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## COMPARISON OF METHODS FOR DETERMINING THE NEUTRAL ZONE IN PATIENTS WITH FULL ADETHIA

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#### **Abstract:**

The concept of the neutral zone is by no means a new one in science and was first described in 1933 by Sir Wilfred Fish in his Principles of Complete Dentures 9. Victor Beresin and Frank Schiesser published the book The Neutral Zonein Complete Dentures. **Keywords:** neutral zone, biophysical methods, fixation methods.

### Introduction

Although complete dentures are not ideal replacements for a natural dentition, nevertheless they should not be noticeable and patients should not feel discomfort in the mouth. The effects of the surrounding facial muscles, speech and chewing are often overlooked in the manufacture of complete dentures. All muscular functions, which include chewing, swallowing, speaking, laughing and sucking, involve the harmonious action of the lips, cheeks, tongue and the bottom of the oral cavity. These actions affect the design of the prosthesis and can be registered using functional methods. Failure to recognize these functions can affect the position of the teeth, the boundaries of expansion, the location of the occlusal plane and the contours of the polished surface, which in turn can lead to an unstable and unsatisfactory prosthesis. The Neutral Zone Concept incorporates neuromuscular function that helps stabilize prostheses. [Application of the Neutral zonein Prosthodontics. JosephJ.Massad]

Improving the effectiveness of treatment of patients with a complete lack of teeth, mainly comes down to the use of dental implantation, but not all patients, for a number of reasons, can afford implantation. Therefore, the biophysical methods of fixation continue to occupy a central position.

In the direction of improving these fixation methods, methods for obtaining casts have recently been modified, volume modeling of the edges of the prosthesis, as well as the location of the edges of structures within the neutral zone, have been practiced.

#### **Purpose of the study:**

Comparison of the definition of the boundaries of the neutral zone during the phonetic activity of muscles and swallowing.

- determination and registration of the neutral zone during muscle movements during swallowing

- determination and registration of the neutral zone using phonetic exercises performed by the patient according to the doctor's instructions

- comparison of the results obtained by the two methods for determining the neutral zone

- assessment of patient satisfaction after rehabilitation with removable prostheses according to three criteria: functionality, retention and stabilization of the prosthesis.

## Materials and methods:

For this study, 30 patients with full adentia, including complete atrophy of the mandible crest, were calculated. The vertical indicator should be the same and controlled by a ruler. The differences between the two methods are compared by measuring the thickness in the frontal and lateral sections of the results. The manufacture of removable dentures, the boundaries of which are within the neutral zone.

## Conclusion

An articulator and facial arch are used to transport the central ratio of the jaws. Photocall every step of the process. Voice recorder for recording phonetic indicators. Impression and acrylic materials. Patients will be monitored for a year and the status and complaints of the patient will be recorded at each visit (every three months).

# References

1. Результаты реализации подпрограммы «Сахарный диабет» Федеральной целевой программы «Предупреждение и борьба с социально значимыми заболеваниями 2007-2012 годы». Под ред. И.И. Дедов, М.В. Шестаковой. *Сахарный диабет. Спецвыпуск*, 2013: 2-46.

2. Дедов И.И., Шестакова М.В., Галстян Г.Р. распространенность сахарного диабета 2 типа у взрослого населения России. Сахарный диабет, 2016, 2(19): 104-112.

3. Аболмасов Н.Н., 2003, Файзуллина Д.Б., 2005.

4.БарерГ.М., ВолковаЕ.А. Заболеванияслизистойоболочкиполостирта // Терапевтическаястоматология: в 3 ч. / под ред. Г.М. Барера. М.: ГЭОТАР-Медиа, 2010. Ч. 3. С. 146.

5. Цепов Л.М., Голева Н.А. Роль микрофлоры в возникновении воспалительных заболеваний пародонта // Пародонтология. – 2009. - № 1. – С. 7-12.

6. Возний А.В. Комплексная оценка функционального состояния органов и тканей полости рта у больных сахарным диабетом с дефектами зубных рядов до и после ортопедического лечения: Автореф. дис.... канд.мед. наук. – Омск., 2003. – 23 с.