

THESIS TITLE:
"CLINICAL AND PARACLINICAL RESEARCH ON THE ROLE OF SALIVA FLUID
DURING COMPLETE EDENTULOUS TREATMENT"

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**ABSTRACT OF THESIS WITH THE TITLE
"CLINICAL AND PARACLINICAL RESEARCH ON THE ROLE OF SALIVA FLUID
DURING COMPLETE EDENTULOUS TREATMENT"**

INTRODUCTION:

Saliva - the first fluid digestive tract - is essential for proper functioning of the body. Variations in salivary flow (reversible or irreversible), changes in viscosity and pH can be determined by numerous physiological and pathological factors. Decreased salivary flow causes oral discomfort clinically manifested by increased incidence of decays, functional disorders, susceptibility to oral candidosis, altered taste sensation, negative implications for prosthetic treatment (partial dentures or full dentures). Prosthetic difficulty to elderly patients is due to the general status of these patients (general diseases, metabolic, psychological, etc.), and especially to local changes senescence unintended thanks, among them being and xerostomia. Found appropriate untreated leads to a less favorable prognosis regarding the adaptability of patients studied, to the new prosthetic treatment. Patients should be aware of potential chronic condition and be guided to make changes in their life style in order to minimize the hiposalivation effects in the oral cavity and the entire body.

The thesis is divided into seven chapters. The first three chapters contain a review of literature related to the chosen field: the importance of salivary fluid of the entire body, fundamental aspects of salivary gland morphology and importance of saliva in dental prosthetics. The last four chapters are the personal contribution through research both clinical and paraclinical on some of the qualities of saliva with theoretical and practical importance in prosthetic dentistry.

OBJECTIVE:

This research proposes a systematic insight into the analysis of three indicators represented saliva flow, pH and viscosity, relative to obtaining a diagnosis and developing a treatment plan correctly and completely for complete edentulous patients for a total term functional rehabilitation.

THE MOTIVATION FOR CHOOSING TOPICS:

Is the importance of clinical and paraclinical salivary secretion examination in the complete edentulous patient treatment. Practitioners tend rather to give little importance or even completely neglecting the role of saliva in prosthetic rehabilitation prognosis of these patients. This, not infrequently, is reflected by a failure of treatment, the patient being unable to adapt to the new clinical situations.

MATERIAL AND METHOD:

The survey was conducted compared, using two groups of patients: a control group consisting of 40 patients aged between 50 and 79 years not wearers of mobile dentures, and a control group consisting of 40 patients aged between 60 and 87 years, total edentulous patients, wearers of acrylic dentures, dentures with seniority between 4 and 15 years.

For the analysis of saliva were used as methods of detection anamnestic questionnaire survey of all direct and indirect factors which affects the salivary flow and a package of three clinical trials evaluating it. pH study was done using two methods of quantification compared by using digital pH meter and salivary bands. Viscosity determination was made using Brookfield viscometer with spindle cone-plate as one of modern methods and precise evaluation of this saliva indicator.

RESULTS AND DISCUSSION:

Average salivary flow rate in the test group had studied fall into the category of salivary flow or medium to least 0.2-0.4ml/min. These values are correlated with the literature given patient age, medication and features associated with female persons. Personal study revealed no significant differences between people belonging to both sexes, age groups 60-89 years, groups analyzed in most studies. The difference between the mean salivary flow in the group of males from the females is only 0.01ml/min, significantly lower than the literature data. This may be due turn, prevents total edentulous male patient population is most affected in terms of systemic diseases than women. In the literature we found differences in salivary flow rate between the sexes in the same age group 0.1-2ml/min.

Regarding xerostomia in personal study we found that the test group of 40 edentulous patients only a total of 4 subjects had values below 0.1ml/min of unstimulated salivary flow, 3 female and 1 male patients aged 80 years, had combined problems with extensive maintenance medication and compensation conditions present and with an old edentulous state. This is confirmed by other studies in subjects with severe plurifactorial conditions at the same age, who had the same local clinical features.

Most studies show that salivary pH decrease occurs in patients with diabetes mellitus. In the personally group, both subjects as control and test, the mean pH values of diabetes patients are considered physiological.

In studies on salivary pH changes in patients with gastro-duodenal, given into the mechanisms regulating action of saliva, buffer systems intervention and antacid medication, the authors concluded that the pH does not change major only indicate that change is finding increased salivary flow in all cases. In the study group we can not achieve a significant correlation due to the small number of patients suffering from this type of disease, age different pH values on the one part acid, on the other hand base, so it is irrelevant average falling within physiological values considered.

Salivary pH decrease is correlated in some studies at female patients aged over 55 years with the development of osteopenia and osteoporosis. In the group studied pH values in patients with clinically diagnosed osteoporosis remain at the lower limit of normal threshold.

Medication related to cardiovascular disease, neurological disorders, mental changes etc. induce changes in saliva by increasing bicarbonate concentrations in saliva with direct implications in pH that become alkaline. The study group confirmed these studies, patients who suffer from these types of conditions both the control group and the test group had a mean alkaline pH.

Salivary pH studies in patients treated with complete conventional dentures and those in whom treatment was the overdenture on implants have revealed significant changes in the index both before and after treatment and differences between the two types of dentures.

Overdenture on implants approaches in terms of mean values measured index value of personal study in control group.

The significance of salivary viscosity was subject to a number of studies. Studies have concluded that salivary viscosity is directly influenced by the pH values. Salivary viscosity helps maintain dentures. Maintaining, stability of complete dentures are dependent on dynamic factors developed from salivary film depends directly on salivary viscosity and film thickness. It was also suggested that salivary substitutes property to form salivary film is an important feature to consider in clinical exploration artificial saliva. In all comparative studies related to the viscosity of saliva in edentulous and not edentulous patients results showed a significant difference, showing an average salivary edentulous group more than patients in control group. Study findings were that the salivary viscosity is very low in complete edentulous patients than in other patients implying a major disadvantage in terms of prosthetic maintenance. In the personal group mean of complete edentulous patients viscosity

is 1.67 compared to control group 1.24, so a higher viscosity than those patients not wearers of complete dentures.

CONCLUSIONS:

Any type of prosthesis - especially mobile prosthesis through oral ecosystem change - contributing to changing conditions in the saliva fulfills many biological functions. In addition, it participates in maintaining and stabilizing removable dentures, both the adhesion and the phenomenon of "salivary retention".

The most important conclusion is related to the future success of complete dentures and prosthetic treatment can not be accomplished through saliva diagnostics, diagnostic quantitative and qualitative conjunction with subject age, gender and current medication or sporadic, as that one has.

Female gender is most affected in terms of indices studied not only due to the associated morphological or salivary glands smaller than male subjects, but also because of physiological involution a characteristic for elderly patients. Above all postmenopausal updates with alterations in terms of phospho-calcium metabolism with direct implications on the three indices studied and especially pH. The observations and the results of this study I suggest before prosthetic treatment with acrylic dentures an evaluation of saliva. Anamnestic questionnaire for assessing the importance of saliva is that we provide the first information on changes in salivary flow and provides insufficient data to assess, at least, if no further clinical or laboratory investigations of local or general.

Results of clinical trials relate to each other and also with different components of anamnestic questionnaire as well as the general conditions of the patients.

Salivary pH variation depends on age, sex, duration of edentulous state, but given the impossibility of correlations between indicators in the control group studied, we can conclude that there are large individual variations depend on other factors such as diet, fluid intake, medication, daily or occasional, and not least the types of existing prosthetic treatment can induce changes in the quality and quantity of saliva.

Given the reach of possibility paraclinical evaluation of salivary viscosity modern methods, we can determine, selecting patients performed acrylic prosthesis prosthetic treatment, as the real value of salivary viscosity. This testing shows that the viscosity is altered both in patients in the control group and the test group. These changes in salivary viscosity are due to general disease patients and medication for both the control group and the test group. At denture wearers an increase in salivary viscosity including those that apparently shows no general disease, these changes may be due to acrylic denture wearing, especially total jaw that changes the temperature and pressure inside the space between the denture and surface support.

The final conclusion of the study is that the maintenance and stability of the complete dentures in conjunction with all determinants and secondary factors during treatment are directly proportional to the three indices studied: salivary flow, salivary pH, salivary viscosity. Quantitative and qualitative evaluation of salivary fluid form determinant factor in oral rehabilitation of edentulous patients with complete acrylic dentures.

KEYWORDS: salivary flow, salivary pH, salivary viscosity, complete edentulous patients