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Psychological profile of laryngectomized patients

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Abstract

Larynx cancer is one of the most susceptible form of cancer susceptible to induce alteration of the patient's psychological profile due to the social role that the larynx has in communication. Oral communication is severely impaired even after voice rehabilitation of the laryngectomized patients, so that the social rehabilitation is somewhat not only a medical but also a social problem. The psychological profile of these patients is altered in a way that dealing with the disease is sometimes neglected and the interaction with the outside world in terms of oral communication is totally abandoned. The starting point for depression in these cases is the acknowledgement of the disease and is, in some cases, the entire medical environment. Facial scarring, the inability to verbally interact with other human, as well as the presence of the tracheostoma, are all deciding factors in the presence of a low self-esteem for these particular patients. Psychological counseling is a mandatory approach for laryngectomized patients, in order to improve their ability to cope with cancer and providing better recovery chances.

Keywords: depression, self-esteem, total laryngectomy, social rehabilitation

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Introduction

Head and neck malignant neoplasia is one of the most important public health issues mainly due to the increasing incidence in the last two decades. The increasing number of the patients that present to the E.N.T. specialist is closely linked to the tobacco and alcohol consumption. There is a way to describe the regular larynx cancer patient in regards to social status and comorbidities, namely the archetype being male, old, multiple comorbidities and associating the consumption of high quantities of tobacco and alcohol (1, 2). Never the less poor health status and comorbidities are risk factors that are presenting most head and neck malignant neoplasia patients. Larynx cancer is the second most involved site of the airway tract after the lungs. The population that presents with this type of malignancy in dominated by the male sex, although there is evidence of increased incidence of larynx cancer in women. The particularity of larynx cancer patients in Romania is that certain categories of people such as minorities and low social and economic status individuals usually present themselves to the physician in late stages of disease. The associated comorbidities and the impaired biological status means that the survival rates in this category of patients is lower than average for the same stage. This has been documented in several studies (3, 4).

Poor socio-economic status comes with an impaired psychological profile. This is either due to the fact that the physical condition is caused by the personal habits or due to the fact that the malignancy leads to psychological changes. In either cases most patients that present themselves to the physician in such late stage larynx cancer have anxiety issues, low self-esteem, depression in various stages and a lack of will.

If the oncologic diagnostic work-up indicates that surgery is viable, patients with late stages of larynx cancer benefit from total laryngectomy. Although surgery is preferred in our department, the Oncology Committee might refer the patient to undergo radiation therapy first followed by salvage surgery in case of no remission or a combination of radiation therapy, chemotherapy and surgery (1, 5). All patients that are admitted in our department undergo total laryngectomy for late stage larynx cancer. This type of surgery is a complex procedure in terms of preparation, work-up and follow-up from patient's perspective. The removal of the larynx debilitates the patient in terms of senses and aesthetics.

The complexity of multimodal therapy for late stage cancer patients is linked to a multitude of side effects, some as a result of surgery such as impaired functioning of swallowing, breathing, speech, taste, smell, decreased sensitivity of the cervical and facial region, facial disfigurement, and some as a result of radiotherapy and/or chemotherapy such as swelling, mucositis, residual pain, alteration of skin, burning sensations (6, 7). All of these side effects have a tendency to limit the social reinsertion of larynx cancer patients.

Most of the patients never work again due to their handicap and those who do are usually unable to return to their workplaces or perform some other tasks for a long period of time after finishing all oncology therapies (8, 9).

Multimodal therapy for oncology patients, in our case larynx cancer patients, requires a thorough assessment of the quality of life. Several instruments have been used for this goal each for specific conditions, such as the Head and Neck Cancer Inventory (10) and survey forms included in the head and neck cancer module of the European Organization for Research and Treatment of Cancer (11). These instruments are of outmost importance in order to better assess the psychosocial variables and include each patient in particular classes of stress. The clear delimitation of these groups is subject for clinical intervention to improve the quality of life for larynx cancer patients (12, 13).

Work-up

Several studies have analyzed the recovery status for larynx cancer patients that survived multimodal oncology therapy. These studies indicate that the quality of life reaches its lowest endpoint during therapy and for a limited period of time lapsed afterwards. From this point on most patients show significant improvement right up to the baseline level. The baseline level as compared to a non-cancer patient is usually reached approximately twelve months after diagnosis (10, 14-16).

Psychological impairment

The psychological profile of the larynx cancer patient is different from that of other cancer patients mostly due to the fact that facial scarring is subject of daily observation by the patient. This is a reminder of the disease for the patient that triggers a series of conflictual emotions. The disturbing experience for these patients is translated into a clinical or subclinical depression, significant psychological impairment being visible in patients that have a great amount of anxiety prior to the treatment. Symptoms of subclinical depression or the full manifestation of a depression syndrome are to be expected in cancer patients and may be present after oncology therapy even months or years afterwards (17, 18). Depression is in most cases a multifactorial condition and it is characterized by the interaction of the diagnosis, the burden of the disease, financial reasons, treatment sequelae, social restrictions, dysfunctional family life, and the possibility of recurrence or death. Moreover, patients appreciate the quality of life by the intake of food and beverages and the ability to speak. All these factors lead to a more likely depression syndrome for larynx cancer patients than any other cancer patients (17).

The recurrence of the disease is a major setback in the psychological profile of larynx

cancer patients and in most cases it is the trigger for stopping all oncology therapy. Those patients who decide to continue oncology therapy relate at a personal level with their surgeon. This type of patient-physician relationship is essential for the coping mechanism of these patients. Trust is a key element in the patient-physician relationship and should be earned by the physician by using appropriate bedside manners.

A large number of studies have been conducted to evaluate depression levels in cancer patients and particular for head and neck cancer patients. Howren and colleagues concluded in 2010 that subclinical depression symptoms present prior to the beginning of oncology therapy was linked to a lower quality of life one year after the conclusion of therapy when comparing values with known baseline indicators. The same poorer quality of life in associated with other factors such as age, gender, socio-economic status, comorbidities and the consumption of tobacco and alcohol.

Some authors indicate that patients with increased levels on anxiety are more likely to refer to their disease as debilitating including disease-specific intrusion and avoidance. Despite these indicators the group of patients with high levels of anxiety that manifest distress symptoms and home healthcare assistance did not differ significantly from the group of patients with less anxiety (19).

Tobacco and alcohol addiction

The consumption of tobacco and alcohol alone or in association is incriminated in the appearance of human malignancies. It is the case of larynx cancer for which the association of the two increases the risk of developing this type of cancer 10 folds. We appreciate that as much as 95% of our patients have a history of consuming tobacco and/or alcohol. Tobacco and alcohol cessation is the most important behavior modification that larynx cancer patients need to do. This is one of the most important problems in post-therapy period. Continued smoking negatively affects treatment efficacy and survival (20- 22). The involvement of the pharynx mucosa is affected by the consumption of alcohol and the mucosa of the trachea is affected by continued smoking in terms of worsening the mucositis present after adjuvant radiotherapy or chemotherapy. Smoking and alcohol consumption increases edema and chronic inflammation. Therefore, severe mucositis is a cause of therapy interruption and further hospitalizations (23). Patients with total laryngectomy smoke through the tracheal tube. In terms of secretions this habit increases the quantity of mucus which may be a cause for tracheal or lung infections which also leads to increased morbidity and hospitalization.

Data from several studies indicate that as much as 50% or more head and neck cancer

patients continue to consume tobacco and/or alcohol after diagnosis and after conclusion of oncology therapy (24- 26). This behaviour is subject to clinical behaviour medicine in which specialist need to intervene because some patients are unawarethat tobacco and alcohol consumption may lead to recurrence or a second malignancy in the head and neck region. Facing with a life-altering diagnosis and potentially aworse outcome, some patients with cancer ofhead and neck consider the cessation of tobacco and alcohol consumption unnecessary and tend to address their addictions for a better short term quality of life (27- 29).

Conclusions

Larynx cancer patients are subject to psychological impairment with subclinical depression or clinical present symptoms due to the severity of the disease and the complexity of the oncology therapy. The quality of life for patients that survive needs to be assessed by using condition-specific instruments to establish the need for psychological support in each patient. Professional healthcare givers are those who interact with larynx cancer patients and need to pay attention to each patient's needs. Further studies need to be conducted in larynx cancer patients that undergo surgery and the use of psychometric instruments is necessary.

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