CHANGES IN PERIODONTAL PATHOLOGY AT ELDERLY PEOPLE

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Abstract: *More and more specialty studies have prooved that the number of the elderly population worldwide is constanty growing. In Romania, as in most of the countries with medium economical development, the aging process of the population has not been accompanied by the sustainment of the oral health. This has led to deeper consequences of the decay and peiodontal diseases spread and thus a loss of the teeth with subsequent edentations and an increase in the number of those who wear partial or complete dentures.*

Cuvinte cheie: *parodontopatie, pacient vârstnic, comorbidităţi*

Rezumat: *Tot mai multe studii de specialitate au demonstrate că numărul populaţiei în vârstă din lume este în continuă creştere. În România ca şi în majoritatea ţărilor cu dezvoltare economică medie, procesul de îmbătrânire al populaţiei nu a fost însoţit de susţinerea sănătăţii orale. Aceasta a dus la o adâncire a consecinţelor răspândirii efectelor cariei dentare şi a parodontopatiilor, şi în consecinţă o pierdere a dinţilor, apariţia edentaţiilor şi înmulţirea purtătorilor de proteze parţiale şi totale.*

INTRODUCTION

The patients with teeth have higher and higher expectations regarding (a) and a more sophisticated approach of the missing teeth and (b) their right to actively take part in the decisions involving the management of the loss of teeth, either through odontal or periodontal causes. There is the proof of a group effect in the younger patients (45-64) and with higher expectations comparing to the elderly ones (65-75) regarding the management of the periodontal or odontal therapy of the remaining teeth. In the last 20 years , Romania has experimented deep demographical and significant changes unseen before. Similar to many other European countries it is confrunted with the challenges of an increasingly aged population; still, unlike most of the other european countries, Romania goes through a simultaneously rapid increase in the elderly population due to the migration of the working adult population towards the economically developed west. The rythm of the change imposes the anticipation of the future requirements regarding the dental services. While there are obvious differences between the demographical prophiles of the E.U. and Romania it is surely reasonable to anticipate that the medical romanian services will be confrunted in the future with and increasing number of patients with partial edentations due to the carious attack and to the extend of the periodontal disease. As a first notice, we can state that there isn't a very different therapeutical behaviour in the atitude of the periodontlogist towards the elderly patient or the young one. We consider it is much more important that in the periodontal therapy of the elderly people there should be identified the factors which condition and endanger the prognostic and the results of the periodontal therapy.

As in the case of the other patients, the rehabilitation of the periodontal afflictions and the epidemiological evaluations for the elderly people are done by the CPI criteria and indexes (Community Periodontal Index). Out of the most encountered CPI indexes in the evaluations studies of the periodotnal disease of the senior patients we poit out:

- Level two from the CPI: bleeding and the presence of the incorrect fillings
- Level three from the CPI: periodontal pockets of 3.5mm up to 5.5 mm

Apparently there seem to be no problems in the solutioning of such cases. The prognostic of the survival of a tooth on the archade in a young patient with a petiodontal pocket of 3-5mm is not the same as for an elderly patient with a periodontal gum pocket of 3mm but with bone resorbtion with gingival retraction of 4-5 mm from the enamel-cement line. Thus the implantation of the tooth is endangered with 7-8 mm in the reserved prognostic. To all these it is added the continuous process of biotrophical involution of the fibrous and bony periodontal tissues specifical to the advanced age , criteria which will inevitably influence the therapeutical atitude of any periodontologist. All these can influence both the prognostic and the choice of the specifical means of periodontal care of the elderly people.

There should be taken into consideration the specifical personal factors which will influence the spam and the selection of the rehabilitation techniques of the periodontal disease:

- The phisiological specifical changes and inherent to the advanced age of these patients
- Comorbidities specifical to the age (diabetes , high blood pressure, heard diseases)

Which impose the existance of therapeutical schemes specifical to the medical care of these diseases. The diseases and the medication of the sistemical diseases will change the therapeutical atitude and the techniques in the approach of the periodontal disease (ex. The surgical techniques will be reduced, even canceled).We will shortly remind other variants which can alter the prognostic of the tendencies of periodontal rehabilitationof the elderly patients:

1. Their habit of smoking
2. The presence of the gingival hiperplasiasecondary to the medical specifical imunosupressive anticonvulsant and antihistaminical medicines.
3. Local causes which favourise the bacterial plate retention, the presence of incorrect fillings or large fixed prosthesis with insufficient cervical adapting.

The presence of the dental plate can be the consequence of some social or medical situations when the elderly patient looses his

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abilities of applying the selfcleaning dental techniques.

4 The intensity of the *"biological activity"* inside the dental-periodontal component

5 The imune modifications are frequently implied in the generation of the phenomenon of tissular fragility specifical to the elderly which can be a primaryor secondary reflection of the medical treatments, of the comorbidities specifical to the third age.

6 The presence of the partial mobilisable prosthesis.

Maybe, out of these reasons, the prognostic of the periodontal treatment in the elderly people is not necessarly favourable. Patients with such comorbidities, in phases much too advanced of the periodontal disease cannot have applied too agressive techinques of oral rehability. The surgical interventions such as the curettage around the root, the surgical ablation of the periodontal pockets, the surgery of the soft tissues, the gingival surgical plasty, the regenerative surgical techniques of augmentation of the periradicular tissues are limited by the presence of more and more systemical aflictions and by the limited capacity of healing after the surgery. Where it is possible or absolutely necessary the surgical intervention, it is taken into consideration the biological nd medical state of the patient , the treatment being applied strictly localised, without risky extensions and preferably in short and multiple sessions with the general medical supervision. In these cases it is necessary the prophylactic administration of antibiotics. Thus the infectuous complications are prevented in the patients with cardiac afflictions (valculopathy, valvular prosthesis), in those with articular prosthesis and/or in the patients with apparent imunitary compensations. Just as exposed to complications after interventions on periodontal infectuous centers, are the patients with decompensated diabetes, those under citostatic treatment, or the patients with autoimune afflictions discovered in the active phases, chronical blood diseases, etc.

Still, there are situations when the periodontal surgery is imposed as a therapeutical solution. In such cases, the patient with an advanced age is summitted to a preoperative medical treatment , through the administration of vitamin complexes and oligoelements and medication which can stimulate the reactivity of the imune system and the regenerative capacity of the organism. Consequently, the periodontal inflamatory afflictions are perfectly treatable in elderly patients as well as in the case of young people but, the treatment has to be individualised according to the extent and the gravity of the comorbidities, and where there is a visible functional fragility special measures are applied. Even if, out of precaution, certain known therapeutical interventions known in periodontology are restrictively applied or even suspended, there is an irreplaceable phase regardless the age of the patient: the control and the monitorising of the periodontopathic bacterial plaque which must be of the highest quality. By the guarantee of a quality control and of the elimination of the dental plaque will depend the success of the treatment of the periodontopathies in the clinical gerontology. The uncontrolled effects of the bacterial plate lead to serious consequences which, in the elderly patient, generate the rapid loss of the teeth. For the senior patients ,the elimination of the periodontopathic bacterial plaque remains a sensitive point especially in the case of those with disabilities or defficient cognitive capacity. In such situations, the consultations will be granted to the person who is responsable of the social safety of the patient, may that be a member of the family or a person under contract. This person will be instructed regarding the correct techniques of brushing, the application of the pastes and of the mouthwashes which ensure a quality oral hygiene, there will be discussed the timetable of the therapeutical sessions and the programe of maintainance of the oral health. The presence of the mobilisable dentures is a risk generating problem in geronot-periodontology. The lack of a rigurous hygiene, the bone resorbtions, the feeble quality of the dental implantation creates the instability of the prosthesis, the trauma of the marginal periodontal tissue, its infection and inflamation. The dental mobility has been one of the great dilemas which have raised the risk level in periodontology and even more in the case of the patient with advanced age. For these, most of the patients recommend the extraction of the teeth with mobility and functional incapacity and the choice of the most simple prosthetic solution. The therapeutical variants odontal periodontal or fixed prosthetic and more difficult to apply in the cases of such persons and the results are doubtable.

Certainly, there are prosthetic solutions which can keep a tooth on the archade or a group of teeth with mobility through the extension of the peosthetic works on the more stable, adiacent teeth, increasing for a while the functional capacities of the dental archades. The selction of the project of oral rehabilitation through temporary or long term prosthesis in the case of the elderly patient is done even after an appreciation of the daily aspects of the patient. Within the therapy and the periodontal maintainance, there must not be neglected the checking and oclusal rehabilitation for the elimination of the interferences and/or of the premature contacts which can worsen the periodontal health state . The maloclusions are frequent at this age, most of them presenting one or more patial edentations which trigger teeth migration and affect the periodontal tissue.The situation is not as critical when the preparation of the teeth included in a prosthetic restorative theme is possible after a complete, secure and predictable periodontal rehabilitation. Most of the times, the localised periodontal treatments are more accessible and with satisfying resutls. Surely, an elderly patient which is diagnosticated with a certain form of periodontopathy, who will have to follow a specifical treatment, will be converted into a person who needs longterm dental care. The elderly patient with periodotopathy must be informed that the treatment is intended for a long period with more stages and that he has to go through all the curative sequences to have the minimal guarantee that the treatment will be finished, after which he will be instructed regarding the self care techniques and programed for sesions of professional maintainance.One of the secondary but more feeble effects in the elderly patients, but just as discomfortable are the termical dentinary hipersensitivities (especially to cold)or chemical (sweet, sour), determined by the scaling and by the root curretage and brushing. These will be easier controlable through common applications of concentrated flor and dentinary desensitising solutions.

In conclusion**,** the periodontal rehabilitation of the elderly patients is done by the same medical plan: the treatment type, the choice of the surgical approach techniques varying according to the health state of the patient, to the compliance level, and the capacity of maintaining the therapeutical results.

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