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The Elderly, Carriers of Dementia Syndromes and Dental Care

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ABSTRACT

The demographic and epidemiological transition resulting from declining birth rates, increased economically active population, decreased infectious diseases and increased chronic degenerative diseases produce a population scenario with a high number of elderly individuals, prone to developing dementia, whose prevalence is directly related to increasing age. Dementia is progressive and characterized by the loss of self-care ability and ability to perform activities of daily living, including the difficulty to perform oral hygiene and accept dental treatment, thus resulting in decreased oral health. Thus, it is necessary to know and think about oral care to increase the quality of life of this population through actions of health promotion, prevention and recovery with the accomplishment of home and hospital dental procedures, besides the traditional service, at a dental office.

Keywords: Aging, Dementia, Oral health.

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INTRODUCTION

Living up to more advanced ages, the so-called aging, is becoming a global trend. According to Canineu (2003) [1] and Rauth and Rodrigues (2006)[2], this trend is mainly explained by the improvement in medical assistance of the population and the decline in mortality rates.

These changes are quite representative and have profound implications. For better understanding, we have as an example that a child born in Brazil or in Myanmar in 2015 can expect to live 20 years longer than a child born 50 years ago. In the Islamic Republic of Iran, only 1 in every 10 people of the population are more than 60 years in 2015. In just 35 years, this rate will have increased by around 1 in every 3. And the pace of population aging is much faster than in the past (WHO,2015).

According to the World Health Organization (WHO), an elderly individual is the one that reaches the age group of 65 years in developed countries and 60 years in developing countries, where the life expectancy is lower. In 2050, we expect to have two billion people aged over 60 years (WHO, 2015).

In Brazil, from the 1940's to 2000, the population aged over 60 years doubled and the life expectancy rose to 72.6 years for women and 64.8 years for men. The world population is aging, mainly in developing countries like Brazil. The age range of 60 years or more has the fastest growing in proportional terms. Projections of the WHO (2015) show that the elderly in Brazil in the period from 1950 to 2025 may increase almost 15 times.

According to data from the Ministry of Health, Brazil, in 2016, had the fifth largest elderly population of the world, and, in 2030, this number will exceed the total number of children between zero and 14 years. This increased life expectancy contributes to the appearance of typical diseases of old age, including issues related to the oral cavity, bringing with it the need for improvement in dental care to these patients (SALES; FERREIRA NETO, CATÃO, 2017)[3].

To most of authors the quality of life of the elderly is directly related to physiological, pathological, psychosocial, sociocultural, economic and environmental aspects, influencing their health, relating to its functional weakening, morbidity and disability. Therefore, Santos et al (2007)[4] state that aging is an inexorable characteristic of humanity; however, a good aging is the daily goal to be promoted by health professionals in different fields, regardless of gender, age, race or social position.

The dentistry is important to increase the quality of life through actions of promotion, prevention and recovery of diseases, since most elderly people have diabetes, hypertension, Alzheimer's disease and other dementias, which interfere directly in the oral cavity. The domiciliary dental procedures reduce the number of aspiration infections, improve self-esteem and contribute to self-care (MIRANDA; RODRIGUES and FRANCO, 2018)[5].

According to Vaccarezza, Fuga and Ferreira (2010)[6], the Dental Surgeon is responsible for identifying and analyzing specific issues of oral health conditions of the geriatric patient, and how they can achieve the systemic condition, aiming to perform preventive actions able to reach as much as possible his/her audience, through educational lectures, guidelines for oral hygiene, and the need for the participation of family members and/or caregivers in the process of health care for the elderly.

Thus, Albeny and Santos (2018)[7] and Miranda, Rodrigues and Franco (2018) reported that the Dental Surgeon should worry about the well-being of the patient as a whole, and in the case of an elderly person, the professional should seek qualifications about the specific care required by this age group, with an exchange of information between the dentist and other professional areas, dedicated to the homecare, which are fundamental for a better preventive and interventionist treatment, also including medications and systemic aspects.

The demographic and epidemiological transition resulting from declining birth rates, increased

economically active population, decreased infectious diseases and increased chronic degenerative diseases produce a population scenario with a high number of elderly individuals.

In this way, the population aging creates demands in the health area, such as need for professional training, in order to meet adequately the needs of the elderly. In the face of various diseases common to the third age, the dementia conditions assume great importance, as their prevalence increases directly proportional to age (BURLÁ et al, 2013)[8].

According to Varjão (2006)[9], and Fiske et al (2006)[10], dementia is an irreversible and progressive condition that triggers, among other factors, the loss of self-care ability and ability to perform activities of daily living, including the difficulty to perform oral hygiene and accept dental treatment, thus resulting in decreased oral health.

Concerning this question, it is necessary to know and think about the impact of dementia syndromes on oral health and dental treatment, repercussions on living and health conditions.

Dementia Syndrome

According to the American Psychiatric Association (2013)[11], dementia is a progressive and irreversible condition, characterized by the decline or loss of one or more areas of cognitive domain, such as learning and memory, language, executive function, capacity for judgment, attention, in addition to motor and social disorders, currently being one of the problems related to mental health with the fastest growing, whose prevalence increases exponentially with age, reaching 20% over 80 years of age (SPEZZIA, 2015)[12].

In general, the epidemiological profile of the disease points to its greater occurrence in elderly patients, and its incidence, according to Freitas, Cançado and Gorzoni (2003)[13], increases steadily until 85 or 90 years of age, and then continues to increase, but less rapidly. It is similar in men and women or slightly higher in women. The annual rates specific to the age ranged from 0.1% at 60-64 years of age to 8.6% at 95 years.

Thus, due to its high incidence rate in an increasingly numerous population, it is of utmost importance that all health professionals are trained to diagnose and monitor the evolution of the clinical status of these patients. In the diagnosis and monitoring, there is the understanding that, in the International Classification of Diseases (ICD-10), dementia is classified as a syndrome resulting from a usually chronic or progressive brain disease, in which there is disturbance of multiple higher cortical functions, and, among the types of dementia, Alzheimer's disease is the most prevalent among the elderly (KOCAELLI et al, 2002; FRIEDLANDER et al, 2006)[14] [15].

Some of the risk factors are associated with the prevalence and incidence of dementia syndromes, including socio-demographic risk factor. This factor seeks to explain that, while the prevalence of dementia syndromes is consistently higher among women, the incidence is not; thus, the higher prevalence may be largely attributed to greater life expectancy of women. Lower educational levels were associated with a higher prevalence. In the USA, the prevalence was reported as high in Afro-American and Latin populations; some authors attributed these findings to the lower schooling and greater cardiovascular morbidity in these populations (PRÍNCIPE et al, 2013)[16]

Following the line of analysis that brings the level of schooling as a factor of influence in the incidence of dementia syndrome, we can infer that, in places where the educational opportunities are universal, higher education may reflect as innate reserve in the occurrence of cases; the process of education can also promote the development of reserves through mechanisms such as increased dendritic branching at the Central Nervous System (CNS) level. Education can also reflect the general socioeconomic status, also representing the quality of environmental factors such as nutrition

or health care. Regardless of the mechanism, higher education is associated with a lower incidence of dementia (MENG, D'ARCY, 2012)[17].

Concerning the quality and style of life, population-based studies indicate that, as factors of influence on the occurrence or reduction of the incidence of dementia syndrome, we have that mild to moderate consumption of alcohol is associated with reduced risk of cognitive impairment and dementia; on the other hand, its excessive consumption is associated with levels of neural degeneration that may lead, throughout years in chronic consumption, to the development of cognitive deficits characteristic of dementia (ANTTILA, EL HELKALA, VIITANEN, 2004)[18]

Another factor of great importance for the life style, and correlated with the appearance or prevention of dementia, is the adherence to a healthy diet high in vegetables and low in carbohydrates and fats, associated with lower rates of cognitive decline and reduced risk of dementia syndrome. High levels of physical activity are associated with reduced risk of neurodegenerative diseases. Furthermore, smoking shows a consistent detrimental effect on Parkinson's disease, potentially involving the effects of nicotine in the cholinergic receptors (LOURIDA, SONI, THOMPSON-COON, 2013)[19].

Finally, an important factor to be reported is the influence of social cycles and community coexistence as a protective factor for the dementia syndrome. In their studies, Crooks et al (2008)[20] found that elderly women with larger social networks, and participating in mental, social or productive activities, have a lower incidence of dementia. The components of the social, mental and physical life style seem to be important, although the reverse causality cannot be discarded, since the neuropathology usually begins decades before the onset of symptoms.

THE MOST FREQUENT ORAL PROBLEMS IN ELDERLY PATIENTS

For Sales, Fernandes Neto and Catão (2017), the oral health in the elderly should be assessed individually, because the physiological alterations of aging do not have the same pattern in different organisms. For many elderly patients, dental treatment is still a challenge, due to motor and cognitive damage present in great part of these. These authors reported that most oral, functional and tissue changes related to age are secondary to extrinsic factors that operate throughout life, with age, by itself, as a limited effect. Since there is the preservation of the state of oral health, changes in oral functions due to age are minimal.

Ribeiro et al. (2016), Spezzia (2015), Côrte-Real, Figueiral and Campos (2011), Albeny and Santos (2018), Sales, Fernandes Neto and Catão (2017) [21] [22] corroborate that the debilitation of oral health in the elderly mainly occurs when there is a reduced frequency of medical-dental care and negligence of oral hygiene. Geriatric patients are more susceptible to acquiring some lesions and conditions such as halitosis, periodontal disease, dental caries, oral candidiasis in its different clinical forms, white tongue, injuries caused by poorly adapted prostheses, such as traumatic ulcers and inflammatory fibrous hyperplasia. Lesions of the oral mucosa, reduced gustatory capacity and xerostomia are also very frequent conditions, in addition to a high prevalence of edentulism, abrasion, oral cancer and the need for frequent total and removable prostheses. For this reason, the professional must provide the correct and early diagnosis of some diseases that, in the beginning, are more likely to be cured, and, in other cases, remove the etiological factor.

For Miranda, Rodrigues and Franco (2018), these factors directly influence the chewing and swallowing, which may facilitate and intensify systemic diseases.

Corte-Real, Figueiral and Campos (2011) reported that, among the elderly, several diseases are frequent, which manifest in oral health, such as dementia and Alzheimer's disease, in which the decreased manual dexterity interferes with the state of oral health. The characteristics of Parkinson's disease

include difficulties in oral hygiene, chewing and prosthetic retention capacity. The pharmacological therapy (anticholinergics and monoamine oxidase inhibitors) seems to relate to a higher risk of dental mortality, such as worst oral health due to the present xerostomia. The typical dysphagia in patients with Parkinson's disease becomes very important motivation for oral hygiene to avoid situations of aspiration of bacterial plaque.

Therefore, the promotion of health of the elderly ensures the well-being, improvement of quality of life and self-esteem of these individuals, because it results in a proper chewing and aesthetics, enabling an easy communication (SALES; FERNANDES NETO; CATÃO, 2017).

Periodontal Disease

Periodontal disease is an infectious disease, usually caused by specific bacteria, which find in the mouth a favorable habitat on the surface of teeth with poor hygiene and factors of retention of bacterial plaque, such as prostheses poorly adapted, where they install. This disease affects the structures that compose the periodontium of protection, represented by the gums, and support of the teeth, composed by cementum, periodontal ligament and alveolar bone. With chronic characteristics, they often have a long travel with low intensity, which makes them painless until the teeth present clinical signs of mobility or change of position in the dental arch, called pathologic migration, which often results in the loss of the dental item(s) after ten, fifteen years from the onset of the disease (KIMURA; FONSECA, 2010)[23].

Many times, periodontitis can be serious over the years due to its multifactorial and complex etiology, in addition to the chronic nature of the disease. There are important characteristics in the elderly that justify the disease, such as: reduced manual dexterity, which makes the mechanical control of dental biofilm ineffective; reduced defense capacity of the immune system and aging of cells of the periodontium, which leads to a slower healing process. The increased severity of periodontal disease with advancing age has been directly related with the period in which the periodontal tissues were exposed to dental-gum plaque and is regarded as the oral history of the individual (RIBEIRO et al, 2016).

Changes in diet and decreased amount of saliva promote a more rapid accumulation of biofilm on the tooth surface of elderly patients. The advancing age also promotes a gradual change in bone tissue, with a reduction of the mineralized tissue, where the reabsorption increases and the neoformation decreases, resulting in an increased bone porosity (ALBENY; SANTOS, 2018).

Another very prevalent disease in the elderly, which can lead to death and be aggravated by the aspiration of bacteria that cause periodontal disease, is the chronic obstructive pulmonary disease, which usually occurs in patients with impaired consciousness (alcohol, drugs, epilepsy), chronic disorders in swallowing and intervention mechanisms, such as pipes of artificial respiration, as well as patients with chronic pulmonary diseases, advanced age, immunologically suppressed, among others (KIMURA; FONSECA, 2010).

Edentulism

In Brazil, according to Silva, Oliveira and Leles (2016)[24], Sousa et al (2013) and Caldas Júnior et al (2005)[25], tooth loss is still a public health problem with a high prevalence and negative impacts on the lives of individuals, despite the possibility of control by means of preventive technologies and rehabilitation actions focused on oral health promotion. The teeth loss causes in the patient a series of problems in functional, psychological and social issues, directly reflecting in the feeding as well as limiting the maintenance of their quality of life, since the teeth are important for interpersonal communication, the ability to speak clearly and to the vocal quality. Complications resulting from teeth loss include chewing insufficiency, moderate dysphasia, articulation and speech disorders, loss of support with facial aesthetic impairment and atrophy of alveolar bone and basal bone of the jaws.

For Catão, Xavier and Pinto (2011)[26] and Sousa et al. (2013), it is an oral condition of high prevalence among the elderly, not only linked to issues of physical dependence, but also to the low socioeconomic level that often leads to a low frequency of dental consultations. Among the main causes associated with this loss, there stand out the consumption of tobacco, alcohol, inefficiency in the practice of oral hygiene and long periods of hospitalization.

Xerostomia

Xerostomia, hypofunction of salivary glands, is one of the main problems reported by the elderly. It has an increasing prevalence with age, affecting approximately 30% of the elderly. It is understood as a subjective complaint of dry mouth, being clinically diagnosed through the sialometry test. This condition can bring enough oral discomfort and difficulty in chewing, swallowing, speech and use of prostheses, besides sensation of burning or even local pain, as well as the increased chance of having dental caries, candidiasis or other opportunistic infections. The main cause of xerostomia in elderly patients is the continuous use of certain drugs and their pharmacological interactions for control of diseases such as hypertension and systemic diseases, such as diabetes, Sjögren's syndrome, AIDS - or its treatment, and head and neck radiation therapy. Tricyclic antidepressants, sedatives, anti-histamines and smoking are also important factors (SILVA et al, 2017, p. 434; CÔRTE-REAL; FIGUEIRAL; CAMPOS, 2011)[27] .

Dental caries

Global data show that caries is the most common oral disease among individuals aged 60 years or more. Facts such as reduced salivary flow due to the use of certain drugs, motor difficulties in the process of cleansing and changes in diet potentiate directly the effects of this disease. Among the main causes that lead to tooth loss, caries is regarded as the main risk factor associated with poor oral hygiene (ALBENY; SANTOS, 2018).

For Vaccarezza, Fuga and Ferreira (2010), as a consequence of the limitation of motor function and mental health of the elderly, there is a limitation in the process of oral hygiene thereby facilitating the increase in dental biofilm accumulation, which in turn cause the appearance of carious lesions, which may evolve, leading to deterioration of the periodontal tissues, predisposing the individual to the emergence of root caries.

Oral lesions

Lesions of the oral mucosa may result from various reasons: traumas, especially those related to the lack of oral hygiene, harmful habits and oral medications. The use of prostheses unsuitable and poorly hygienic can cause the prosthetic stomatitis, oral candidiasis, traumatic ulcers and angular cheilitis, among other diseases. Moreover, the consumption of alcohol and smoking contribute to the high prevalence of premalignant lesions and malignant lesions, such as leukoplakia (CÔRTE-REAL; FIGUEIRAL; CAMPOS, 2011).

Lesions that become malignant with greater frequency and of greatest importance are: leukoplakia; nicotine stomatitis; erythroplakia; erythroleukoplakia; actinic (solar) keratosis; lichen planus (erosive form); nevus (moles) and chronic candidiasis (CÔRTE-REAL, FIGUEIRAL, CAMPOS, 2011; VIDAL, AKL and XIMENES, LM, 2015)[28].

Mouth Cancer

The magnitude of the cancer in a population is related mainly to the age, the risk factors to which they are exposed, the quality of assistance and information available. Since cancer usually manifests in advanced ages, the older a population, the greater the incidence and mortality rates is a consensus in the lierature.

Currently, with advances in molecular biology, cancer is defined as a genetic disease of somatic cells that results from the interaction of various genes with environmental factors, such as smoking, associated with 90% of cases, also involving alcoholism, diets low in vegetables,

exposure to ultra violet light and fungal and viral infections, characterizing it as a multifactorial disease. The squamous cell carcinoma (SCC) is the most common histological type among oral cancers (VIDAL, AKL and XIMENES, LM, 2015; VIDAL, AKL et al, 2018)[29]

The direct and simple clinical examination can be quite useful for prevention and early diagnosis of mouth cancer, but it is important to consider, according to Saliba et al. (1999)[30], the degree of physical, psychological and economic dependence of the institutionalized elderly, which are obstacles in relation to the care to be provided to their oral health, who have a high rate of dental caries, periodontal problems and total edentulism, not having access to adequate dental care. Thus, how to diagnose early and prevent oral SCC in these individuals?

Unfortunately, the semiological research of the mouth is often neglected in the routine of health services in general, and, consequently, reduces the chances of a better prognosis for those patients, because many injuries, when checked later, have a worse prognosis and staging (REZENDE et al, 2007 and 2008)[31 32].

Halitosis and dental mobility may accompany the cancerous lesions, but can also constitute clinical periodontal disease, independent of cancer. The evaluation by the physician or dental surgeon is essential and, through the sum of clinical and complementary tests, there will be the diagnostic conclusion, preferably as early as possible (VIDAL, AKL and XIMENES, LM, 2015)

The identification of risk factors, treatment of potentially malignant lesions, the prevention and early diagnosis of oral carcinoma represent the hope of life, since the late diagnosis incurs mutilations, worse prognosis and decreased survival rate (VIDAL, AKL et al, 2018)

REPERCUSSIONS OF DEMENTIA SYNDROME IN ORAL HEALTH

For the integral care of patients with dementia syndrome, the multidisciplinary look is of extreme importance, since the patients affected by this morbidity usually need to receive care from third parties, especially with age advance and consequent worsening of the clinical case. Whether family members or caregivers, these people, often already overburdened physically and emotionally, face a series of difficulties in the care provision, not being different in terms of oral care (GALLUCI-NETO, TAMELINI MG, FORLENZA, 2005)[33]

According to Caramelli and Barbosa (2002)[34], conditions such as the difficulty of oral opening, lack of cooperation, aggressive behavior and little collaborators, hinder the relationship of care and consequently lead to a worsening of oral clinical conditions of the patients. Recognizing a painful condition in these patients can represent a challenge, because, with the loss of language, behavioral changes can install in the presence of a simple tooth pain. Therefore, only an approach in conjunction with the various professionals in the health area can circumvent these issues.

The dental assessment, in such cases, must be as thorough as possible, addressing, beyond anamnesis, intra- and extra-oral physical examination. The extra-oral examination assesses the presence of lymph nodes, muscular tonus, lesions of the face, lips and commissures. The intra-oral examination assesses the mucosa, saliva and teeth, as well as oral hygiene. Partially or totally toothless patients use prostheses, verifying its conditions regarding hygiene, fractures, abrasions, adaptation and functional aspect (SPEZZIA, 2015).

When visiting the literature about the main oral findings in elderly patients with dementia syndrome, the most common clinical conditions encountered are: oral candidiasis in its various clinical forms; white tongue; lesions from unsuitable prostheses, such as traumatic ulcers and inflammatory fibrous hyperplasia; root caries and periodontopathies. The high accumulation of dental biofilm, poor teeth brushing and prostheses and the presence of white tongue denote the difficulty of hygiene in these patients. Hyposalivation is also common,

and directly influenced by the wide variety of medications that can be prescribed concomitantly (ZULUAGA, 2002)[35]

Adam (2006)[36] emphasizes in his research that the evolution of the dementia clinical picture leads to loss of self-care, which invariably reflects on oral conditions. Therefore, as soon as the diagnosis of dementia occurs, the patient should be referred for dental assessment, because, as the more severe stages of the disease install, the implementation of dental procedures is impaired, once the patient's collaboration is lost, in addition to the loss of mobility of some patients, which results in a domiciled or bedridden person, who, if not able to acquire dental services at his/her residence, may end up without assistance by not being able to go to health units.

Oral health care seeks guidance in the prevention of oral-dental pathologies through the guidance of hygiene for caregivers and family members, who are oriented regarding the technique adapted for oral hygiene and hygiene of dental prostheses, since this population is composed of patients that depend on basic care from third parties. The family members or assistants must receive training to perform the oral hygiene of the patient, and, in some cases, there may be need to use brackets to floss, electrical toothbrushes, intermittent jets of water or interdental brushes. Furthermore, they should receive instructions on non-cariogenic diet, use of fluoride and chlorhexidine for mouthwash or in the form of gel. In more advanced stages of the disease, dental procedures can be performed using general anesthesia at hospital environments (SPEZZIA, 2015).

DENTAL CARE – MULTIDISCIPLINARITY

Dental care has traditionally been carried out at clinical offices of public health posts or private clinics. However, the health care in the hospital environment requires the work in a multidisciplinary team, a fact that demanded the reintroduction of Dentistry in the work environment is a highlights the literature.

Hospital Dentistry can be defined as a practice focused on the care of oral changes, which require low-, mid- or high-complexity procedures, performed in a hospital environment, whose goal is to improve the health of hospitalized patients. The holistic approach of the patient, and not only on aspects related to the care with the oral cavity, is crucial and depends on the inter-relationship of all the members of the multidisciplinary team that assists the patient (GAETI-JARDIM et al, 2013). This concept is expanded, covering the dental care to patients at home.

The hospitalized patient, or, under homecare, often presents impaired oral health, requiring special care, whose recovery is directly related to the performance of a multiprofessional team able to meet him/her integrally, respecting his/her specificities is consensus in the literature.

For Miranda, Rodrigues and Franco (2018), the home dental care is considered a reality of professional activity in many countries and is characterized by comprising a preventive, healing and educational health service performed with elderly patients impaired, bedridden, or unable to go to the doctor's office. The objective of this service is the establishment of health in an interdisciplinary way, in which the patient is seen as a whole, providing greater comfort during the clinical intervention, by means of humanized procedures, as well as a bond and trust between patient and professional.

According to Rosendo et al (2017) [37] and Fernandes-Costa et al (2013)[38], the treatment of the elderly patient differs from the treatment of the general population due to physiological changes during the natural aging process, the presence of chronic systemic diseases and the high incidence of physical and mental disabilities in this segment of the population. It must take into account the dialog with the same and the analysis of his/her perception of oral condition whenever possible, by means of conversation with family members and/or caregivers. At the

anamnesis, the health professional must be aware of the general health condition of this patient, as well as the medicines used by him/her, besides his/her expectations regarding the treatment.

Home dental care for the elderly partially or totally dependent is characterized by a set of preventive actions with minimal intervention with the purpose of promoting oral health and guiding families and caregivers. In order to reduce the discomfort and uneasiness, the appointments must be quick and the caregivers must be informed about health education and encouraged in the collaboration of care, forming a professional-patient-family triad. These should be also prepared for the conditions of psychological management, which can lead to negative acceptance by the elderly patient. Many caregivers, already physically and emotionally overburdened, have difficulty and insecurity to perform a simple tooth brushing, requiring more instructions regarding oral hygiene care of the elderly patient (SALES; FERNANDES NETO and CATÃO, 2017; MIRANDA; RODRIGUES and FRANCO, 2018).

For Albeny and Santos (2018) and Spezzia (2015), the multidisciplinary look is of extreme importance, seeking a greater perception of all professionals involved in the care of these patients, because, in most cases, they receive care from third parties. There are cases of difficult oral opening, lack of cooperation, aggressive behavior and little collaborators. Recognizing a painful condition in these patients can represent a challenge, because, with the loss of language, behavioral changes can install in the presence of a simple tooth pain. Therefore, only an approach in conjunction with the various professionals in the health area can circumvent these issues.

The dental surgeon integrated in the interdisciplinary homecare team operates and develops activities not only for guidance on measures of oral hygiene, but also intervenes in emergency situations, such as pain, bleeding in the oral tissues, abscesses and radicular remains (foci of infection), in addition to treatments of coronary and root scraping, extractions of teeth with mobility, biopsy, minor surgeries in tissues and sealing of cavities, but also organized according to physical, social and emotional needs of the elderly patient (MIRANDA; RODRIGUES and FRANCO, 2018). As can be seen in the reports of clinical cases below.

Ethical considerations - the elderly, families and guardians of the following reported cases signed the Informed Consent Form, agreeing with the disclosure of data, information and images for academic, scientific purposes. CAAE: 07264818.7.0000.5207.

CASE 1 - AJMS., 75 years old, male gender, bedridden due to Cerebrovascular Accident (CVA), with tracheostomy, carrier of chronic renal insufficiency, fed through enteral nasal probe (ENP). The home dental clinical evaluation identified the presence of fixed dental prosthetic oral rehabilitation, periodontal disease, tartar and white tongue. (Pictures A1, B1, C1 and D1). The adequacy of the oral environment was performed at home, through hygiene, brushing and coronary-root scraping, with elimination of tartar, dental biofilm and white tongue. (Pictures E1, F1, G1 and H1). Families and caregivers were instructed about the mouth-dental care every day to be performed in patients with fixed prosthetic oral rehabilitation. AJMS follows under home dental monitoring on a weekly basis.

CASE 2 - AN., 96 years old, female gender, carrier of cardiopathy, chronic renal insufficiency. Lucid, conscious, oriented and very cooperative. The home dental clinical evaluation identified patient partially toothed, carrier of dental prosthesis in the upper arch and the presence of extensive dental caries in lower previous dental elements (42 and 33). (Pictures A2 and B2). The plan of dental treatment was established with the adequacy of the oral environment through coronary-root cleaning and biological, anatomical, functional and esthetic restoration of dental elements 42 and 33 with

photopolymerizable resin. (Pictures C2 and D2). AN and her family were advised about the mouth-dental care every day to be performed in patients with removable total prosthetic oral rehabilitation. NA follows under under monthly dental follow-up.


A1


B1

Pictures A1 and B1 - Clinical aspect of the upper dental arch showing fixed dental prosthetic oral rehabilitation, periodontal disease and tartar. Pictures - Personal collection Dr. Berta Moreno.


C1


D1

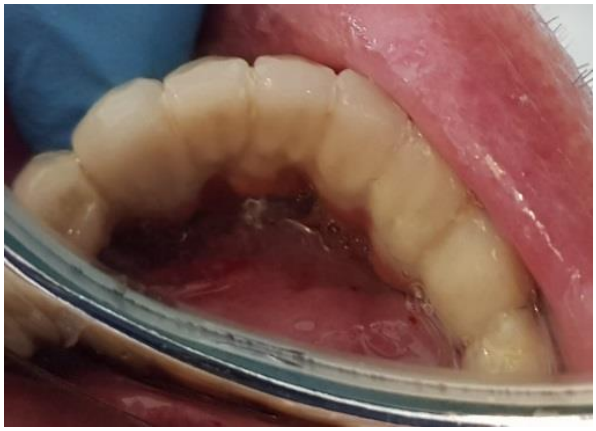
Pictures C1 and D1 - Clinical aspect of lower dental arch showing fixed dental prosthetic oral rehabilitation, periodontal disease, tartar and white tongue. Pictures - Personal collection Dr. Berta Moreno.


E1


F1

Pictures E1 and F1 - Immediate clinical aspect of the upper dental arch, showing fixed dental prosthetic oral rehabilitation, after the first session of adequacy of oral environment. Pictures - Personal collection Dr. Berta Moreno.


G1


H1

Pictures G1 and H1 - Clinical aspect of the lower dental arch, showing fixed dental prosthetic oral rehabilitation, after the first session of adequacy of oral environment. Pictures - Personal collection Dr. Berta Moreno.


A2


B2

Pictures A2 and B2 - Clinical aspect of the partially toothed patient, carrier of dental prosthesis in the upper arch and the presence of extensive dental caries in lower previous dental elements (42 and 33). Pictures - Personal collection Dr. Berta Moreno.


C2


D2

Pictures C2 and D2 - Immediate clinical aspect of the partially toothed patient carrier of dental prosthesis in the upper arch after the adequacy of the oral environment through coronary-root cleaning and biological, anatomical, functional and esthetic restoration of dental elements 42 and 33 with photopolymerizable resin. Pictures - Personal collection Dr. Berta Moreno.

CASO 3

CASE 3- MCF., 80 years old, female gender, black, drinker and smoker. Since early age (40 years), according to reports from relatives, has demonstrated atypical behavior, presenting repetitive and disorganized speech, recurrent episodes of forgetfulness, aggressive behavior and difficult locomotion attributed to dizziness and absence of spatial location within the rooms of her own residence. After an episode in which the patient, at 55 years of age, forgot where she lived and began to live on the streets until the family rediscovered her, three months later, she was admitted to the Correia Pincanço Hospital, reference in the state of Pernambuco in Mental Health, staying in the hospital for about seven months. During this period, the patient received the diagnosis of Paranoid Schizophrenia and Alzheimer's disease, and after numerous hospitalizations along the years, according to relatives, this diagnosis updated for dementia syndrome. The home dental clinical evaluation noted terrible oral-dental condition of MCF: edentulism in the upper arch and partially toothed in the lower arcade, not making use of dental prosthetic oral rehabilitation. MCF has only the lower previous dental elements 31, 32, 33, 34, 41, 42, 43, 44 and all with periodontal disease, presenting tartar, gingival retraction and dental mobility grades II and III; in addition to white tongue; characterizing poor oral-dental hygiene, as well as the commitment of masticatory function and phonation. (Pictures A3 and B3). MCF follows under follow-up and programming for immediate implementation of dental treatment and periodontal surgery, at home, and subsequent dental prosthetic oral rehabilitation. The family members were oriented about the mouth-dental care every day to be performed.

A3

B3

Pictures A3 and B3. Clinical aspect of the bad oral-dental condition of MCF, who displays periodontal disease (tartar, dental mobility degrees II and III), edentulism and need for dental prosthesis. PICTURES - Collection of the Dentistry Center - RMISF/ FCM/UPE.

MCF features, depending on the literature, habits and life-style related to the development of dementia syndromes: female gender, advanced age, alcohol consumption, smoking, diet high in fat and carbohydrate (PRINCÍPE et al, 2006; MENG and D'ARCY, 2012).

The low socio-economic condition of MCF, apart from her lack of schooling and of an active social cycle, are also factors to be considered as adjuvants in the process of illness (CROOKS et al 2008).

FINAL THOUGHTS

Population aging is a global and Brazilian reality and, consequently, dementias and other chronic diseases should be considered under the aspect of prevention, early diagnosis and control, in order to preserve the quality of life of the population.

The dental care performed at the doctor's office, hospital, or, in appropriate domicile and integrated in the multiprofessional, inter-transdisciplinary assistance is able to reduce the number of aspiration infections, maintain the mastication, favor the phonation, swallowing, improve self-esteem and self-care. Dental procedures can be of low, mid or high complexity, but the objective is to maintain oral health, improve the overall health and quality of life of this population, which is totally or partially dependent.

Many are the impacts of the dementia syndrome on oral health, such as the case of MCF, which presents oral-dental-facial and functional aesthetic impairment with impaired phonation, chewing and swallowing. The awareness of the population, capacitation of professionals and the multiprofessional care are essential to improve health conditions and quality of life of the patient.

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