

## THE ANALYSIS OF ALIMENTATION AND THE ALIMENTARY BEHAVIOR OF THE PATIENTS WITH INCREASED INCIDENCE OF DENTAL CALCULUS

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### Abstract

*In the present paper we analyzed the type of alimentation and the alimentary behavior of the patients with increased incidence of dental calculus with the purpose of underlying the factors involved in the etiology of this affection, the ensemble of measures that assure the maintaining in the normal limits of the salivary pH together with the evaluation of the unfit diet. The type of alimentation and the alimentary behavior are factors that influence the dental calculus, more important being the infusion of vitamin A from the diet and the level of Fluor from the drinking water and food, mainly cereal products, fish, tea and mineral waters (Banu C., et al., 2009). Together with these factors, also the systemic factors have an influence on the dentition, as would be those that influence the calcification, factors that act on the mechanism of absorption and retaining of Calcium, together with the alimentary infusion of Calcium and vitamin D (Banu C., et al., 2009).*

**Key words:** *alimentary behavior, dentition, etiologic factors, dental calculus, mechanism of absorption of alimentary Calcium*

### INTRODUCTION

The analysis of the alimentation and the alimentary behavior of the patients with increased incidence of dental calculus presents a significant importance because the treatments of the dental affections are expensive, representing at this hour approximately 10- 15% of the total of expenses for health, and the services for prevention are less expensive compared to the treatment. Beside these benefits regarding the financial element of the patient with increased incidence of dental calculus, the analysis of the alimentation and the alimentary behavior of these patients brings benefits to the health of the entire body, being obtained a balance in the metabolism by its two facets, anabolism and catabolism.

### MATERIAL AND METHOD

The methods regarding the analysis of the alimentation and the alimentary behavior of the patients with increased incidence of dental calculus were represented by the alimentary inquiries accomplished for a period of 10 days per month for six months and by the analysis of the salivary pH using testing bands, that measure the level of pH from 1-14, with a high precision and easily to be accomplished on the level of the

dentistry medical practice. In order to test the salivary pH and to obtain the clinching results won't be consumed any kind of food at least 2 hours before the performance of the test. The saliva harvested in a recipient will be tested by introducing the testing band in the saliva for approximately 15 seconds after that is compared the resulted color with the testing scale reading the value of the resulting pH. The value of the salivary pH of 7,0 is ideal, the body is in a acid-alkaline balance, with a pH of 6,5 the body is easily acid being recommended an alkaline diet and with a pH of 6 is imposed the correcting of the alimentation.

By the analysis of the alimentation is determined also the disorders regarding the mechanism of absorption and retaining of the alimentary Calcium, which correlated with the decrease or in the case of this study with the increase of the salivary pH to alkaline values determines the precipitation of the Calcium salts and their deposits, with the appearance of the dental calculus.

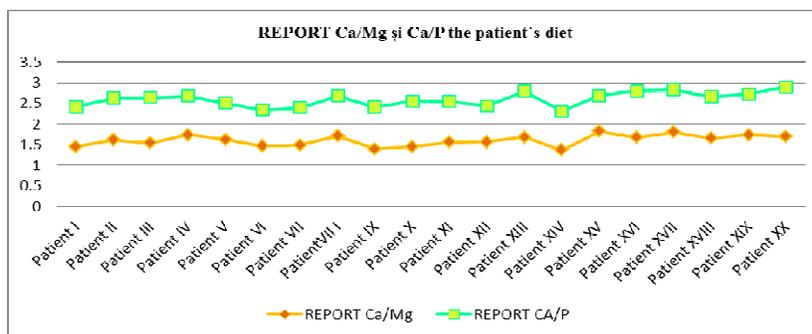
This study, by the applied methods, has as purpose the evaluation of the dental status, main indicator in the prophylaxis of the dental affections from the European countries.

## **RESULTS AND DISSCUSIONS**

The results of the study regarding the analysis of the alimentation and the alimentary behavior of the patients with increased incidence of dental calculus by applying the methods above mentioned lead to the underlying of the factors involved in the etiology of the dental calculus.

The study of the factors incriminated in the appearance of the dental calculus presents a great importance because it can get to a periodontal disease called periodontitis that separates the gum of the tooth root leading to the falling of the teeth and to the increasing of the number of edentulous patients (with false teeth) with an impact on the capacity of feeding, nutrition and general health.

Following the study regarding the content of diet in Ca, Mg and P and of the report between these elements in a group of 20 patients registered on the lists of the dentistry individual medical practice was observed in average that the report Ca/Mg was not satisfied in any of the days from the analysis

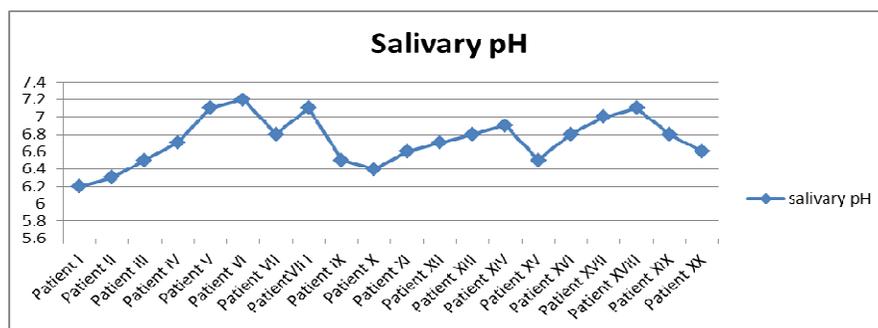


The report Ca/P (figure 1) was in average between 0,87 and 1,21, values that correspond to the effective recommendations. This report is favorable to the absorption of Calcium, stimulating the coefficient of digestive utilization of the Calcium from the food that is included in the evaluated diet.

After the digestive utilization of the Ca from the aliments, this arrives in the plasma from where by the active secretion on the level of the expansion it arrives in the saliva where if it meets an alkaline medium it can precipitate forming the dental calculus. The capacity of the saliva to maintain an acid basic balance is a prophylactic factor in the formation of the bacterial plaque, of the dental calculus and even of the decays.

Following the interpretation of the results obtained by applying the questionnaires of alimentary frequency and of the diet history it resulted that the alimentary profile of the investigated patients was an acid-basic one which explains the important of the research of the alimentary causes in the dentistry affections.

The salivary pH registered at all patients investigated values between 6,3 – 7,2 which explains once more the acid-basic alimentary profile (figure 2).



## CONCLUSIONS

The health of the dentition beside the primordial importance on the general health of the population presents an importance also from the point of view of aesthetics as factor of influence on the integration of the patients in the society.

The alimentary inquiries furnish data regarding the diet history, the alimentary frequency, the alimentary habits and data regarding the structure and the combination of food based on which it can be elaborated the alimentary profile of the patient which correlated with the incidence of the formation of dental calculus contributes to the instauration of the prophylaxis of this affection with impact on the quality of life even since childhood.

The conclusions of these researches, converge to the sustaining of the importance of a balanced acid-alkaline alimentation of the person because the consumption of proteins and carbohydrates at the same meal, hardens the digestion and the digestive utilization of the nutrients and the consumption of sweet acidulous drinks extracts the Calcium from the bones and teeth for the maintaining of the pH in the normal limits.

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