

ORIGINAL PAPER

STATISTICAL DATA ON HYGIENIC AND DIETETIC FACTORS THAT MODIFY THE EVOLUTION OF PHYSIOLOGICAL AGEING ON THE UPPER RESPIRATORY TRACT MUCOSAE

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SUMMARY

Smoking it's a world leading cause for cancer. Patients who smoke are not always willing to quit smoking even if the doctor confirms the benefits they would have in doing so. Tobacco is the most important risk factor for cancer and more than 50 diseases. More than 5,300 components, of which at least 70 are carcinogens, have been identified in tobacco smoke. Squamous cell carcinoma of the oral cavity, pharynx, and larynx are among the 10 most common types of cancer in men. Cancer of the oral cavity is considered a public health problem worldwide. Studies have shown that the risk of developing cancer of the oral cavity and larynx is much higher in smokers and drinkers.

Key words: smoking, cancer, larynx, oral cavity

RÉSUMÉ

Données statistiques sur les facteurs d'hygiène et de diète qui modifient l'évolution du vieillissement physiologique des muqueuses de l'appareil respiratoire supérieur

L'habitude de fumer est la cause principale du cancer à l'échelle mondiale. Les patients qui fument ne sont pas toujours prêts à cesser de fumer même si le médecin confirme les avantages qu'ils auraient à le faire. Le tabagisme est le principal facteur de risque important pour le cancer et plus de 50 maladies. Plus de 5300 composants, dont au moins 70 sont cancérigènes, ont été identifiés dans la fumée de tabac. Le carcinome épidermoïde de la cavité buccale, du pharynx et du larynx sont parmi les 10 types les plus communs de cancer chez les hommes. Le cancer de la cavité buccale est considérée comme un problème de santé publique dans le monde entier. Des études ont montré que le risque de développer un cancer de la cavité buccale et du larynx est beaucoup plus élevé chez les fumeurs et les buveurs.

Mots clés: tabagisme, le cancer, larynx, bouche

INTRODUCTION

The World Health Organization considers smoking to be the leading preventable cause of death worldwide and a chronic recurrent disease caused by nicotine dependence. Worldwide, laryngeal cancer ranks second among respiratory tract tumors, with 160,000 new cases per year. The major risk factors are smoking and alcoholism. Most smokers are unaware of the damage caused by chronic tobacco use, and nearly half will die of a tobacco-related disease [1, 3, 13].

Tobacco is the most important risk factor for cancer and more than 50 diseases. More than 5,300 components, of which at least 70 are carcinogens, have been identified

in tobacco smoke. Squamous cell carcinoma of the oral cavity, pharynx, and larynx are among the 10 most common types of cancer in men. Cancer of the oral cavity is considered a public health problem worldwide [12, 14, 15].

Studies have shown that the risk of developing cancer of the oral cavity and larynx is much higher in smokers and drinkers.

The risk depends on:

- the duration of smoking,
- the number of cigarettes smoked per day,
- and the frequency of alcohol intake [4, 6].

Continuing to smoke after a diagnosis of cancer contributes to:

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- a higher risk of complications during treatment,
- decreased responses to radiotherapy and chemotherapy,
- leading to worsening of other tobacco-related diseases [9, 11].

Maintaining tobacco use:

- increases the risk of recurrence,
- increases the risk of developing a second primary tumor,
- Leads to decreased quality of life and overall survival [5, 9].

The etiology of laryngeal cancer remains unclear. While the majority of laryngeal cancer patients have a long history of smoking and alcohol assumption, only a small percentage of such individuals eventually develop laryngeal cancer [6]. This suggests that an individual's genetic make-up plays an important role to their susceptibility to laryngeal cancer and supports the current notion that susceptibility to laryngeal cancer is associated with interactions between genes and the environment [1].

In spite of that smoking is the most important risk factor in head and neck cancer. According to a large case-control study, over 90% of laryngeal cancer cases in South-Eastern Europe could be prevented by avoiding smoking. Its role in the carcinogenic process, the mechanisms of DNA genetic changes, mutations in oncogenes and tumor suppressor genes have already been described in lung and head and neck cancer [2, 7, 15].

Free radicals and oxidative damage in tobacco-related carcinogenesis have also been investigated in inhalation studies of tobacco smoke in laboratory animals. Current studies show that about 1/3 of the adult population smokes worldwide. Some studies from western Europe show that 37% of children live in houses that adults smoke in. Passive smokers have a 25-30% higher risk to develop cardiovascular diseases and a 20-35% higher risk to develop lung cancer [3].

Considering that the vast majority of patients with head and neck cancer are heavy smokers and quitting smoking has tangible benefits in cancer treatment we decided to conduct a study on smoking and alcohol consumption habits in this population in order to provide data for interventions and approaches that are more effective for smoking cessation in cancer patients [8, 10].

MATERIAL AND METHOD

This was an observational study involving patients with squamous cell carcinoma of the oral cavity, pharynx, or larynx who were treated at the IFACF –ORL, Bucharest. We consecutively recruited 130 subjects who met the eligibility criteria and were treated between January 2013 and February of 2015. Data regarding cancer staging and treatment were collected from medical records.

Active smokers were defined as subjects who had smoked at least 100 cigarettes in their lifetime and who, at the time of the interview, continued to smoke daily or occasionally. Smoking history was quantified by pack-years of cigarettes smoked.

The analysis of smoking habits included questions regarding:

- current cigarette use
- age at smoking initiation
- type of tobacco used, amount of tobacco used
- duration of use.

Patients were asked questions regarding the number of smoking cessation attempts and the use of pharmacological treatment for smoking cessation. We assessed emotional factors:

- anxiety
 - sadness
 - happiness
- associated with the act of smoking, as well as
- behavioral factors
 - coffee consumption,
 - alcohol consumption,
 - having meals,
 - talking on the phone
 - the work environment

In addition, we obtained data regarding withdrawal symptoms after smoking cessation, contact with smokers, and number of relapses.

RESULTS

Larynx cancer patient's repartition (fig. 1).

Smokers/ alcohol users (fig. 2)

76 (58%) smoked more than 20 cigarettes/day

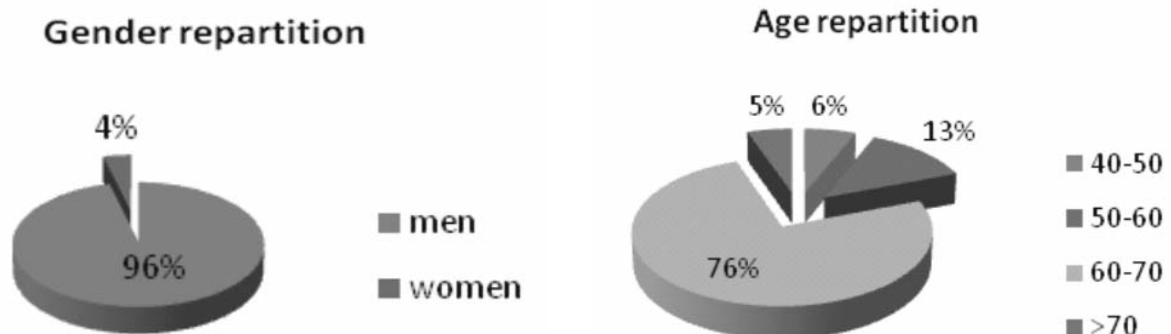


Figure 1

and 54 (42%) smoked less than 20 cigarettes/day
45% declare they smoke their first cigarette within 5 min of awakening.

In our study the mean duration of tobacco use was 40 years. Supraglottic cancer developed in about 70% of cases; 97% were primary partial laryngectomy.

The incidence of overall complications was 23%, airway complications representing the most common (8%), followed by swallowing (6%), local (5%) and pharyngocutaneous fistula complications (4%).

All patients would use commercial cigarettes. 125 patients reported contact with smokers at home or at work. 80 patients had never tried to quit smoking. Of the 120 patients who declare ceasing smoking, 115 did so after diagnosis or during treatment

CONCLUSIONS

- The prevalence of heavy smoking for long periods was high in our study.
- A diagnosis of cancer is a motivating factor for smoking cessation.
- Many patients continue to smoke even though they are aware that smoking is a risk factor for morbidity and a factor increasing morbidity during treatment.

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