SMOKING AND ALCOHOL CONSUMPTION – RISK FACTORS IN THE MALIGNANT PATHOLOGY OF ORAL CAVITY

Summary:
In the study performed we proposed to investigate some important risk factors (smoking and alcohol consumption) for malignant tumour pathology of the oral cavity, with patients hospitalized in the Maxillofacial Surgery Clinic Timisoara, during the period 2004-2005. As method we used the epidemiological longitudinal descriptive retrospective inquiry through a specific questionnaire, consisting in 9 items, applied to a sample-group of 25 patients of the Maxillofacial Surgery Clinic Timisoara, all diagnosed with oral cavity carcinoma, and investigation of the observation files of the same patients. The specific questionnaire consisted in items about debut, maximal quantity, consumption frequency, stress factors and the reasons for consumption. We used positive diagnosis, pathologic personal antecedents and disease history taken from observation files. The malignant tumours of the oral cavity occurred especially in men, the smoking debut occurred at 15-18 years, the number of smoked cigarettes was 11-20, the period of this behaviour occurring surpassed 20 years in 40% patients. The debut of the alcohol consumption took place between 19-24 years, the maximal quantity consumed was 6-10 portions per day, 60% patients’ preferred strong drinks, and the duration of consumption was 10-20 years. The pathologic personal antecedents of the investigated patients indicated the existence of cardiovascular diseases as associated with or caused by these risk behaviours. In conclusion, it is possible to trace a relation between alcohol consumption and smoking – malignant tumours of the oral cavity.

Keywords: smoking, alcohol consumption, malignant tumour pathology, oral cavity, maxillofacial surgery

Introduction

Smoking is an issue belonging to public health and it implies many shortcomings both for smokers themselves, and for other family members, considered as passive smokers. Its major impact on individual behaviour was determined both by industrialisation and by tobacco being sold under the form of cigarettes, which are relatively cheap. Tobacco is harmful for human body not only because of the nicotine in its composition, but also because of a wide range of pesticides used during its cultivation, which are then breathed in together with nicotine (1,2,4).

Alcohol consumption brings about higher incidence of juvenile delinquency, criminal offences, accidents produced under the influence of alcohol, work casualties, loss of creativity. Alcohol consumption can affect the gastric mucosa, the larynx, the liver (hepatic steatosis, hepatic cirrhosis), the pancreas (pancreatitis), the brain (hallucinations, stroke), the muscular system (loss of co-ordination), the sense organs, the heart (cardiopathy, modified blood pressure). The multiple effects of alcohol on health may short-term and long-term effects (5).

The etiology of oral carcinoma is complex, having many unknown points. At present, there is supposition about the existence of certain oncogenous factors, coming from the environment which determines immune transformations and genetic mutations capable of
producing cancer. Among the oncogenous factors responsible for producing oral cancer one can mention: tobacco and alcohol in high concentration, lack of oral hygiene, industrial polluting agents, viral factors, factors of external environment, immune factors, the genes, transformations of tumour suppressing genes, etc. (2,3).

**Purpose**

We intended to study in the present work and the existence or inexistence of a relation between two risk behaviours (smoking and alcohol consumption) and the malignant pathology of the oral cavity.

The objectives we set were: watching smoking as a stated present-day; investigating alcohol consumption; studying geographical distribution; establishing the location of malignant oral tumours, investigating personal history of patients hospitalised with oral cavity tumours in the Maxillofacial Surgery Clinic Timisoara, between 2004-2005.

**Material and method**

The study was performed on a sample-group made of 25 patients hospitalised in the Maxillofacial Surgery Clinic Timisoara, during October 2004 - April 2005. The method we used was epidemiological longitudinal descriptive retrospective inquiry, using a specific questionnaire with 9 items, and concurrent study of the observation files of these patients. The questionnaire administered contained items referring to the two risk behaviours (debut, maximal quantity, frequency of consumption, stress factors and reasons for consumption). We used positive diagnosis, pathologic personal antecedents and disease history taken from observation files.

**Results**

Most patients with oral cancer were male (84% men and 16% women). 72% of the patients were of ages between 45 and 60 years and only 28% were over 65. The debut age for smoking was 15-18 years, and for consumption of alcohol 9-24 years (figure 1).

40% of the patients have been smoking for more than 20 years, and the duration of alcohol consumption ranges between 11-20 years. (24%) (figure 2).

From the statements given by the patients to the doctor and written in the observation files we noticed...
that 48% of the patients smoke 21-40 cigarettes/per day and 32% smoke 11-20 cigarettes/day (figure 3).

52% of the patients declared to their family doctor that they used to drink alcohol daily. 63% of the patients took between 6 and 10 servings/day most of them preferring strong drinks (figure 4).

The geographic distribution varies, most patients coming from the Timis county, but patients from the counties of Caraș-Severin, Hunedoara, Arad, Bihor, Olt are present too (figure 5).

The most frequent locations of oral cancer are the lip and the oral plateau (36% for each location) (figure 6).

It resulted from the observation files that the patients had personal pathological antecedents of high blood pressure (48%) and heart diseases (20%) (figure 7).

As far as motivation for smoking and alcohol consumption is concerned, 72% of the patients indicate the company, 64% sorrow/grief, 44% of the patient’s indication both reasons.

Conclusions

The patients with diagnosis of tumour of the oral cavity are predominantly males aged 45-65 years.

According to the patients’ declarations, the debut for smoking was at 15-18 years; 48% smoke 21-40 cigarettes/day and 40% have smoked for more than 20 years.

The debut of alcohol consumption was at 19-24 years, the maximal quantity was 6-10 servings/day, 60% of the patients au preferred strong drinks, and the duration of consumption varies between 10-20 years.

Most patients with oral tumours come from the counties Timiş and Caraș-Severin.
The observation files revealed the fact that most patients presented in their personal pathologic antecedents high blood pressure and heart diseases. A significant number of patients deny having had any disease in their antecedents.

The patients with tumours of the oral cavity indicated as motivation for the presence of the two risk behaviours, the influence of their company and sorrow.

References: