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# The functioning of the patient in the mental aspect and interpersonal relationship after Laryngectomy Surgery

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Abstract

**Introduction.** The most radical way to get rid of the cancer of the larynx is total laryngectomy. Laryngectomy involves the complete removal of the voice organ, which is the larynx, as a result of extensive laryngeal cancer categorized according to the TMN classification as T3 and T4, so this is a social problem that needs attention and should be taken into account in scientific research.
**Goal.** Assessment of the results of the functioning of people after laryngectomy in the patient's psyche and interpersonal relations.
**Material and methods.** A literature review was made using PubMed, Google Scholar databases based on keywords.
**Results**. On the percentage scale, the highest results achieved for patients without function, 63% reported physiological tests of depression, and 26% revealed mental disorders. Patients may also have anxiety disorder, phobias, panic disorder, and anxiety concentration syndromes that are able to manifest themselves in the results of stress levels. Women demonstrate that more often than men, lower initial values as a result of laryngectomy mutilation, and because of the results in the use analysis, they use substitute speech, which may sound like a male voice.

When it comes to data related to the age of users, younger users (under 65 years of age) are more likely to solve mental problems. Low income, unemployment, lack of a permanent job associated with an increased risk of depression or mental treatment.
**Conclusions.** In patients with laryngectomy after larynx cancer, they include a significant reduction in quality of life, an increase in depressive reactions, and communication difficulties in a larger group of people. This is a significant social problem that requires research.

**Key words:** Total laryngectomy; laryngeal neoplasms; voice rehabilitation; larynx; interpersonal relations; quality of life

## INTRODUCTION

It has been proven that the level of depression in patients after total laryngectomy is higher than in patients after partial laryngectomy. Patients feel dependent on their life partners. They also feel that they burden them with their consequences and difficulties with treatment. Eliminating the consequences of total laryngectomy concerns various functions, such as mental and social functions. It should start quickly, preferably already during the diagnosis, to prepare the patient slowly for treatment. It is important to introduce elements of rehabilitation (e.g. showing the patient how to cope mentally after surgery) during hospitalization. This is due to the fact that patients experience changes in the mental and social issues already at the time of determining the stage of the disease [1].

Laryngeal cancer is a malignant tumor that is the most common cancer in the tubes and pipes. Men get sick for the most part compared to women.

The risk of laryngeal cancer is 330 times increased by smoking and drinking alcohol. The chances of partial surgery on parts of the larynx are constantly increasing due to cost advances. In this situation, the patient has a chance to power the functions of the word. Unfortunately, many people still have external laryngectomy (total laryngectomy) as the only option. It saves lives in many cases, but it has consequences that make life difficult. Patients must change their lifestyle (eg diet) and deal with various symptoms such as dyspnoea, problems with swallowing, or coughing up secretions. A very unfavorable effect of laryngectomy is the loss of communication with the environment. It causes understanding in understanding with the family, taking care of matters outside the home, or expressing one's emotions and views. Doctors choose all other electrocution of the larynx whenever all options are excluded. In patients after hospital laryngectomy, it is possible to produce a socially efficient replacement voice [2].

It can be produced by fistula speech (with the use of a voice prosthesis), using electronic sound devices, and esophageal speech. The latter is considered one of the best and very natural in creating speech [4].

A patient who has lost the ability to produce voice and sound loses self-confidence. Depression is frequent and, in the worst-case scenario, even suicide. In this situation, the most important thing is that the patient is provided with

care and assistance. The main problem here is the loss of voice, which rehabilitation aims to restore, but also a disturbed psyche. The latter should be dealt with by a psychologist. Patients after total laryngectomy can communicate through esophageal speech. In this method, the body can adapt to the production of voice through an organ other than the larynx, more specifically the esophagus. Thanks to this, patients can say how long they can do it. Fortunately, most patients (30-85%) master esophageal speech. Rehabilitation is important here, in which it depends mainly on the patient and his willingness to work to what extent he or she masters speech. The goal is to achieve such a level of intelligibility of esophageal speech that it is as understandable as possible [3].

In addition to the patient, a speech therapist plays an important role. The speech therapist explains to the patient what to do to restore the ability to speak and work with him for a given postoperative period. The induction of esophageal speech depends on various factors (e.g. related to health, cancer history, personality, and social functioning). According to Twardowski's theory of activities and products, mental phenomena are expressed in physical activities and products. To meet the chosen goal, the patient must be motivated to learn, to go through a very difficult time, and to change the attitude towards himself. Communication with the environment is very important and necessary for people. Patients after total laryngectomy, therefore, want to restore speech functions. In the meantime, they communicate with gestures, writing, or facial expressions. It proves how great a human need is to share with people what he feels and knows [4].

## MATERIAL AND METHODS

The article presents a detailed review of the scientific literature from the available PubMed and Google Scholar databases using the following keywords: total laryngectomy, laryngeal cancer, voice, and laryngeal rehabilitation, interpersonal relationships, quality of life. This allowed for the collection of the necessary information on the functioning and effects of patients after total laryngectomy.

## RESEARCH AND RESULTS

Speech is a key form of communication processes among people. Without it, it would be difficult to communicate with others. People after a total laryngotomy cannot communicate with the so-called loud speech, because as a result of surgical treatment, the speech generator, which is the larynx, is removed. In many cases, laryngectomy is performed as a result of a diagnosed, highly advanced cancer. Communication with the environment takes place, also in a non-verbal way through body language (gestures, facial expressions), or by writing the content of the message on a piece of paper or electronically (e.g. by cell phone, computer, or tablet). These activities reduce the pace and quality of communication. The informative, and emotive function is disrupted as a result of the inability to communicate with the environment thanks to voiced speech, but the patient may, however, use a pseudo-whisper verbally. As a result of

depriving the process of information exchange, the patient becomes helpless and progresses social isolation [5, 6]. The very diagnosis of cancer causes a strong stress reaction in the patient on all levels, its activity in the cognitive, somatic, social, and emotional zones, among others. In the cognitive sphere, the patient hammer out the changes in the way she thought about herself and her relations with the world at that time. Stress in the somatic sphere causing the severity of symptoms, the patient focuses excessively on increased sensations from his body. The stress reaction at the social level causes a slow withdrawal from non-standard interpersonal relations and a progressive tendency to isolation. Panic, depression and apathy are characteristic of the patient's emotional zone, it is in this plane that feelings are especially intensified [7,8,9].

In patients after total laryngectomy, the fear of illness, loss of voice, and rejection is the main companion, which can lead to depression. It has been proven that patients after total laryngectomy with surgical removal of tumors located in the neck show greater susceptibility to depression than patients after partial methods of laryngectomy [10, 11].

Pruszewicz researched 140 laryngectomees, in 26% they observed mental disorders, of which 3% showed a depressive syndrome ", while 23% showed a depressive response. In laryngectomee patients without any disorders, 67% experienced a physiological reaction of depression. Together. with the implemented rehabilitation of the esophagus after surgery, the patient slowly stabilizes mentally, feeling the progressive improvement of the effect as a result of rehabilitation, and later the depressive symptoms gradually disappear [10,12]. concentration, chronic anxiety disorder, panic disorder, and phobias.

It was found that in oncologically treated malignant neoplasms the above-mentioned disorders were increased due to ongoing stress [10].

There is also a group of patients after total laryngectomy who report a feeling of dependence on life partners, as well as a feeling of burdening their partners with treatment, including surgical treatment, and the consequences of surgery [13]. In such a situation, a valuable skill is to reconcile caregiving with help leading to the independence of the laryngectomee. The consequence of overworking and over-solving problems for patients may lead to the unconscious, secondary, and social "Disability" and to a strong dependence of the patient on the partner [14].

Demographic studies also include the results of studies analyzed on demographic indicators, concerning the comparison of women and men in a wide age group in terms of psychology. Laryngeal cancer has been shown to have less impact on the mental functioning of men than of women. Women are more likely to fear for themselves and their families. The female sex is also more prone to loss of self-esteem because more often than men, they pay much attention to their appearance [24]. As a result of a total laryngectomy, there are usually extensive scars after the surgical incision has healed, traces of tracheotomy, and tracheotomy. after a tracheotomy tube. Not only the appearance may change after surgery. The voice that disturbs the laryngectomees also changes. The generated sound is lower compared to the physiological voice. As a result of the treatment, patients use substitute speech. The new, developed method of communicating with the environment has its advantages, but also disadvantages. For example, the frequency varies, and so does the volume of speech. It is similar to dull and average phonation time which decreases. The sound of the speech of laryngectomies patients resembles

a male voice more, which is why, among other things, it is a factor that determines the loss of self-worth among women. The problem may be the identification of the interlocutor through the telephone conversation because it is more difficult to identify the interlocutor with gender. In men, the thyroid cartilage of the larynx, and more specifically its laryngeal elevation, changes. As a result of the laryngectomy performed, the so-called "Adam's apple" (laryngeal eminence) is removed, which significantly affects the loss of the external sign of masculinity. As a result, there may be a decrease in the level of self-esteem, and then it can result in social withdrawal and isolation [6]. Women cope better with the consequences of total laryngectomy than men. This happens when they are surrounded by the strong support of their family. A high tendency to the occurrence of problems related to the psyche is also associated with socio-demographic factors such as low income, lack of a permanent job, and unemployment.

Younger patients are more likely to develop mental health problems. Each patient should be provided with psychological care. Support of a psychologist, therapist, or psychiatric treatment of the patient may have a positive effect on the psyche of the laryngectomee person and the prognosis of the disease [15].

The concept of quality of life (QOL) is a common indicator of the psychosocial consequences of cancer. The quality of life of people with oncological diseases is assessed in several aspects, which relate to the physical, mental, social, and somatic spheres. For example, in the physical sphere, the activity and efficiency of functioning are assessed, in the mental sphere, attention is paid to the degree of adaptation to the disease and presumed mental disorders. In the social sphere, the willingness to maintain contacts and social ties is specified, and in the somatic sphere, it is determined what somatic ailments may appear in a sick person. It is also noted what impact they have on the patient's quality of life [16].

Nalbadian et al. Conducted a study on the quality of life after the evaluation of laryngectomy. 57% of the respondents confirmed communication problems with strangers, while only 29% with family relatives. 30% of patients showed shame in front of their voice, 32% of people were ashamed of their appearance, symptoms of depression in 42% of respondents. The lonely ones constituted 30% of all respondents, but 3 out of 4 light that their life so far has changed dramatically. More than half of the respondents experienced financial difficulties [17,18].

Laryngectomy clubs, which can dance much faster, meet those affected by the disease. Contact with people with similar experiences who understand the wear and tear of laryngectomy may prove to be an ideal form of psychotherapy. Participants of the camps and their fates accept themselves and recharge for various outings in the form of entertainment or culture.

The research on the demographic was begun also carried out by Watson et al. Modified by Juczyński in Poland. The classification was based on the Mental Adjustment to Cancer Scale developed by the above-mentioned authors [19].

This page examines the prerequisites of gender, marital status, education, and social child in terms of two different styles: passive and alert, which differentiate the style of dealing with cancer. Fight, mobilization, patience, stubbornness, and determination to enter the enterprise, characteristic of the patient's active attitude, when confusion, helplessness, anxiety, anxiety, fear,

fear and a hypochondriacal attitude towards the typical attitude of passive behavior, otherwise known as the destructive style [20,21].
In people of entities in pairs, people with children, women, and higher educated people, the prognosis was favorable for an active style of dealing with cancer. In childless people, along with men in these studied groups, the passive style of coping with the disease was more common. When it comes to fighting cancer, the destructive style prevails over the active style [22].

## CONCLUSIONS

A person needs contact with another person for support. Belonging to a social group is very important, through interpersonal relationships it gives a sense of security, the possibility of providing support, preferably when it is in a sense of security, providing opportunities for support. For people after laryngectomy, social life is vital to speech development. Patients initially fear out-of-the-box for the obvious reason of losing the ability to communicate the way they did before surgery. Friends may be willing to support and understand a sick person, but have difficulty getting used to the new situation. A good option for the patient, in addition to non-standard social and family ones, is the laryngectomy Returning to work or looking for a new one is stressful for the patient. Total laryngectomy complements, like all other diseases, an obstacle to good sexual relations between partners. Past illness and changes in the willingness of partners to have intercourse. This is a normal reaction in such a case, but the longer it is, the more depressed the partners feel [23].club. There you can listen to people who follow the path of titles and who can give advice on substitute learning if they are in a higher stage. Each neoplastic disease affects the patient's postoperative activities, but also his family. The patient needs approval, scientific research as therapeutic, but too frequent control and handling of matters for the sick person may create a worse dependence on sensitivity towards other people. Encourage the family to encourage discussion to communicate through esophageal words.
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Doctors and patient caregivers must treat the patient in a good way. Psychological therapy started after the diagnosis of laryngeal cancer, will be of great help to the patient. The laryngeal surgery has consequences, such as the necessity to use a tracheostomy tube. For strangers and even relatives of the sick person, this is the view. It causes difficulties in contacts, the patient may feel rejected. It is especially noticeable in men who, deprived of the "Adam's apple", experience decreasing self-esteem and therefore often isolate themselves from the environment. In patients, they may appear already during oncological treatment, in addition to the lowest levels, such as stress or anxiety, also e.g. heart palpitations, difficulty sleeping, and others. The latter are somatic complaints.
If the patient has a voice prosthesis implanted, the effects of producing speech can be seen very quickly. Unfortunately, in cases where patients do not have

dentures and learn the word esophagus, the work on restoring communication is longer and harder. Patient rehabilitation begins after the postoperative wound has healed [24]. In addition to meetings with a speech therapist, the purchase is to add psychological therapy, preferably from the moment you wait for the diagnosis. This helps the patient regain self-confidence, strengthen self-esteem, accept illness. Likewise, speech therapy has to force the patient before laryngectomy surgery. Provide the patient with basic information about what is waiting for surgery. Patients experience depression, which is more pessimistic if left untreated [25].

The knowledge about social problems after laryngectomy, as well as about those with a mental state, is still incomplete. There are topics that are always active. Therefore, by hiring one research search.

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