

Particularities in the Dental Treatment of Elderly Edentulous Patients with Parkinson's Disease

Tânia e Silva Pulicano Lacerda*

Department of Odontology, City University of São Paulo, São Paulo, Brazil

*Corresponding author: Tânia e Silva Pulicano Lacerda, Department of Odontology, City University of São Paulo, São Paulo, Brazil, Tel: 1-650-268-9744; Fax: 1-650-618-1414; E-mail: tanielacerda@col.odo.br

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Short Communication

Parkinson is one of the most common diseases nowadays. It affects all ethnic and social groups worldwide. According to the data from WHO (World Health Organization), around 1% of the population older than 65 is affected by it. Generally speaking, young adults are not among the risk group [1,2].

Parkinson's disease patients (PDP) require special attention, due to important systemic alterations that can interfere with oral health. Therefore, it is necessary to identify the differences between the treatment of an edentulous PDP and a healthy edentulous patient for a better rehabilitating dental treatment. These difference must be taken into account from the very first moment the patient arrives at the dental office. One such difference is accessibility. Since many PDPs present difficulties walking, the floor and furniture of the office should be adapted for them. When the patient gets to the dentist's chair, the staff needs to be prepared to receive him or her and keep these difficulties in mobility in mind. Any sound system or music must be turned off to enable a good communication with the PDP. Sometimes cognitive problems can be diagnosed together with Parkinson's. In this case, it is important to establish a dialogue with a family member or caregiver [3].

If the patient gets to the office without a diagnosis of Parkinson's, some symptoms may be displayed, like tremors, significantly smaller handwriting, neck stiffness, and mask-like expression. In order to minimize and control such symptoms, a multi-professional group of professionals can be contacted (Figure 1).

The group age that grows the most worldwide is the one above 80 years old [2].

If the diagnosis has already been established, some symptoms can be observed: cognitive loss (memory loss, difficulties concentrating), functional (bradykinesia, stiffness) and degenerative chronic diseases (depression and dysphagia) are among the most important alterations affecting the elder's body [4]. When the patient presents dysphagia, the planning of the prosthesis may be affected and an evaluation with a

speech therapist and nutritionist should be done [5]. A team of healthcare professionals (a physician, a physiotherapist, an occupational therapist, a speech therapist, a nutritionist, and others) can enhance the patient's quality of life by controlling some of these symptoms [5,6].

Clinical manifestations can include the development of fixed postures, bradykinesia (slow movement), and mask-like expression, affecting mainly the lower lips and consequently, the retention of the prosthesis. Furthermore, some difficulties related to specific motor skills (writing), standing up and sitting down from certain chairs, balance and walking may be found [3,7].

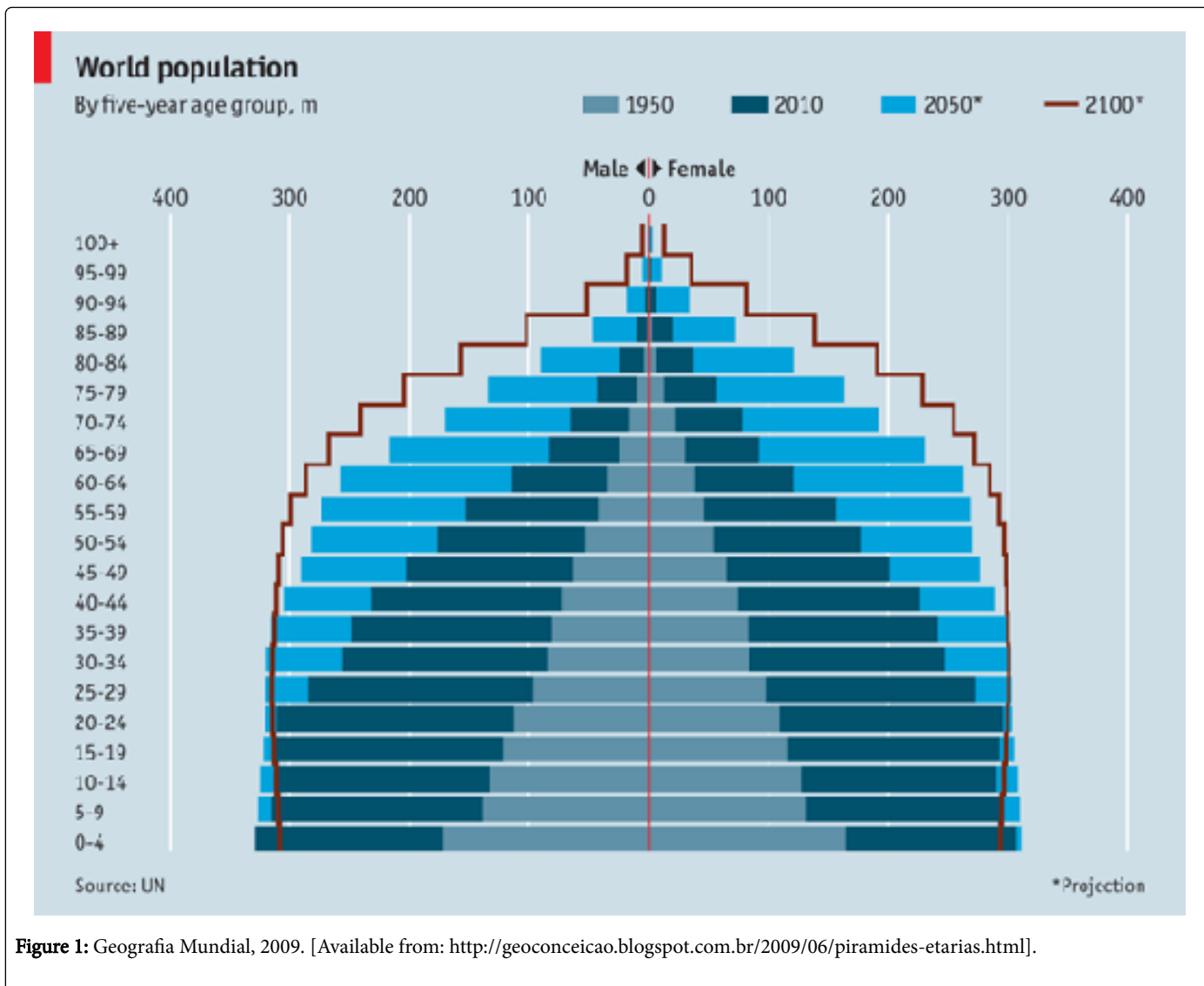
In order to plan an oral rehabilitation of the PDP it is important to consider the patient's motor difficulty in inserting, retaining and cleaning the denture.

Treatments for edentulous PDP can be: implant-supported fixed prostheses, which are very difficult to clean, and removable dentures, which are easier to clean but more difficult to retain. To improve the retention of these prostheses, one of the resources is the use of implants as an additional retention system [8]. The overdenture retention system can be of three types: ball, magnet and bar.

The bar and ball systems are more difficult to place and clean than the magnet system. However, it should be noted that magnet systems are contraindicated for patients with pacemakers [9].

It is also important to highlight that while choosing artificial teeth, lower cusps are preferable in order to facilitate adjustments, as well as improve the prostheses' stability. One should keep in mind that to rehabilitate a Parkinson's disease patient, professionals must give special attention to the maxillary-mandibular records, so any occasional articulation problem can be either avoided or fixed.

Furthermore, adjustments are often required in the toothbrush handles to enable the grip and to improve the quality of the hygiene of the prostheses and of the mouth. Metallic reinforcements may also be indicated inside dentures to facilitate repair in case of fractures [7].



Final Considerations

When caring for PDPs it is very important to know the signs and symptoms of the disease, assess the medical history of the edentulous patient and choose the best dental treatment, along with a multiprofessional team. An integral approach is essential in the care of the elderly and helps not only in maintaining oral health, but also improves the patient's quality of life.

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