Quality of Life of Patients Trested With Implant-Supported Overdentures: a Survey of 29 Patients

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Abstract

A total of 127 implants were placed in 29 patients. The average number of implants per patient is 4.3. 27.6% of patients were rehabilitated with bimaxillary prostheses, 27,6% with maxillary prosthesis and 44,8% with mandibular prosthesis (Graphic 1). 6 implants failed (4,72%) - 3 implants failed because fibrointegration and the others 3 implants failed because of a postoperative infection in a 70 years older polymedicated patient with diabetic, hypertension and allergy to penicillin (Graphic 2). Comparing the results of the two questionnaires (before and after treatment) patients treated with implated-supported removable denture showed a significant statistical increase in their quality of life ($p < 0,05$).

Graphic 1 – Percentage of patients by type of rehabilitation

Graphic 2 – Total implants versus Total failed implants

The OHIP-EDENT questionnaire has 19 questions, subdivided into 7 subscales¹. The subscales are: 1 - Functional limitation, 2 - Physical pain, 3 - Psychological discomfort, 4 - Physical disability, 5 - Psychological disability, 6 - Social disability, 7 – Handicap

Results

Each patient answers two questionnaires: one questionnaire about the muco-supported prosthesis (PRMS group) and another questionnaire about removable implant-supported prosthesis (PRIMS group).

There was a significant increase in quality of life in all subscales in the PRIMS group. 13% of patients reported some kind of functional limitation (food catching) and 15% of patients maintained some type of psychological discomfort (worried and self-conscious) (Graphic 3).

Graphic 3 – The answers distribution of the 7 subscales of OHIP-EDENT questionnaire

Background and Aim

Millions of people around the world are toothless. Edentulism has an impact on the individual's personal and social life. With the increase of life expectancy, the number of total edentulous people also increases. Total removable dentures are rehabilitations associated with a discomfort and social and personal problems. The development of osseointegrated dental implants allowed patients to have trust and Comfort with removable dentures². The purpose of this study was to evaluate the oral health-related quality of life of patients treated with implant-supported overdentures and the success rate of the implants used, in a dental unit center.

Conclusion

Implant overdentures is a predictable treatment and a good option for edentulous patients to whom a fixed rehabilitation treatment is not an option and do not support traditional removable prostheses.

Methods and Materials

From a total of 49 patients (165 implants) treated with removable dentures supported by dental implants (BTI Biotechnology Institute-Spain) from 2016 to 2018, 29 patients were selected. All patients answered two OHIP-Edent Portuguese version questionnaires (one on the pre-implant and one after implant placement), the surgeries were all performed by the same oral surgeon and rehabilitated by the same Dentist with removable implant-supported prostheses, by six or two implants through the Locator system. The total number of implants was 127. The associations between the OHIP-Edent variables and the patient's age, gender, associated pathology and the number of implants supporting the overdenture, as well as the survival rate of the implants were evaluated.

References

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