

69 - SMOKING AND ALCOHOLISM: INFLUENCE ON ORAL CANCER

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1 INTRODUCTION

Nowadays, the Public Health has found significant changes in the population epidemiologic profile. It was infringed from infect-parasitic diseases to chronicle degenerative pathologies. In this enfermity list it is detached the neoplasia. Conforming some authors (INSTITUTO NACIONAL DE CÂNCER - INCA, 2008; GUERRA; GALLO, 2005), the same ones are thought as a serious health problem in Brazil and in the world. Among the various types of cancer, has deserved attention the head and neck ones. These ones compound a heterogeneous group of injuries caused by innumerable manifestation possibilities according to location site. This neoplasia is responsible for 4% of deaths related to neoplasia processes (PORFÍRIO; MARTINS; MUNHOZ, 2007). Among the most prevalent types, deserve special attention the oral cancer, once it has presented stressed increase, becoming a great challenge to national and foreign Public Health. After all, there was an increase of this neoplasia during XX century in the european continent, in North America (NEGRI et al., 1996; SWANGO, 1996; COZ et al., 1995) and some countries of Asia south, like India, the oral cancer is the commonest one in men and the third more common in women (WUNSCH FILHO; MANCAU, 2002). In Brazil, data reveal that the referred neoplasia in the 5th incidence place among the other cancer types in men and is the 7th among women, causing to estimate a total of 14.120 new cases by year (INCA, 2010).

The oral cancer injury aggressiveness is evidenced from a late diagnosis, contributing to an unfavorable prognosis. This way, it has one of the lowest survival rates in five years among the main kinds of cancer, including skin, breast, prostate and cervix (PITIPHAT et al., 2002). The risk factors knowledge constitutes the basis for the disease effective prevention (LEITE, 2010; MAUÍCIO; MATOS; GUIMARÃES, 2009; PARADA et al., 2008). As main risk factors, the literature reports the smoking and alcoholic habit (INCA, 2008; 2002). It is estimated that, from the oral cancer diagnosed individuals, 95% are smokers and 76% smoke and consume alcoholic drinks regularly (INCA, 2002). However, it is invigorated that such risk factors are subject to preventive actions, owing to adopt, mainly, healthy life habits.

The prevention is possible through measures that result in risk factors exposition decrease diminishing, then, oral cancer incidence in Brazil. In this context, are detached bundled actions that aim to: smoking control, alcohol use control, solar exposition control, especially among workers; the oral hygiene stimulus; and the adequate follow-up of dental prothesis (INCA, 2002).

The conceptions presented before reflect some studies imminence which give permission to list and treat the oral neoplasia development risk factors, after all, to point out these elements can make possible preventive measures development, as well as the early diagnosis and detection of its, propitiating a better diagnosis to the population that is injured or in risk. Therefore, the present study aimed to discuss the smoking and alcoholism correlation with oral cancer.

2 METHODS

The research was configured as exploratory, descriptive and of bibliographic kind. So, in the beginning, it was aimed a theme approximation (exploratory study), after that was done a correlation between the facts (oral cancer) and phenomenon (risk factor), then being delineated (descriptive study).

The research area were the study was achieved involved the bibliographic material referring to the oral neoplasia and its link with smoking and alcohol use. In general, this investigation corresponded to a literature revision, based in bibliographic benchmark, which greater sources were books, handbooks, periodic and others.

The data base used was SCIELO and used as descriptors: oral cancer, smoking, alcoholism; risk factors and oral cancer, implicating in 215 articles. After this tabulation the material analysis occurred through four stages: 1) exploratory reading to get all theme bibliographic knowledge; 2) selective reading turning possible the sensible investigation of the object material selection, resulting in 37 articles/texts that presented the smoking, alcoholism and oral cancer correlation, being dated from the year of 1995 to 2010; 3) analytic reading that served to collected information appreciation and evaluation, detaching the essential aspects over the theme and, finally, 4) interpretative reading, which conferred greater sense to the results obtained in previous stage.

It is necessary to detach that the bibliographic references were registered through the medical history organization that served to consideration and comments notes exposed by each author, aiming to relate them with each other. It is also detached that, as a revision study it wasn't necessary the Research Ethics Committee submission.

3 RESULTS

The oral cancer is understood as any neoplasm that is present in the oral cavity (SOARES, 2005), either, is conceived as a chronicle disease which results in high morbidity and mortality, and could be enhanced by the exposition to various risk factors.

Concerning to oral cancer carcinogenic factors, national studies (PINHEIRO; CARDOSO; PRADO, 2010; FERNANDES; BRANDÃO; PRADO; PASSARELLI, 2009; INCA, 2008; LIMA, 2008; CARRAD et al., 2008; SILVESTRE; JERONYMO, 2007) and foreign ones (THOMAS et al., 2003; SWANGO, 1996) detach as main risk factors the smoking and alcoholism, respectively. It is said, this way, that the individuals that use drugs present high carcinogenic injuries prevalence when compared to general population (FERNANDES; BRANDÃO; LIMA, 2008). So, the smoking and alcoholism, in association, raise up the probability of malign neoplasia occurrence, however risk factors might also be considered (PRADO; PASSARELLI, 2009; SILVESTRE; JERONYMO, 2007).

Tobacco use can increase the risk from 10 to 20 times in smokers when compared to no smokers. It is one of the strongest known carcinogenic agents. Its inhaling (snuff) is one of the fundamental risk factors to oral cancer development, being

the association confirmed by epidemiological studies all over the world (INCA, 2002).

It is added that oral cavity cancer mortality rate is similar in any tobacco use way, existing a strong relation between the quantity used a day and the exposition period duration, decreasing the risk with the smoking cessation (INCA, 2002). However, the tobacco participation in the oral carcinogenesis is mutable depending on tobacco type (smoked, chewed, added or not to sweetener and flavoring substances), habit related time, age of beginning and association or not with alcoholism (BRENER et al., 2007).

The tobacco as a risk factor for oral cancer comes from the fact that the mouth is in direct contact with it and the byproducts liberated in this contact are about 5 thousand of chemical elements and from these, 43 are carcinogenic ones, turning to oral mucosa drying, provoking an increase of keratin layer, that promotes other carcinogenic action, increasing the probability of developing oral cancer. Beyond the tobacco proximity, there is a thermic-mechanical traumatism between the kind of tobacco and some anatomical mouth regions. The industrialized cigarettes, cigars, pipes, straw cigar, and chewed smoke reach chronically anatomical regions like lips, mainly the lower one, labial commissure, tongue edge and back, tongue and zygomatic mucosa, and oral floor, making the epithelial cells to divide and differentiate themselves (PRADO; PASSARELLI, 2009).

Therefore, the alcohol has got direct correlation with oral cancer (CARRAD et al., 2008; SILVESTRE; JERONYMO, 2007; THOMAS et al., 2003). To each excessive ingestion is accredited 2 to 4% of cancer deaths and, more specifically, about 50 to 70% of all deaths caused by tongue, oral cavity, pharynges and esophagus cancer (INCA, 2002). It is also believed that that the alcoholic drink ingestion (six doses or more) increases in 5 to 10 times the oral cancer appearance chances. And, even those subjects that consume alcoholic drinks in more moderate way (three doses a day), have also the oral cancer risk increased (INCA, 2008).

The mechanisms through which the alcoholic drinks can cause cancer still aren't well clear. The injury provoked by the alcohol ingestion in the oral mucosa can be a result of its direct action, blood flow presence or other systems acting (CARRAD et al., 2008; INCA, 2002).

Its carcinogenic action is accredited fundamentally to one of its metabolites, the acetaldehyde, that has got the capacity to cause cellular deoxyribonucleic acid mutations when in contact. On the other hand, individual attributes that condition a greater velocity of ethanol mutation in acetaldehyde in the organism can, partly, expose the reason through which some persons develop cancer instead of others, as a result of extended and excessive alcohol exposition (INCA, 2002). In a chronicle contact with the mucosa, the alcohol acts as a solvent, exposing the mucosa to countless carcinogenic factors, decreasing the organism defense reaction velocity and provoking cellular damage (PRADO; PASSARELLI, 2009).

The literature still reports that the data are still worse if there was an association between alcohol and tobacco (SILVESTRE; JERONYMO, 2007; INCA, 2002), elevating for 35 times this neoplasia development chances. Therefore, the alcohol intensifies the tobacco effects (BRENER et al., 2007). The association of smoking with alcoholism is very shocking in oropharyngis and mouth cancer (values varying from 77.1% to 83.9%). And depending on the intensity, quantity, quality and addiction of smoking and alcoholism duration, greater is the risk (PEREZ et al., 2007). In this sense, as greater is the drinks doses number and the cigarettes quantity consumed greater is the possibility of oral cancer (PRADO; PASSARELLI, 2009).

4 CONCLUSION

It could be verified that had been increasing the neoplasias population emergence estimates, among them, the oral cancer, and a world reality. It is known that, for the neoplasia development, there are various associated risk factors detaching, essentially, the smoking and alcoholism habit, especially if there is interrelation between them, even so, the alcohol consumption and smoking practice is each time greater in the country.

Although critic factors are subject to prevention and their cessation reduces the probabilities of development of neoplasias in the oral cavity. Therefore, to develop health public policies that aim to control and prevent these habits may be considered important, once the oral cancer is a public health problem, deserving this way, a greter attention of governors and health professionals, especially the dentist, that has the possibility to achieve education in health, with the fomentation to programmer that aim the knowledge and control of the factors considered of risk, specially, the smoking an alcoholic drinks consumption. Even more, such professionals can do the neoplasia early diagnosis trough the detection of asymptomatic injuries in routine odontological exams, propitiating better prognosis and improvement in the injured population life quality.

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SMOKING AND ALCOHOLISM: INFLUENCE ON ORAL CANCER ABSTRACT

Objective: discuss the correlation between smoking and alcoholism with oral cancer. **Methods:** The research was configured as exploratory, descriptive and bibliographic. In general, the investigation corresponded to a literature review, based on a bibliographic benchmark, which greater information sources were books, handbooks, periodicals and others. It was used as descriptors in SCIELO data base: oral cancer smoking, alcoholism, risk factors and oral cancer, implicating in 215 articles. After this tabulation, a material analysis was done, resulting in 37 articles that presented the smoking, alcoholism and oral cancer correlation, being dated from the year of 1995 to 2010. **Results:** the data collect showed strong correlation between smoking, alcoholism and oral cavity neoplasia, especially when there is an association of both factors. **Conclusion:** the picture reflects, then, the clinical studies imminence, as well as preventive measures adoption like health education actions and neoplasia early diagnosis, propitiating better prognosis and life quality in the injure population.

DESCRIPTORS: Oral Cancer. Smoking. Alcoholism.

TABAGISME ET ALCOOLISME: SON INFLUENCE SUR LE CANCER BUCCAL RESUMÉ

Objectif: discuter la corrélation du tabagisme et de l'alcoolisme avec le cancer buccal. **Méthodologie:** La recherche a été configurée comme exploratoire, descriptive et bibliographique. L'étude a fait une révision de la littérature de base bibliographique dont le plus grand nombre d'information a été les livres, les manuels, périodiques d'entre autres. On a utilisé comme descripteurs dans la base de données du SCIELO: cancer buccal; tabagisme; éthilisme; facteurs de risque et cancer buccal, en comprenant 215 articles. Après recatologuement, on a fait l'analyse du matériel, en résultant 37 articles qui ont montré la corrélation tabagisme, alcoolisme et cancer buccal, entre les années 1995 et 2010. **Résultat:** la collecte des données a révélé une haute corrélation entre tabagisme, alcoolisme et néoplasie de la cavité orale, spécialement quand on a l'association de tout les deux facteurs. **Conclusion:** le cadre reflète, donc, l'imminence des études cliniques, aussi bien que l'adoption de mesures préventives comme les actions d'éducation en santé, bien que le diagnostic précoce de la néoplasie, en favorisant de meilleurs pronostics et l'amélioration dans la qualité de vie de la population touchée.

MOTS-CLÉS: Cancer Buccal. Tabagisme. Alcoolisme.

TABAQUISMO Y EL ALCOHOLISMO: INFLUENCIA SOBRE EL CÁNCER ORAL RESUMEN

Objetivo: analizar la correlación entre fumar y el alcoholismo con el cáncer oral. **Métodos:** la investigación se configura como exploratorio, descriptivo y bibliográfico. En general, la investigación correspondió a una revisión de la literatura, sobre la base de referencias bibliográficas, cuya principal fuente de información fueron los libros, manuales, revistas y otros. Se utilizaron como descriptores en la base de datos SCIELO: cáncer oral, tabaquismo, consumo de alcohol, factores de riesgo y el cáncer oral, lo que resulta en 215 artículos. Después de este anuncio, el análisis se hace del material, dando como resultado 37 artículos mostraron que el cáncer de la correlación de fumar, el alcohol y oral, que data del año 1995 y 2010. **Resultados:** la recogida de datos mostraron una correlación muy fuerte entre el tabaco, el alcohol y el cáncer de la cavidad oral, especialmente cuando hay una combinación de ambos factores. **Conclusión:** el marco refleja, pues, la inminencia de los estudios clínicos, así como la adopción de medidas preventivas, como las acciones de educación para la salud y el diagnóstico precoz del cáncer, proporcionando mejores resultados y una mejor calidad de vida de la población afectada.

PALVRAS CLAVE: Cáncer Oral. Fumadores. Alcoolismo.

TABAGISMO E ALCOOLISMO: INFLUÊNCIA SOBRE O CÂNCER BUCCAL RESUMO

Objetivo: discutir a correlação do tabagismo e alcoolismo com o câncer bucal. **Métodos:** a pesquisa configurou-se como exploratória, descritiva e bibliográfica. De modo geral, a investigação correspondeu a uma revisão da literatura, baseando-se em referencial bibliográfico, cujas maiores fontes de informação foram livros, manuais, periódicos e outros. Foram usados como descritores na base de dados do SCIELO: câncer bucal; tabagismo; etilismo; fatores de risco e câncer bucal, implicando em 215 artigos. Após esta catalogação, foi feita a análise do material, resultando em 37 artigos que apresentaram a correlação tabagismo, alcoolismo e câncer bucal, sendo datados do ano 1995 a 2010. **Resultados:** a coleta de dados evidenciou fortíssima correlação entre tabagismo, alcoolismo e neoplasia da cavidade oral, especialmente quando há a associação de ambos os fatores. **Conclusão:** o quadro reflete, então, a iminência de estudos clínicos, bem como da adoção de medidas preventivas como as ações de educação em saúde, bem como do diagnóstico precoce da neoplasia, propiciando melhores prognósticos e melhoria na qualidade de vida da população acometida.

PALAVRAS-CHAVE: Câncer Bucal. Tabagismo. Alcoolismo.