A SURVEY ABOUT FUNCTIONAL IMPRESSION TECHNIQUE IN COMPLETE DENTURES FABRICATION

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ABSTRACT

Background: Functional impression technique is an important stage in complete denture treatment. Its proper performance ensures the exact representation of gingivobuccal sulcus and thus the stability and retention of the final prosthesis during function.

Purpose: This study aims to investigate the general practitioner’s acquaintance about functional impression technique in complete dentures.

Material and methods: An anonymous questionnaire was constructed and administered on paper and it was mailed to 98 dentists from different regions of the country. Respondents were 53 men and 35 women.

Results: Majority of the respondents were with no acquired specialty. Prevalent number of dentists uses functional impression technique. In the highest percentage of cases the procedure takes between 10 and 20 minutes, which is not a problem for most of the practitioners.

Discussion: Clinicians pay attention to functional impression technique and the required chairside time for the procedure is spent.

Key words: complete dentures, functional impression, gingivobuccal sulcus.

INTRODUCTION:

The treatment with complete dentures is a public problem of our society. Essential for the successful treatment with complete dentures is proper planning, the type of prosthesis (fixed or movable) and prosthetic design [1]. Patients expect from complete dentures to be stable during the process of mastication, to be comfortable during speaking and smiling, to be aesthetic and nature-looking [2, 3]. This is related to anatomy of the prosthetic field, soft tissues condition and dentist’s technique [4, 5]. Stability also depends on correct arrangement of artificial teeth and strict compliance of rules, linked with compensatory curvatures [6, 7]. Bone base is important for successful treatment. The composition of the fully healed edentulous ridge of the posterior maxilla was recently examined and was found to contain about 50% mineralized bone and 16% bone marrow [8]. Maxillary tuberosity showed the least bone density [9]. Maxilla’s resorption is centripetal and it decreases its volume [10]. The type of atrophy is heavily influenced by sequence of tooth loss, and by premature extraction [11]. Boyanov classified the degree of atrophy in three basic and one additional [12]. The inclination of alveolar crests is important for retention of
the dentures. According to inclination alveolar crest can be retentive, vertical and non-retentive [13].

PURPOSE:
The survey’s aim is to know the level of awareness of dentists about importance of border molding procedure in complete dentures fabrication.

MATERIAL AND METHODS:
An anonymous questionnaire, contained 11 questions, was constructed and administered on paper and it was mailed to 98 dentists from different regions of the country. Respondents were 53 men and 35 women. Descriptive statistics and graphical analysis were used to process and visualize the results.

RESULTS:
The question “Do you have acquired specialty?” requires nonactive answer from respondents. Half of the dentists (58,3%) were without specialty, 18,1% were with “Prosthetic Dentistry” specialty, 8,2 % - without answer. This high percentage without answer and without specialty means that dentists don’t want to learn more or can’t see the reason to do it. The answers were divided in eight groups and visualized on diagram 1.

![Diagram 1. Division of acquired specialty](image)

The answer of the question “Do you use border molding procedure in complete dentures fabrication in your dental practice?” was positive in 68,4% of cases. Majority of the dentists apply border molding technique and know the main rules, diagr. 2:

![Diagram 2. Border molding procedure usage](image)
The question “According to you, how much time do you spend including border molding procedure in your dental practice?” required active written answer. Half of the respondents think that it is between 10 and 20 min. The answers were divided in seven groups and illustrated in diagr. 3:
Diagr. 3. How much time dentists need for border molding procedure?

The answers of a question “Is this waste of time a problem to you?” are illustrated in diagr.4:
The question “When assessing the model obtained, do you comply with the bone base?” again was yes/no question. Most of the dentists consider the result with the shape and the condition of a prosthetic field, diagr. 5:
CONCLUSION: 
Dentists use border molding procedure in their practice. It takes between 10 and 20 minutes for each arch, but this procedure is not waste of time for them. Majority linked the result of the treatment with the bone condition.

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REFERENCES:

6. Славчев Д. Пресъздаване дъгата на горна цяла протеза след анализ на фронтална телерентгенография, Дисертация за присъждане на ОНС „Доктор“, Пловдив, 2005.
7. Узунов Т. Планиране на протезната конструкция при дистално неограничено частично обеззъбяване , Дисертация за присъждане на ОНС „Доктор“, София, 2008.