of the gastrostomic catheter can generate difficulty in feeding in public places and changes of the patient's body image (Babin, Sigston, Hitier, Dehesdin, & Choussy, 2001). Therefore, catheter-integrated feeding limits the patients' daily activity, being a major cause of discomfort for them, with an important impact on the quality of their lives.

In general, nutritional disorders in patients with HNC cancers have a multi-factorial determinism, xerostomia (dry mouth syndrome), olfactory, taste, swallowing and chewing impairments being the main incriminating factors. (Babin et al., 2001).

Radiotherapy is a common treatment for head and neck cancers but it produces considerable acute and long-term side effects to the oral cavity, one of them being the loss of salivary gland output, which can persist for many years and determine dry mouth (xerostomia), as well as oral discomfort, mucositis, recurrent microbial infections, difficulty

in chewing and swallowing, increased incidence of dental caries, impaired taste, and an inability to wear dentures. The salivary dysfunctions induced by radiotherapy cause permanent oral impairments and contributes to lower the patients' quality of life (Henson, Inglehart, Eisbruch, & Ship, 2001).

Over the last decade, there have been successful attempts to diminish the loss of saliva experienced by most patients following the completion of radiotherapy. For example, use of the saliva substitutes (artificial saliva) can increase the patients' quality of life.

Surgery treatment for head and neck cancers often causes anatomical and functional changes that can lead to severe dysfunction in oral cavity such as speaking difficulties (Davudov et al., 2019).

As oral language remains the preferred contact method between people, impairments in communication can change a person's daily life. A common symptom of HNC patients is dysphonia but this is not necessarily correlated with disrupting relationship life or impaired quality of life. This shows that patients can have a functional speech and a positive attitude about it. A particular situation is the presence of a permanent tracheostome which can alter breathing patterns, with an impact on the ability of normal speaking or undertaking various physical activities (de Graff et al., 2000). A permanent tracheostome and loss of speech are unquestionably serious disabilities; nevertheless Babin et al. sustain that these factors do not always appear to decrease the patients' quality of life and a potential explanation for this is that, with time, patients learn to cope with tracheostoma and laryngeal speech (Babin et al., 2001).

Physiognomic issues

Most of the surgical treatments in patients with HNC might interfere with patients physiognomy. Therefore, choosing an appropriate reconstruction technique seems to be an important parameter when treating these patients (Davudov et al., 2019).

The aestetic appearance of a facial scar after surgery in a pacient with HNC appears to be more important for female patients. For men the functional result seems to be more important than the aesthetic one (Davudov et al., 2019).

The aesthetic defects in the cervico-facial region in patients with HNC are determined firstly by their disease and secondly by the surgical and adjuvant treatment. A particular situation is the extirpation of the parotid gland completely with the subsequent facial nerve sacrifice having a strong impact on the quality of life not only because of the important facial asymmetry but also due to the functional impotence determined by the palpebral ptosis of the affected side (Ferrans, 1990).

Depending on the localization of the cancer patients must be informed about the surgical technique, and also about the defect that will be created by the removal of the tumor in oncological safety limits.

It is mandatory that the medical staff provide information to the patient about the necesity of the surgical intervention, the extent of the surgery and the deffect that will remain after it. The medical staff should also present to the patient the different posibilities of immediate reconstruction in order to facilitate his/her social reintegration on the one hand and on the other hand to start as soon as posible the adjuvant radio-chemotheraphy. In our opinion it is mandatory that the patient undergoing extensive surgery for carcinoma localised on the face to benefit from a psychological examinations and if necessary to undergo psychological counselling sessions in order to fully understand the impact that the surgery will have on his/her physiognomy, and to facilitate the faster mental recovery of the patient. In order to obtain the best aesthetic result it is recomended that the reconstruction to be performed by a plastic surgeon (Mirabile et al., 2016).

Before the surgery it is also very important that the family of the patients to be informed of the problems that will follow the surgery, and of the fact that the patient will need psychiatric and psychological evaluation and psyhological counselling in order to prevent the onset of depression (Bossi et al., 2020).

Conclusion

Improving the quality of life has become an important outcome in the treatment of patients with cancer. Therefore, the number of research studies that focus on the quality of life of patients with head and neck cancer has rapidly increased over the past few years. They show that quality of life is extremely poor after the cancer was diagnosed and treated and continues to deteriorate during treatment. Therefore it is very important for the medical team to find various solutions of improving the patients' quality of life by individualized interventions according to the particularities of each patient.

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