



ОДНОМОМЕНТНАЯ УСТАНОВКА ИМПЛАНТАТОВ КАК АЛЬТЕРНАТИВА СИНУС-ЛИФТИНГУ В СЛОЖНЫХ КЛИНИЧЕСКИХ УСЛОВИЯХ



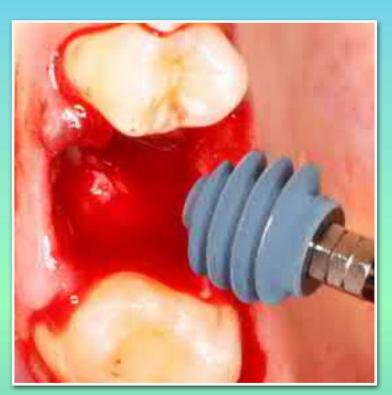


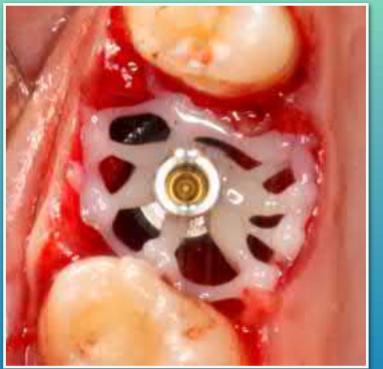
# Immediate Implant Placement as an alternative to Sinus Lifting in difficult clinical conditions

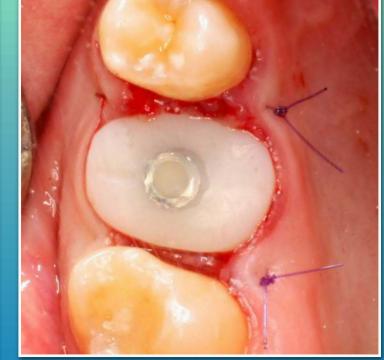
(case report by Dr. Alexander Lysov)





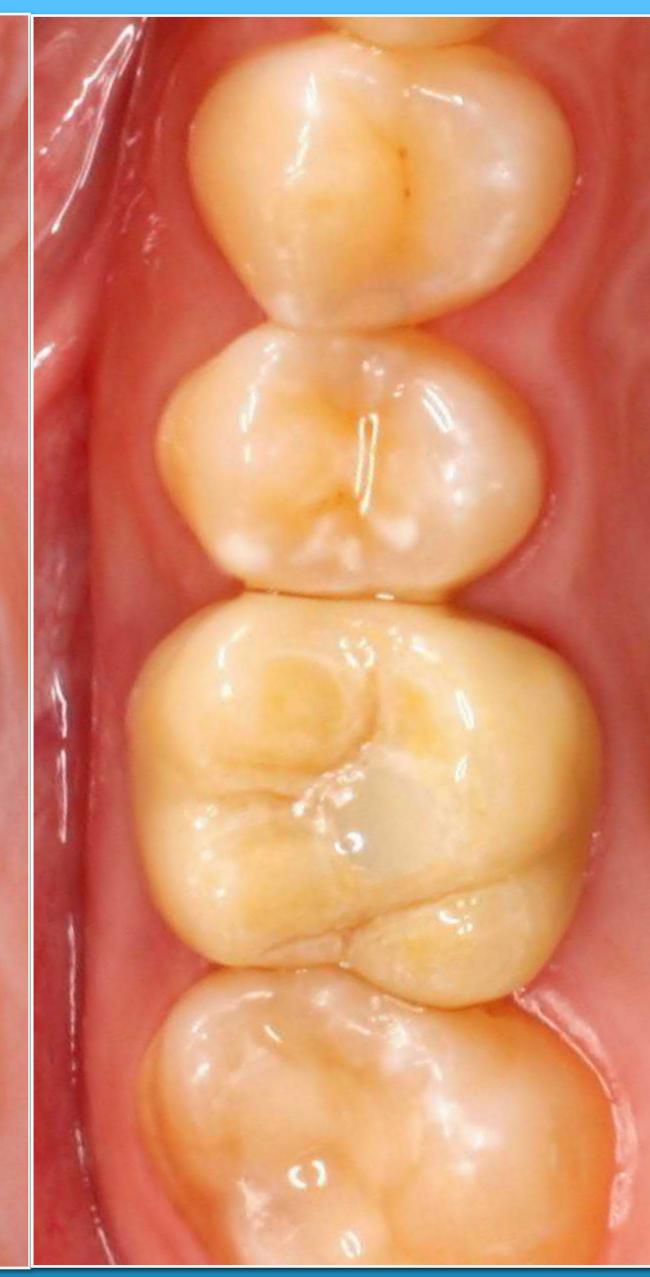












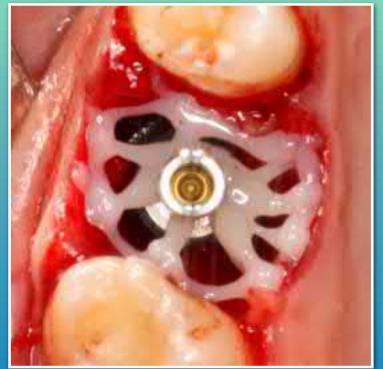
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(case report by Dr. Alexander Lysov, DDS, PhD)



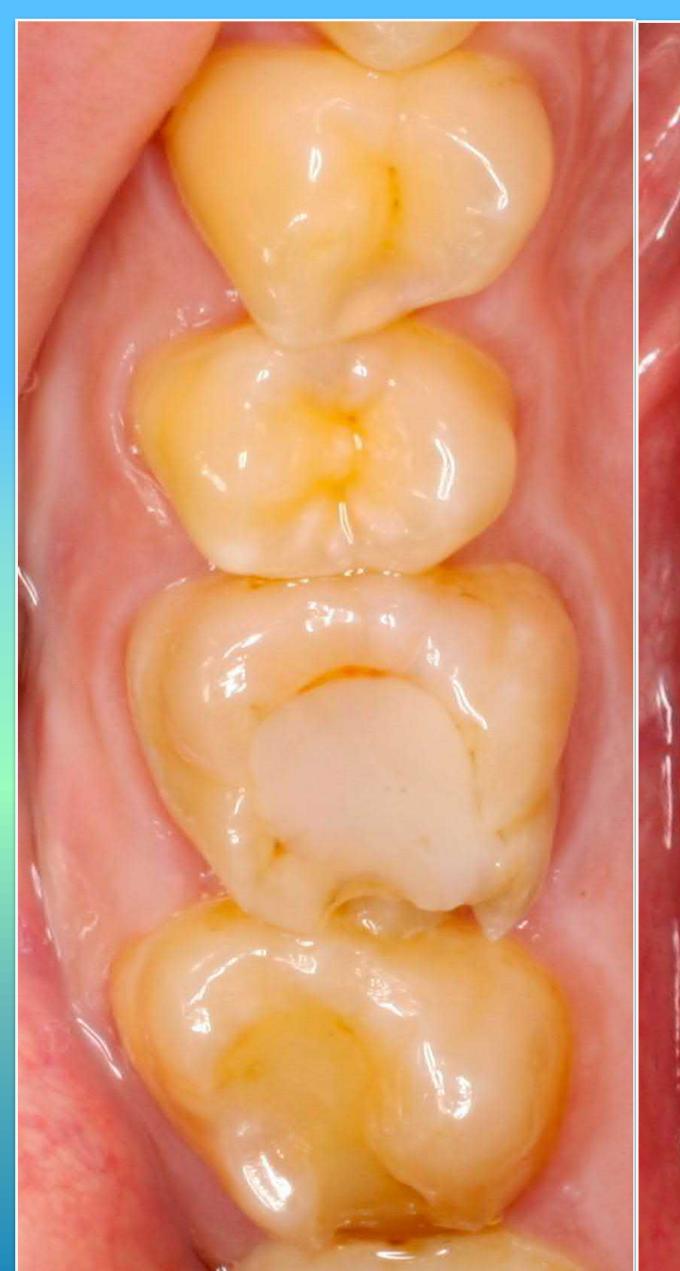




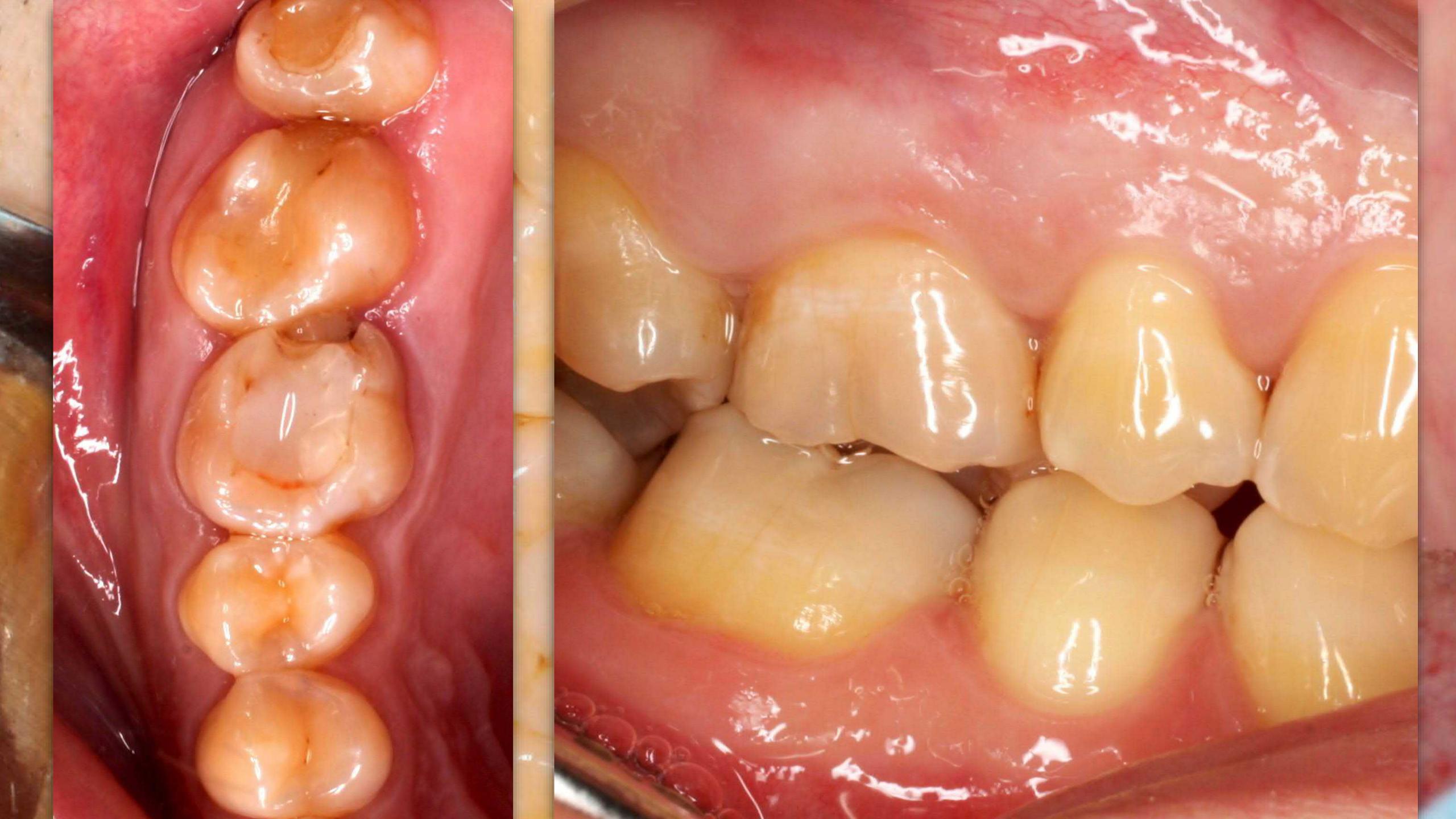




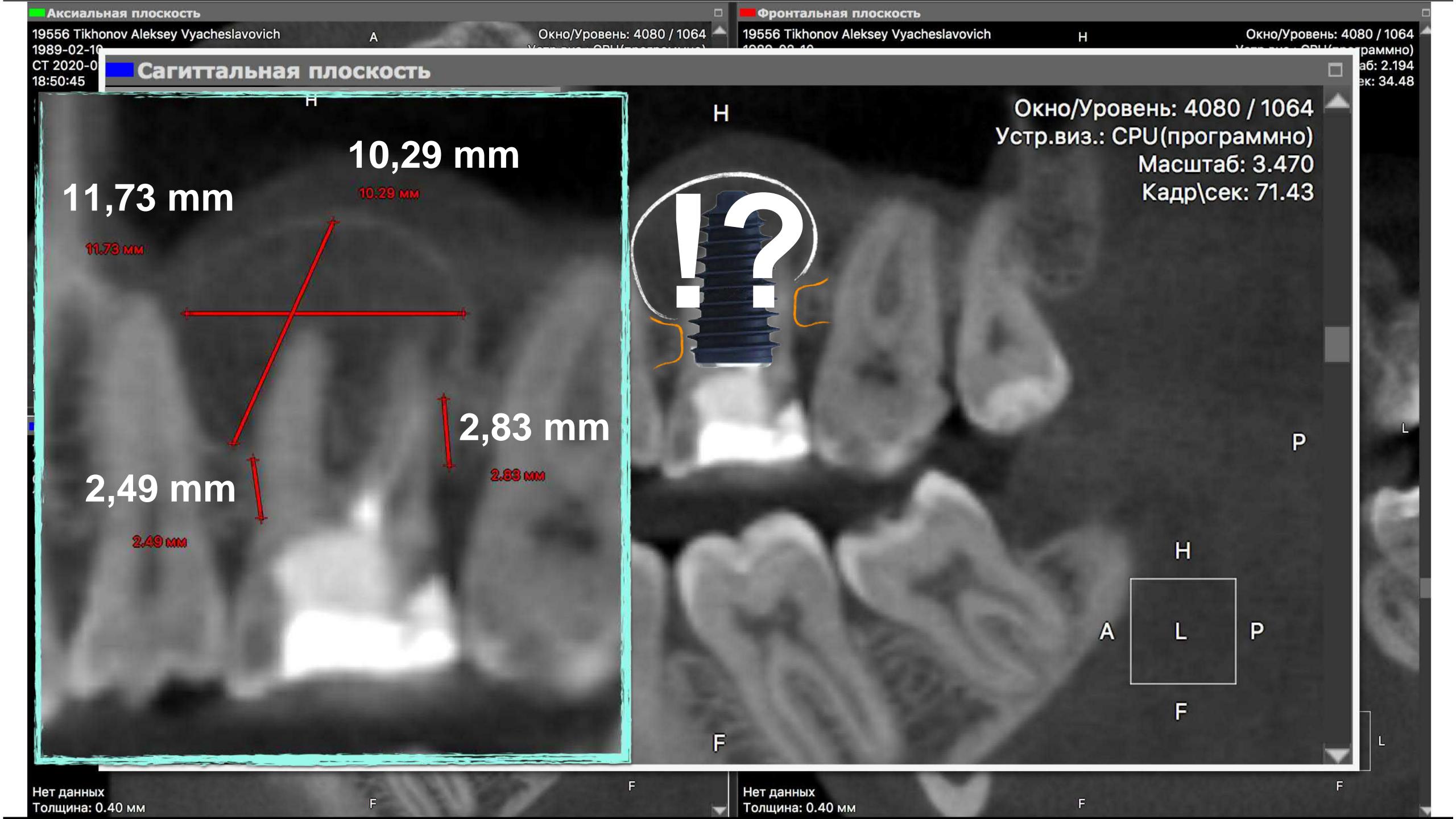






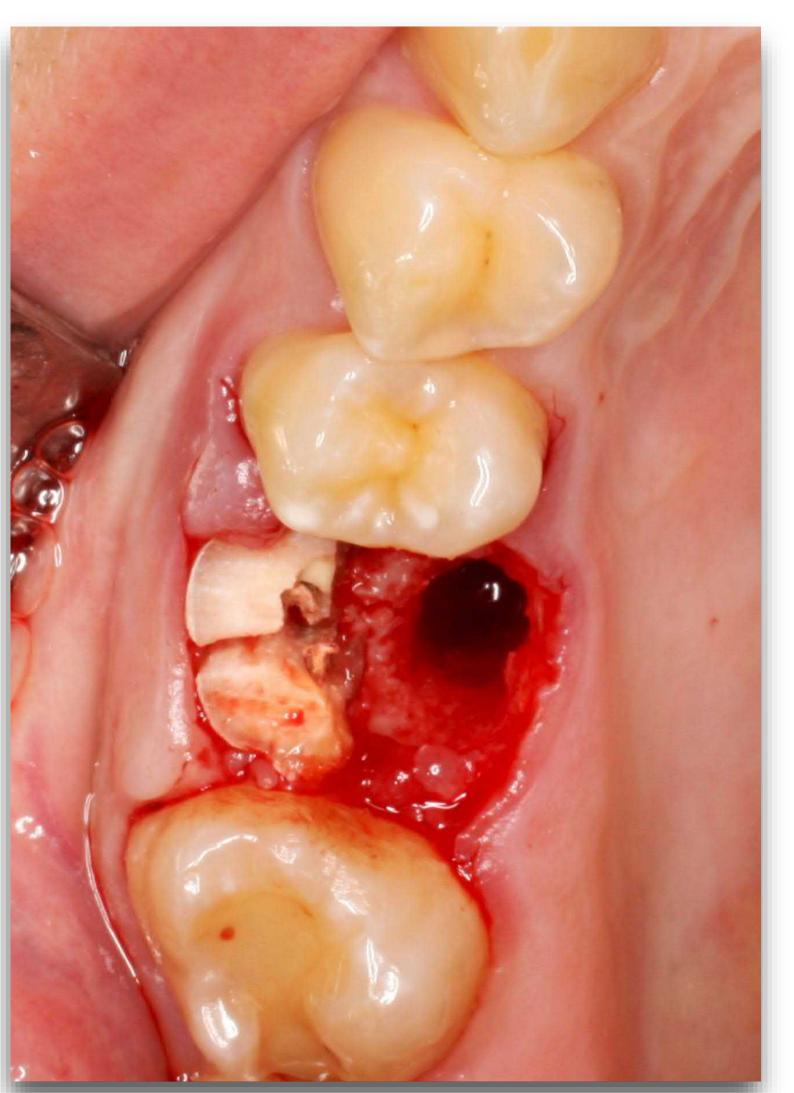


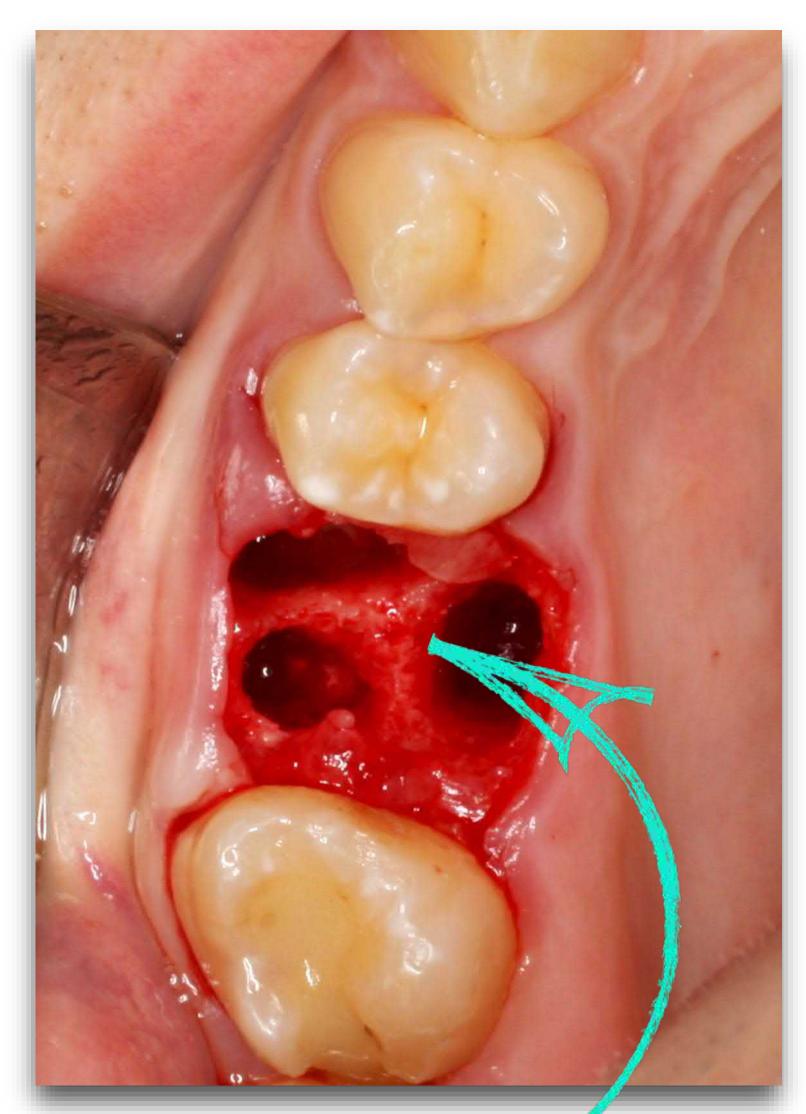




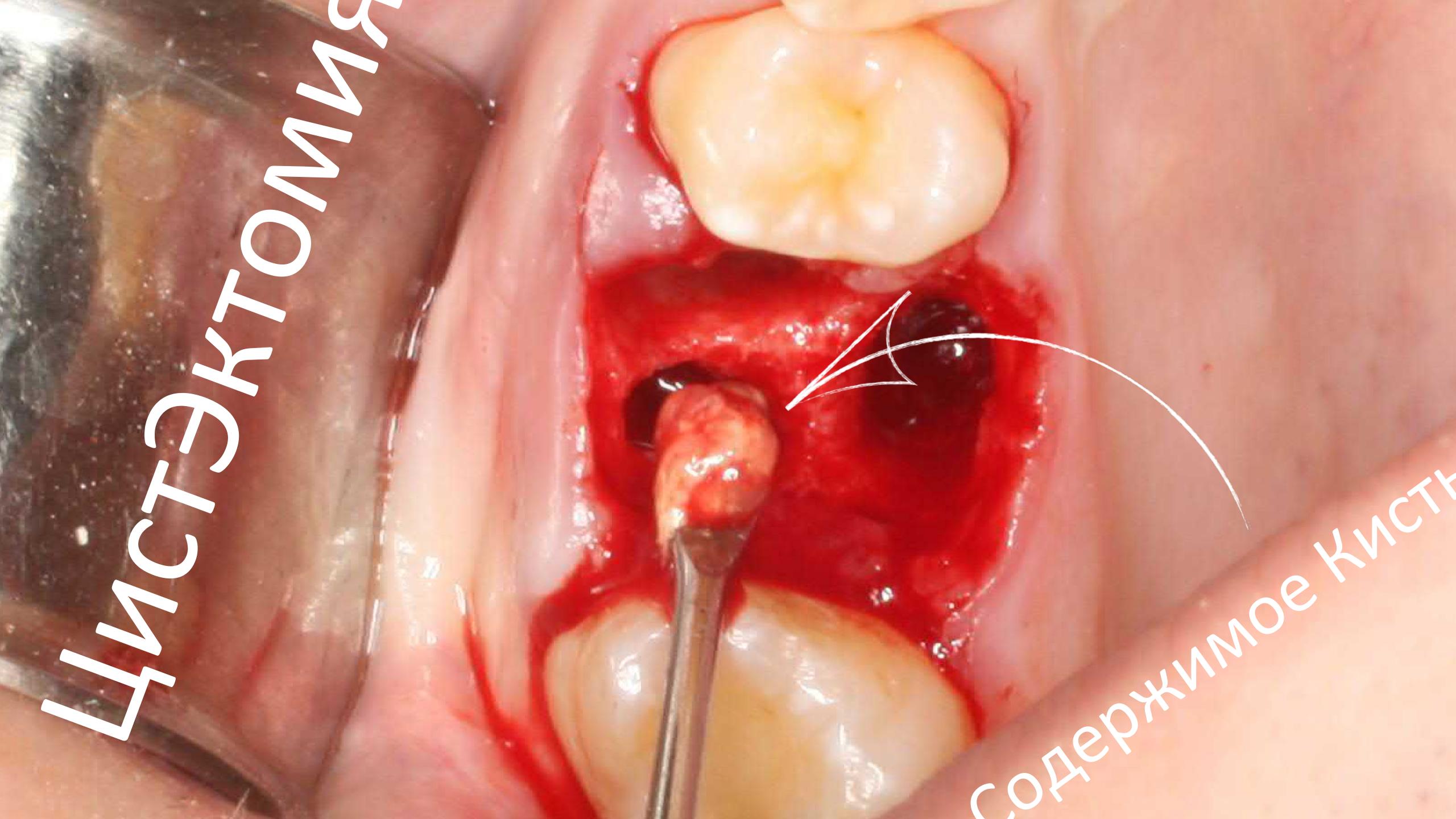
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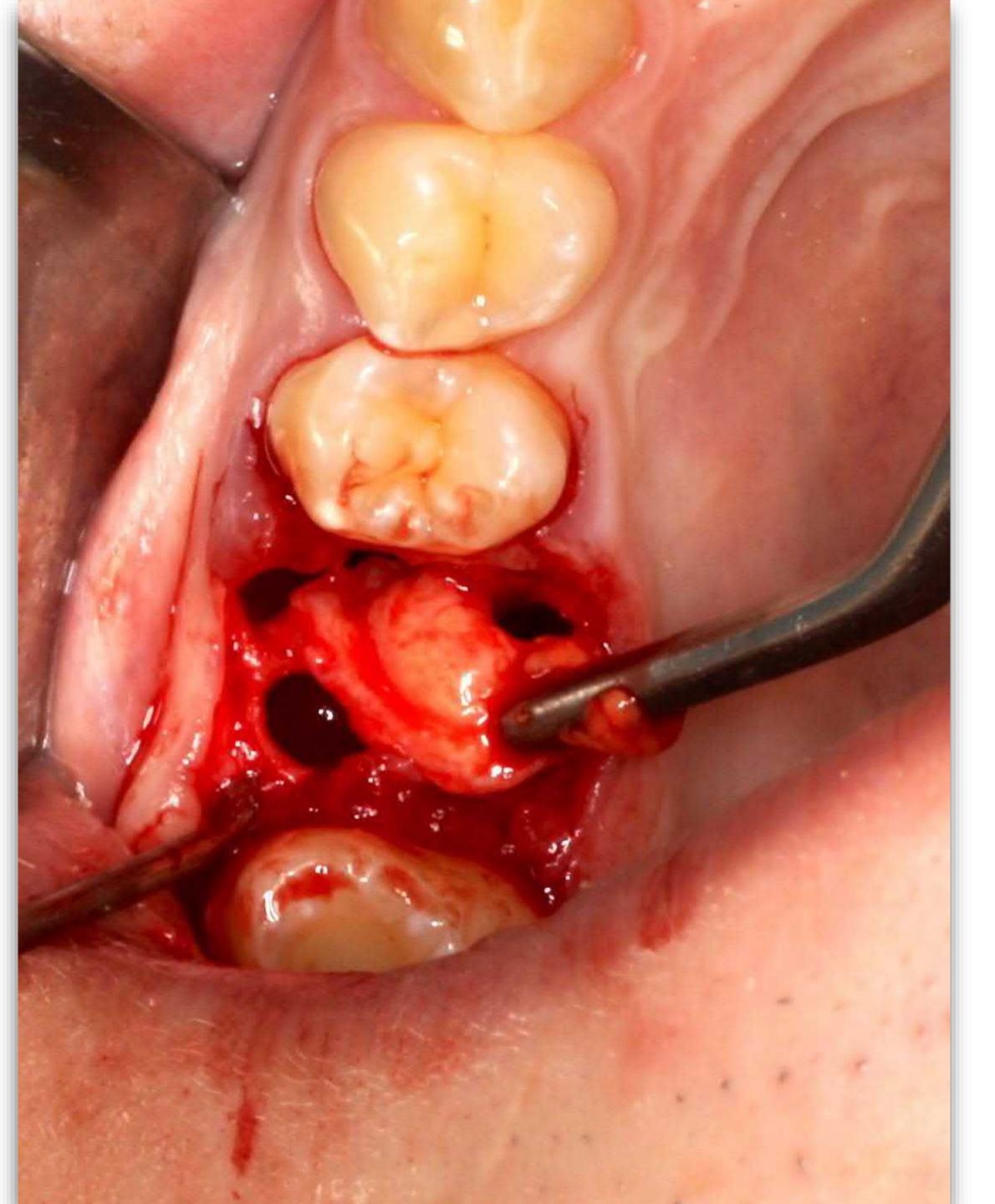


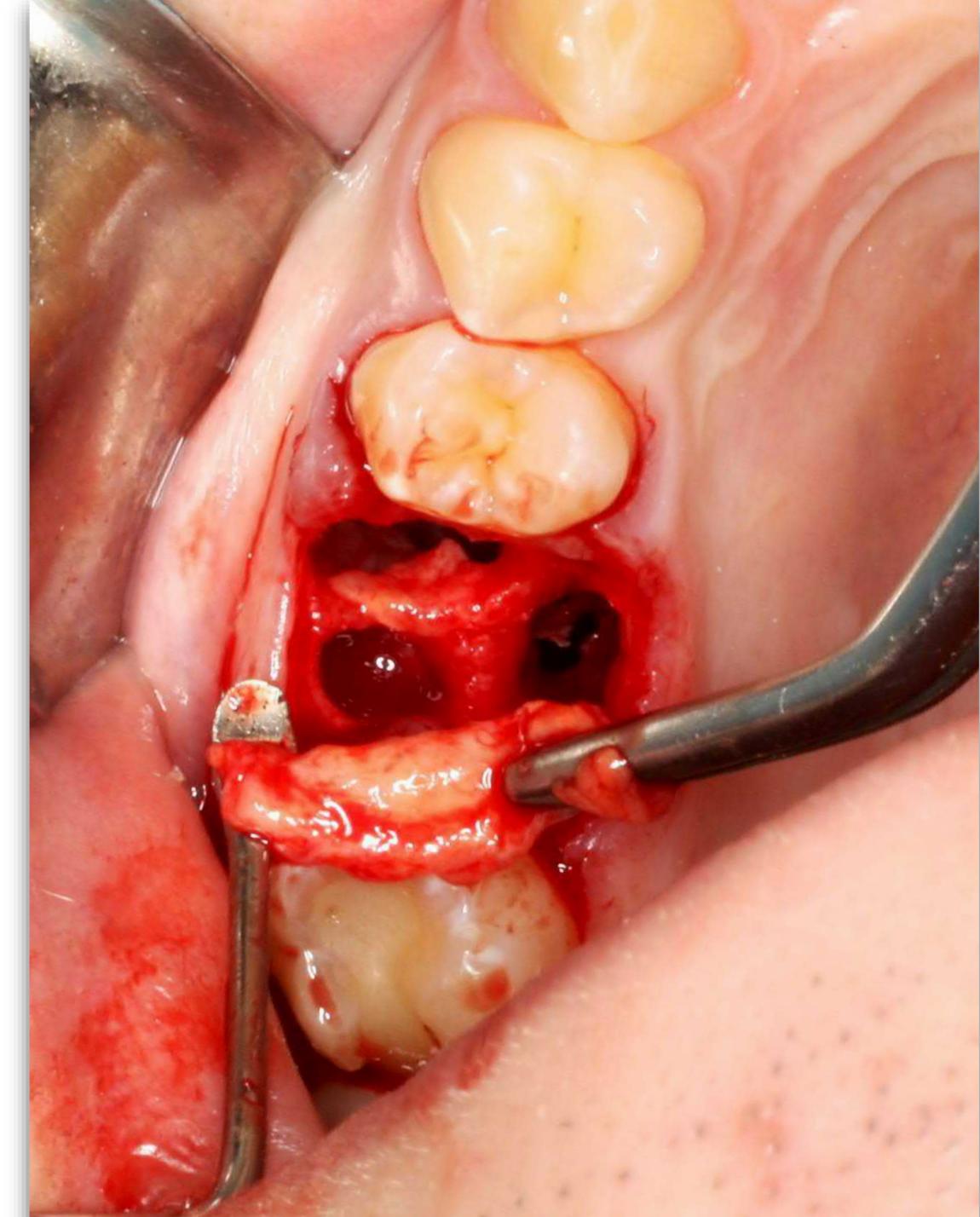


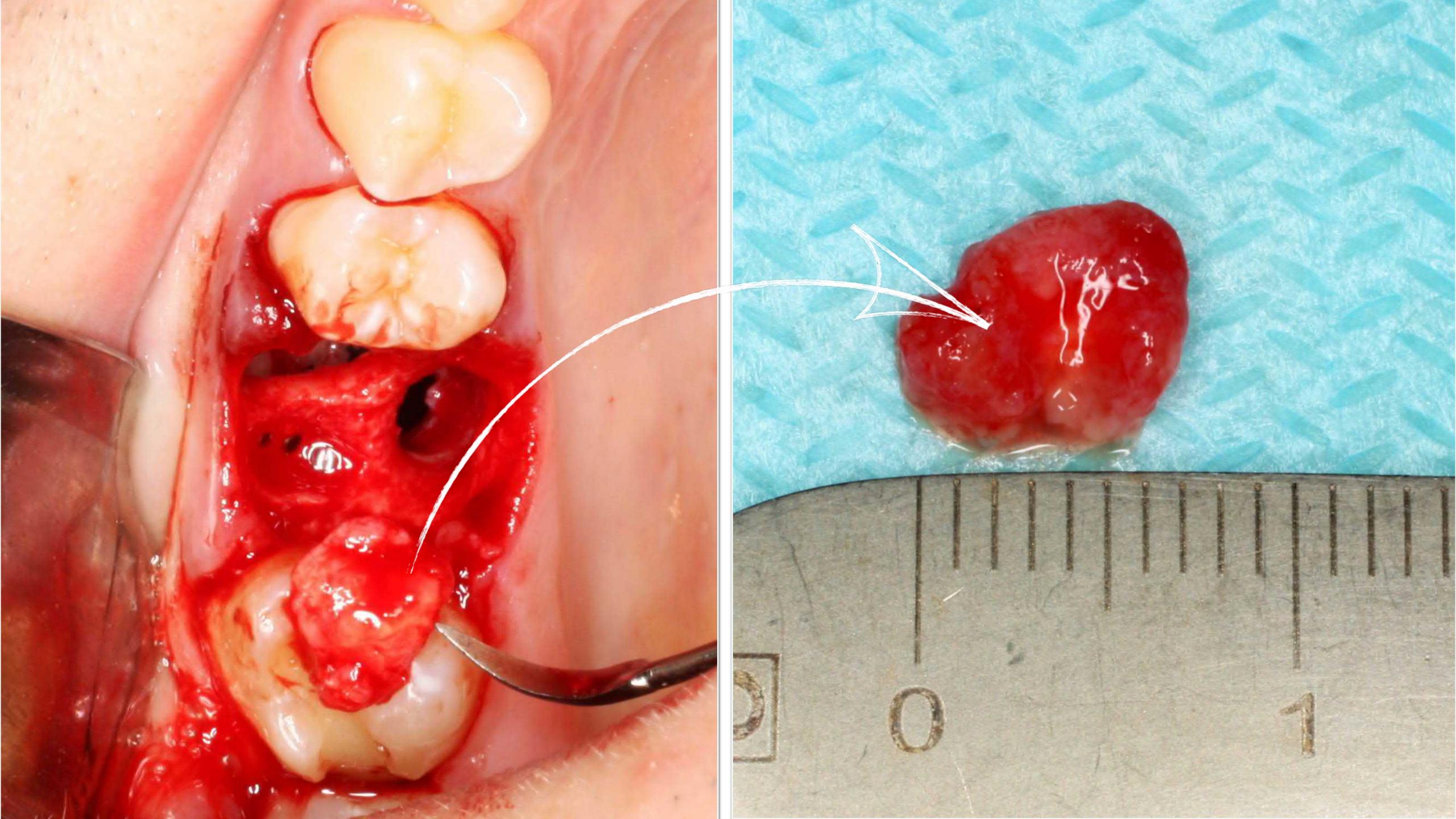


Задача - Сохранить Межкорневые Перегородки





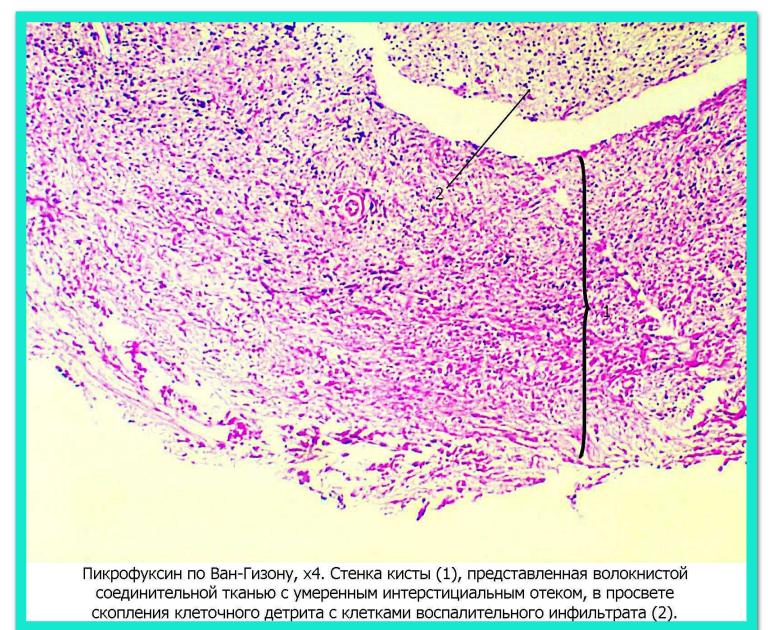


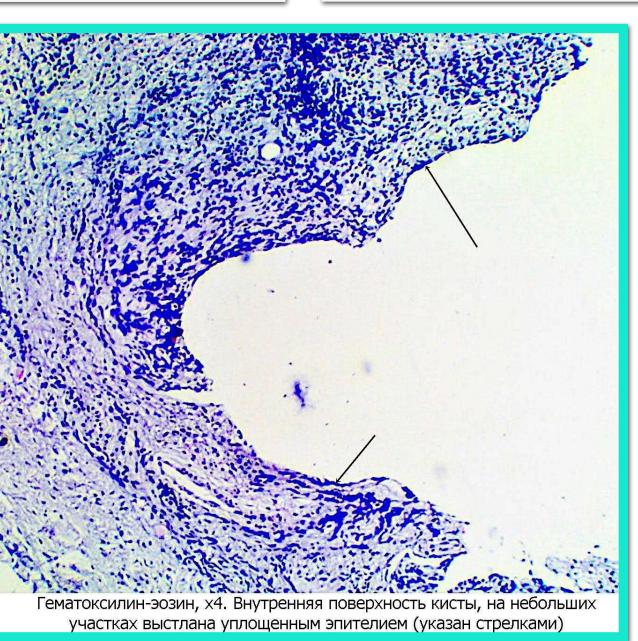


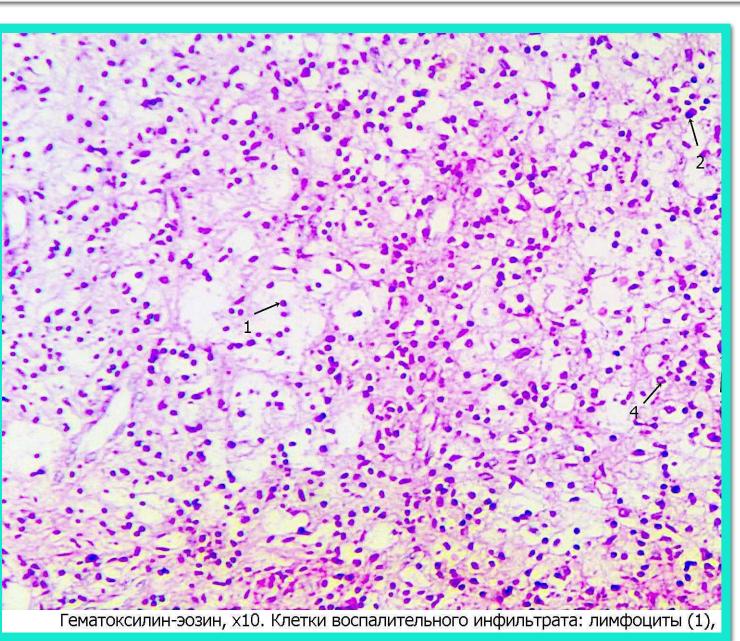


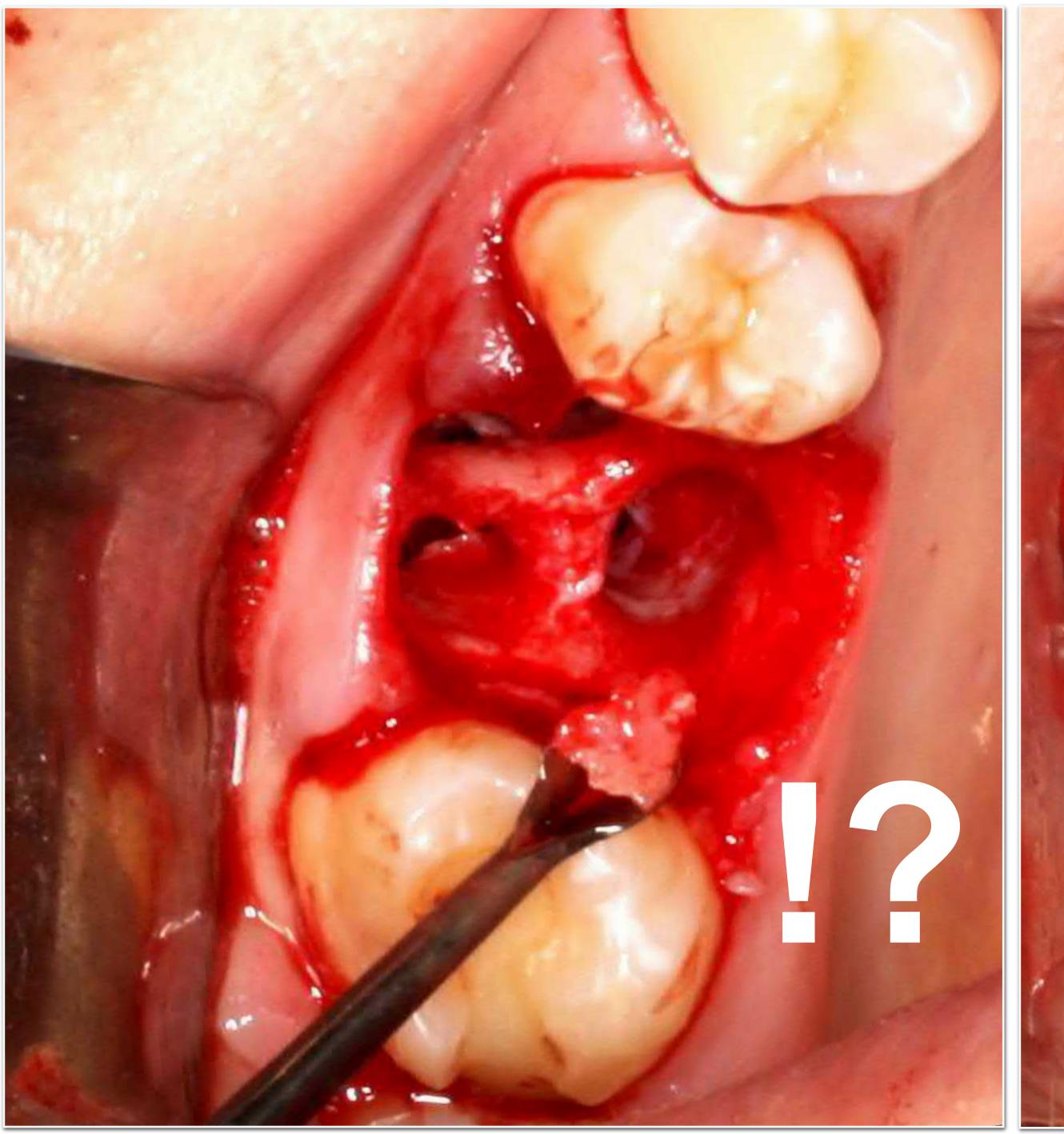


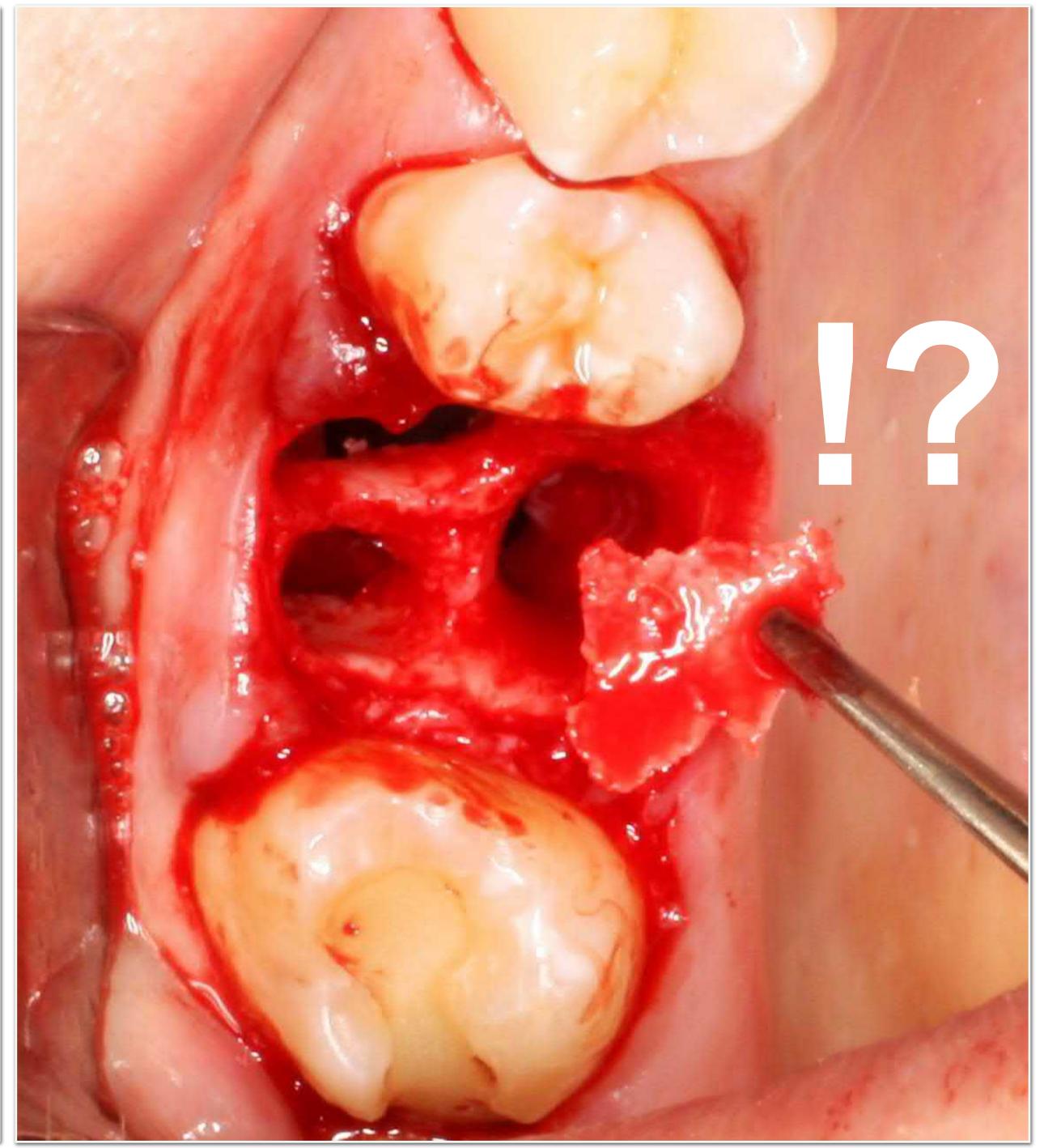


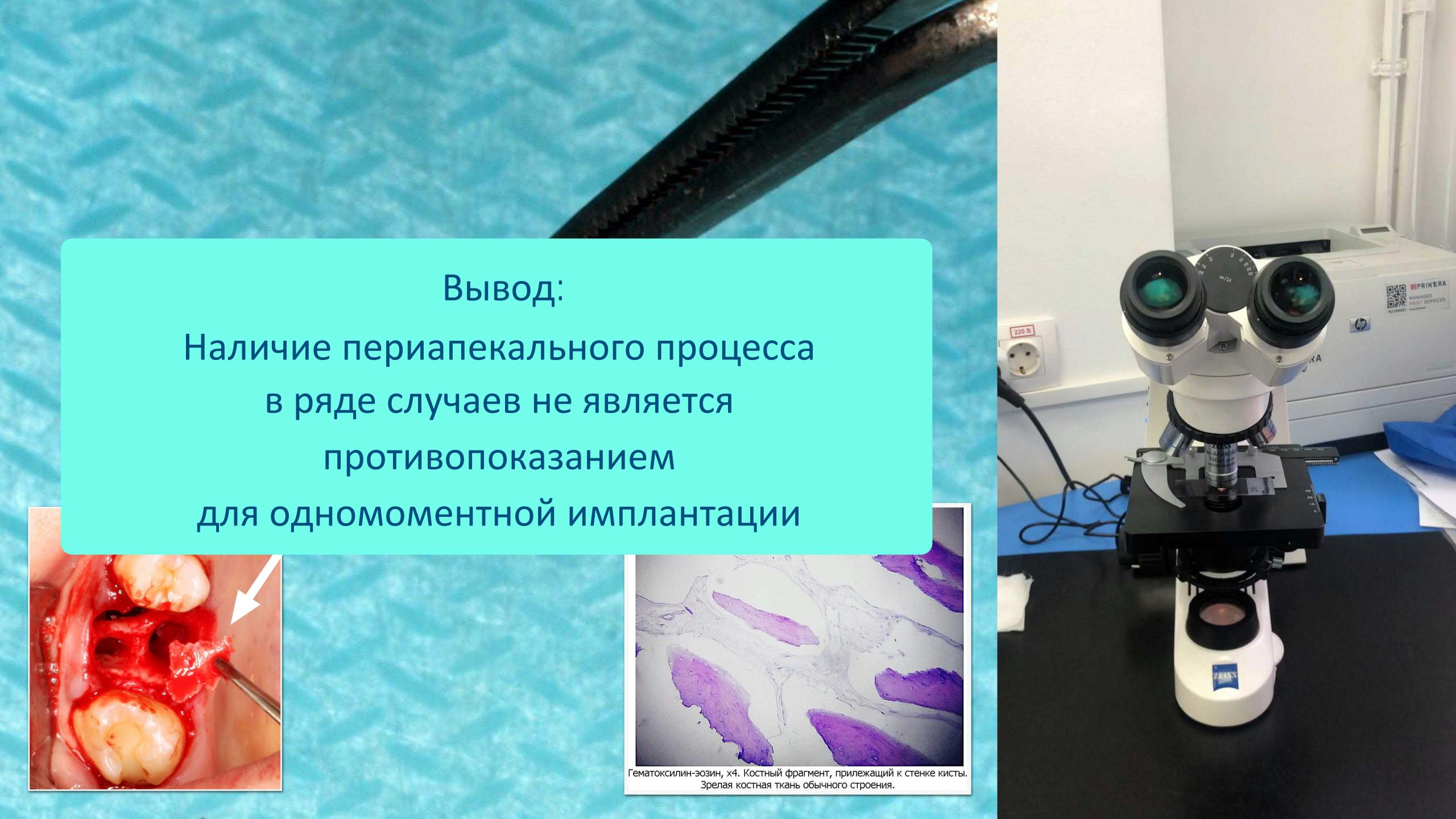


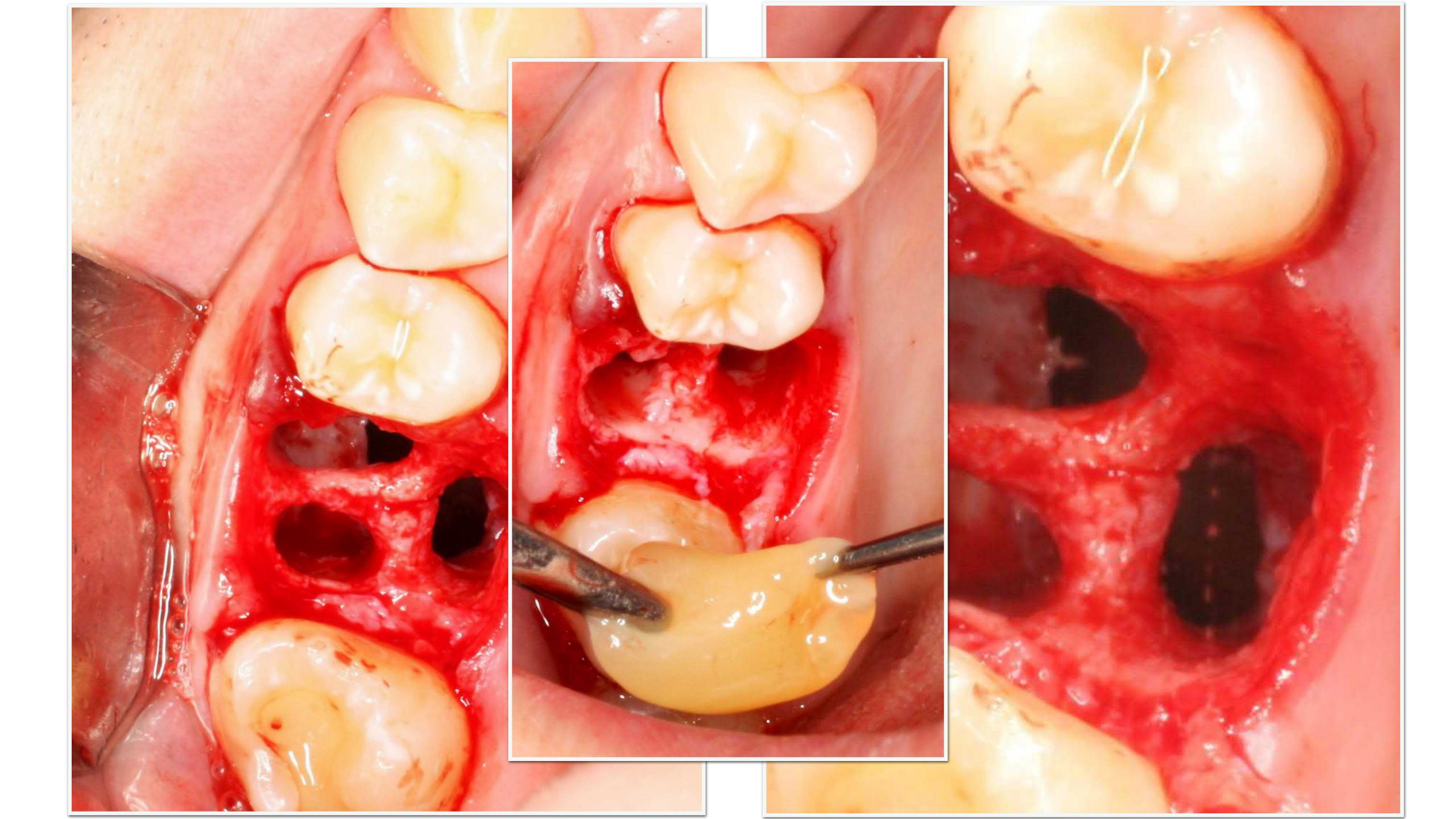


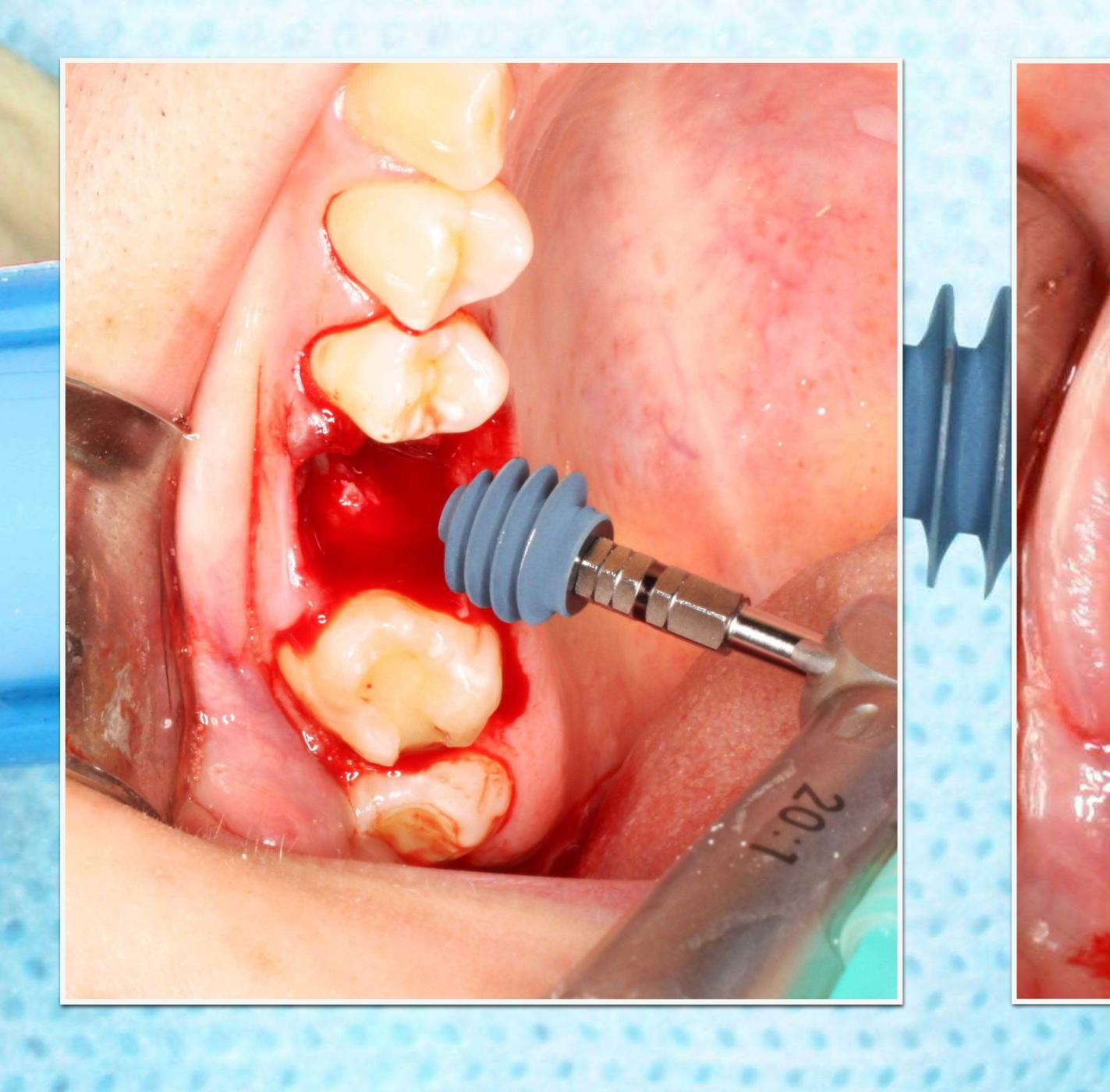


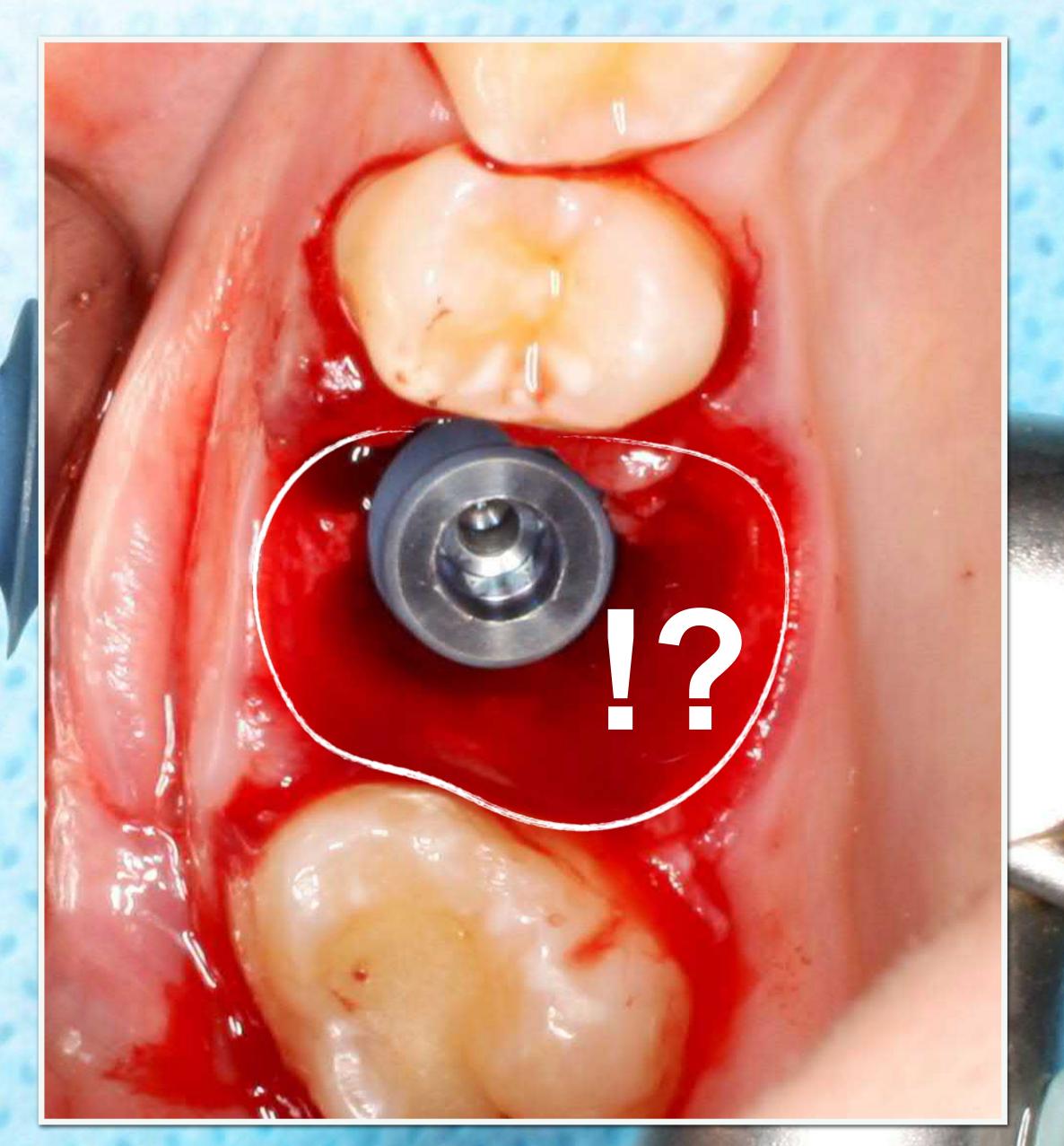


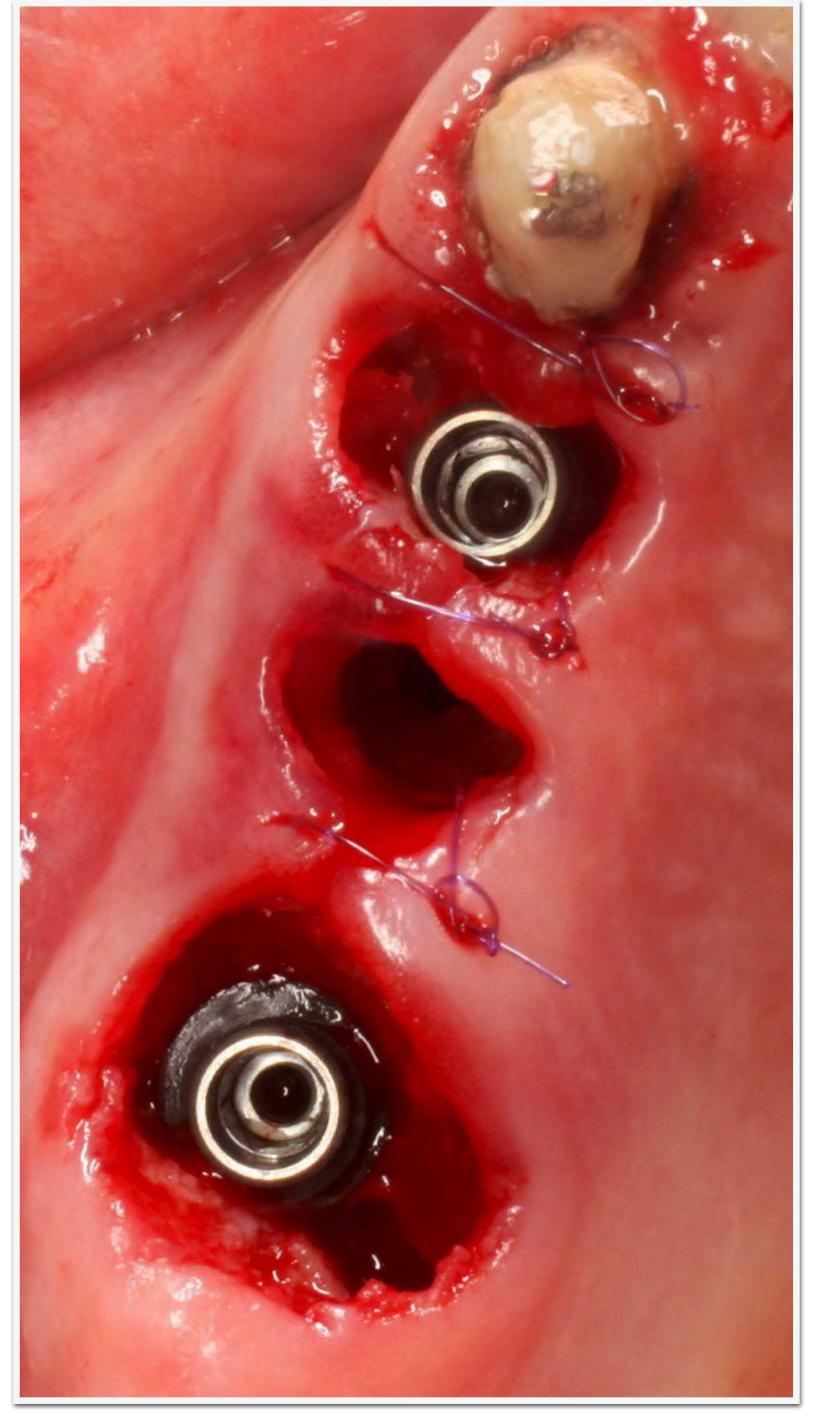


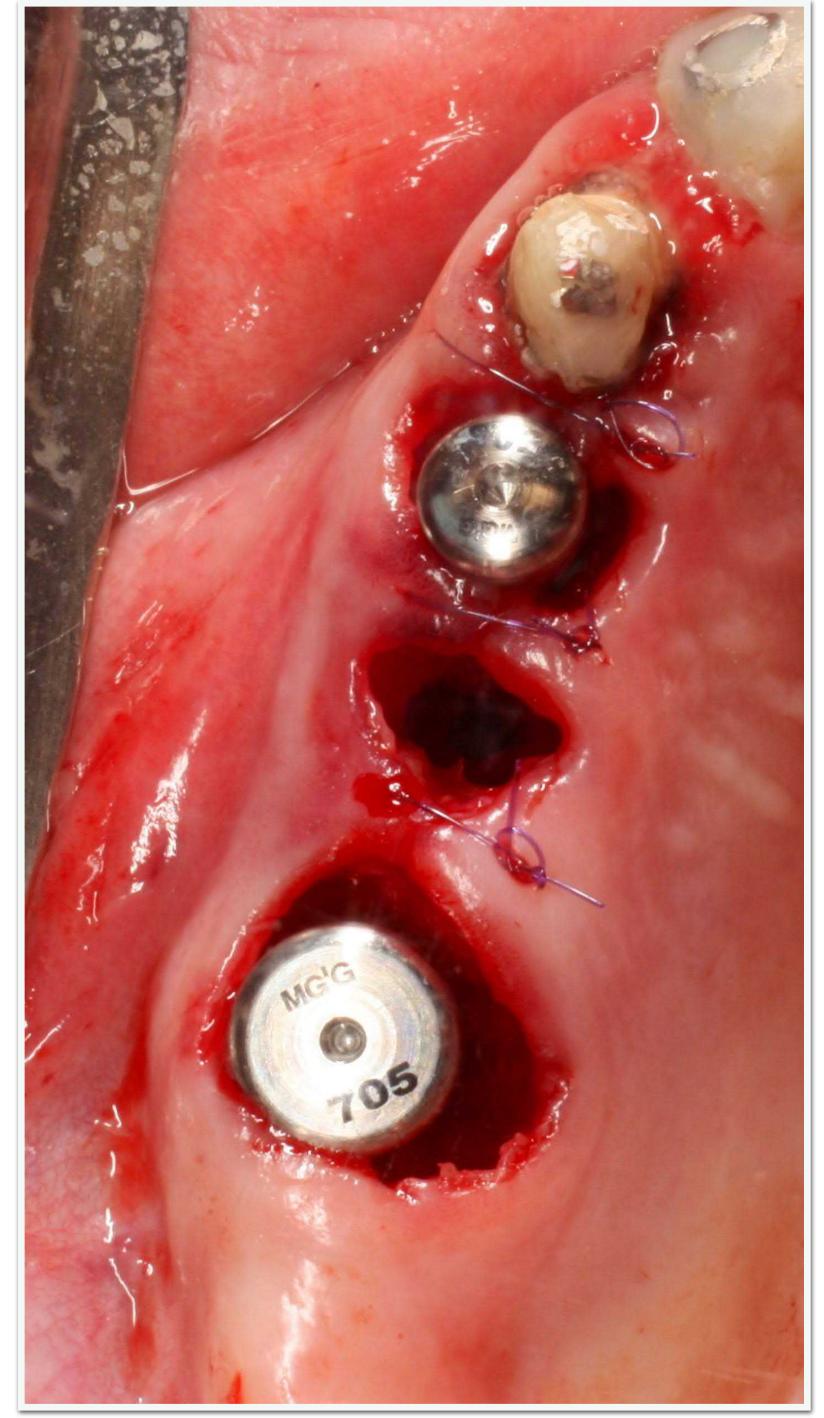












## A New Concept in Maintaining the Emergence Profile in Immediate Posterior Implant Placement: The Anatomic Harmony Abutment



Richard Akin, DDS, MD

As the knowledge base in the demanding realm of esthetic management of anterior implant sites continues to expand, there exists a void in the literature on solutions to accelerate posterior implant protocols. This article proposes a new protocol using the anatomic harmony abutment for immediate molar implant placement. This technique preserves the anatomic emergence form with sutureless implant site sealing and improves the predictability of final restoration fabrication and delivery. The purpose of this report is to describe this concept and its numerous benefits to patients, surgeons, laboratories, and restorative dentists.

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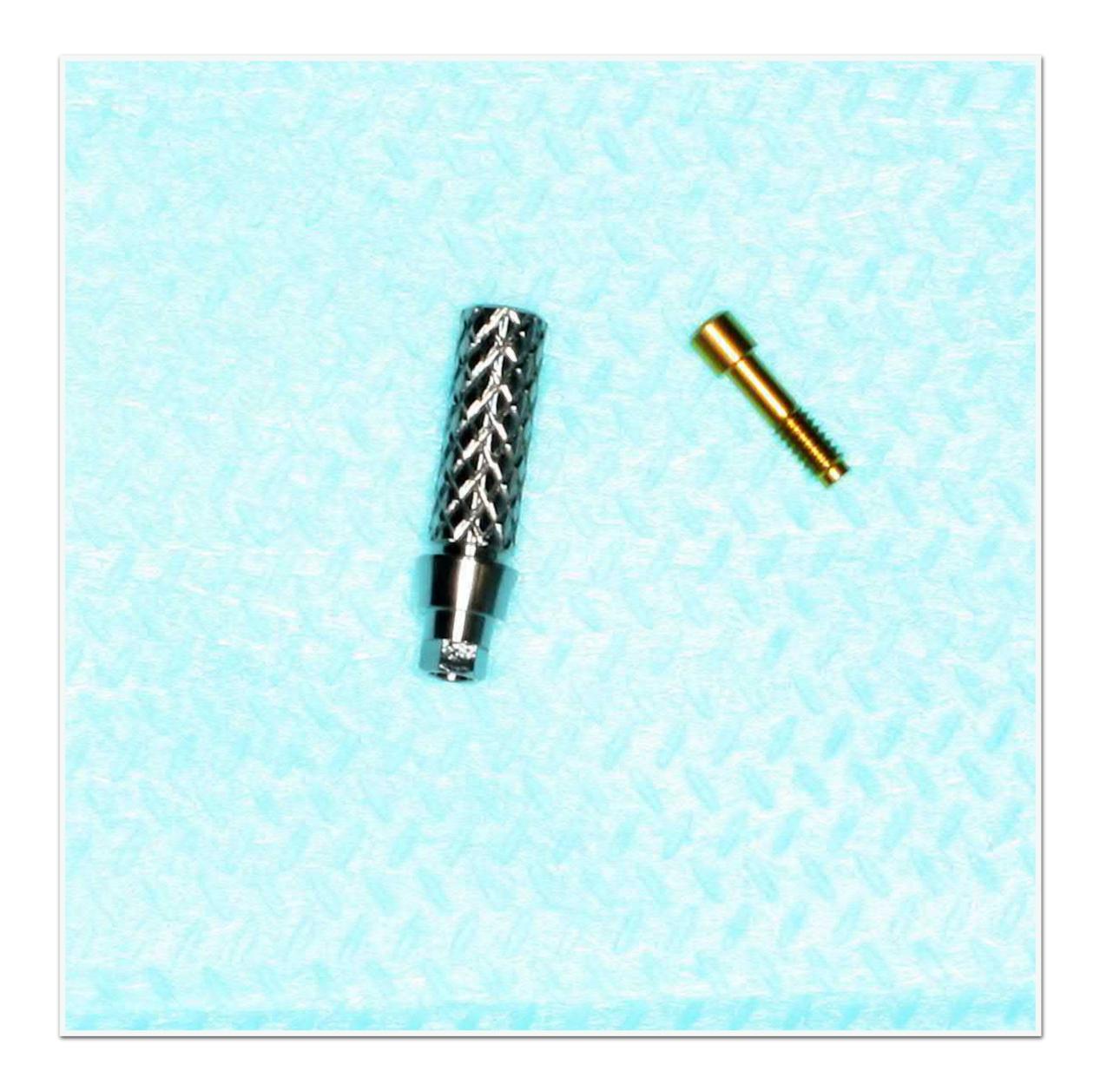
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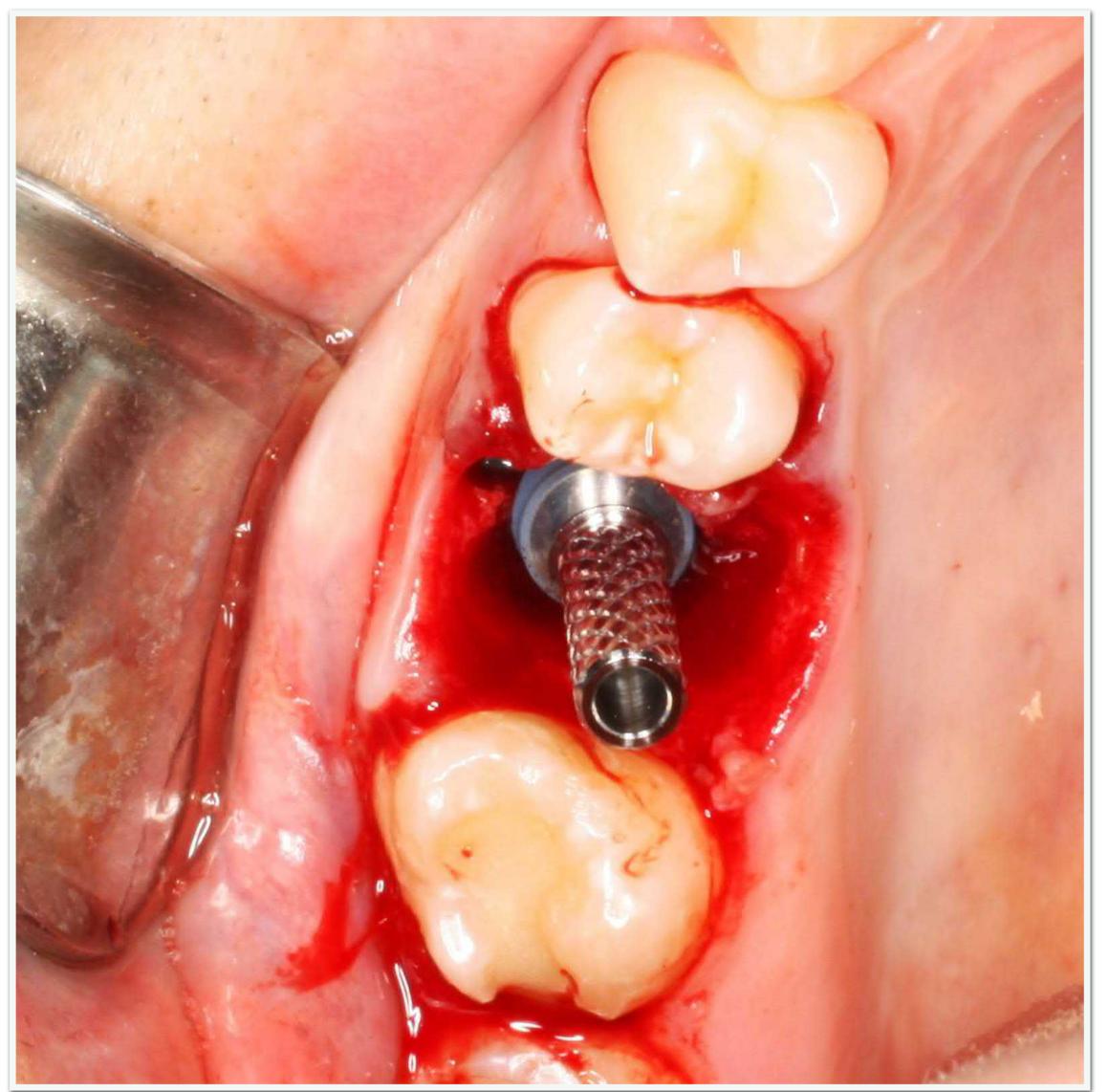
# Richard Akin, DDS, MD

#### The Anatomic Harmony Abutment



FIGURE 9. Abutment schematic.





Research Highlight 2021:Vol. 1:No. 2: 18-27

### Prosthetic and Surgical Aspects of **Achieving Functional and Aesthetic** Success of Implantological Treatment **Using Individual Suprastructures**

Lysov Alexander, DDS, PHD Belokhvostikov Egor, DMD

#### Abstract

Currently, dental implantation is widely applied to replace lost teeth. After tooth extraction, hard and soft tissues defect is inevitably formed, which, due to delayed implantation, is alleviated by various methods of preserving the socket. In the case of immediate implantation, it is necessary to alleviate the defect of hard and soft tissues, to create an anatomically correct framework to form a natural gum contour corresponding to the extracted tooth group specificity. At the same time, to achieve the success of implant treatment, the dentist shall take into account many factors. The use of individualized suprastructures at the surgical and prosthetic stages of treatment allows achieving a predictable and optimal result both in functional and aesthetic terms. The purpose of this article is to describe, by the example of several clinical cases, the peculiarities of the manufacture and use of an individual healing abutment, an individualized impression coping, followed by the manufacture and fixation of the final restoration, which preserves and maintains the formed natural contour of tooth eruption. The presented work provides the data of a comparative analysis of various methods of manufacturing suprastructures with a description of their advantages and disadvantages. Recommendations are provided on the technology of treatment implementing the individualized suprastructures, the observance of which will have a positive effect on the results of rehabilitation of patients with the application of dental implants.

#### Keywords

Dental implantation, individual healing abutment, dental implant-supported prosthetics, soft tissue management, biological width.

#### Introduction

Currently, dental implantation with subsequent prosthetics is widely used in the partial and complete absence of teeth. The success of implant treatment [1] depends on many factors that shall be considered by the surgeon and prosthodontist, both at the planning and manipulation stages [2]. The absence of one or more teeth hurts the condition of the maxillary ridge and the dentition as a whole. In 2005 Mauricio G

Araújo et al. described the changes in the alveolar structure that occur after tooth extraction. The authors identified two intersecting phases of bone resorption. There is a vertical decrease of bone tissue in the first phase, then the bone decreases in volume in the horizontal direction [3]. It is known that after tooth extraction, soft tissues tend to fill the space that appears in the socket leading to their volume increase. This process is the most active in

the first two weeks after extraction and depends on the thickness of the alveolar bone walls. An increase in the volume of soft tissues is more pronounced with a thin phenotype of the vestibular plate during

flaps to form two small flaps on the pedicles that later mobilize, rotate, and place in the interproximal space between the SHAs [11]. The methods mentioned above are applicable at a two-stage protocol of the

2021:Vol. 1:No. 2: 18-27 Research Highlight

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Most of them describe manipulations that consider occurs. the reduction of the amount of bone resorption as Over the last five years, works describing the pedicle from the palate are performed.

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the first two weeks after extraction and depends on flaps to form two small flaps on the pedicles that later the thickness of the alveolar bone walls. An increase mobilize, rotate, and place in the interproximal space in the volume of soft tissues is more pronounced between the SHAs [11]. The methods mentioned with a thin phenotype of the vestibular plate during above are applicable at a two-stage protocol of the the healing period after tooth extraction than with a implant treatment. It implies the installation of the SHA thick one [4]. At the moment, there are many ways at the second surgical stage that certainly increases of preserving the socket of an extracted tooth before both the patient's discomfort and the duration of treatment. The additional risk of complications also

the main purpose, but at the same time, preserving methods of gum shaping during simultaneous the natural contour of soft tissues remains relevant dental implantation, considering the individual and necessary. Based on the available data, one can characteristics of peri-implant tissues, have conclude that after healing the sockets, the natural been published. So, in 2016 Akin R. described profile of tooth eruption is most likely to be lost due manufacturing Individual Healing Abutment (from to the unpredictability of the bone atrophy and the now on IHA) by a direct method on the day of final position of the gums [8, 9]. To create the contour surgery. The essence of the technique is as follows. of the gums during tooth extraction and immediate After low-traumatic tooth extraction, a dental implant implantation, the role of frames supporting soft with fixed impression transfer is installed in its socket: tissues is performed by standard healing abutments, its surface is covered with an adhesive. Further, the as a rule (from now on SHA). This suprastructure composite-resin material is applied to the transfer, has been known and widely used since long, but adapted with a blunt spatula along the contours of has several disadvantages. For example, SHA has a the socket, and polymerized using a LED lamp. Then cylindrical shape that, as a rule, does not correspond IHA is removed from the implant for finishing. Thus, a to the natural profile of teething, being of oval shape suprastructure that repeats the shape of the socket in molars and tending to a triangle shape in the is produced. It also serves as a frame for managing frontal group of teeth. The largest sizes of SHA do not soft tissues corresponding to the natural contour of exceed 7-8 mm in diameter, and this is still less than tooth eruption [12]. Subsequently, various studies the diameter of the socket of the removed molar. For were carried out on the use of IHA to contour the these reasons, additional manipulations have to be gums, for example. In 2017 Lambert J. Stumpel and used to compensate for the soft tissue defect during co-authors proposed an indirect method of making tooth extraction. In 2017, a technique for creating a IHA using an alginate jaw model. At the same time,  $\hbox{soft-tissue buffer zone with simultaneous implantation} \quad \hbox{before the surgical intervention, an impression is}$ in the lateral part of the upper jaw was described. At taken from the patient. Then a jaw model shall be the first surgical stage, tooth extraction, immediate made from the alginate mass, from which the crown implantation, and soft tissue management surgery part of the tooth is removed with a scalpel, and the using a rotated connective tissue autograft on a socket is processed using a spherical bur to imitate a defect in hard and soft tissues. Further, the light At the second stage, the SHA is installed. According cured composite is used to model the body of IHA to the authors, this technique reduces the risk of and four fixing wings that rest on the edges of the complications of implant treatment by creating well at the buccal and lingual walls. Afterward, conditions for the biological width in the coronal they are polymerized using a LED lamp. A hole direction, increasing the thickness and volume of is prepared in the abutment body made by the soft tissues above the dental implant platform [10]. method described above to adapt the temporary The method of soft tissue management proposed by structure to the titanium cylinder fixed to the implant. P. Palacci exists. During the installation of the SHAs, Afterward, IHA is transferred from the model into semilunar incisions are made on the mucoperiosteal the oral cavity [13]. In 2019 a group of researchers

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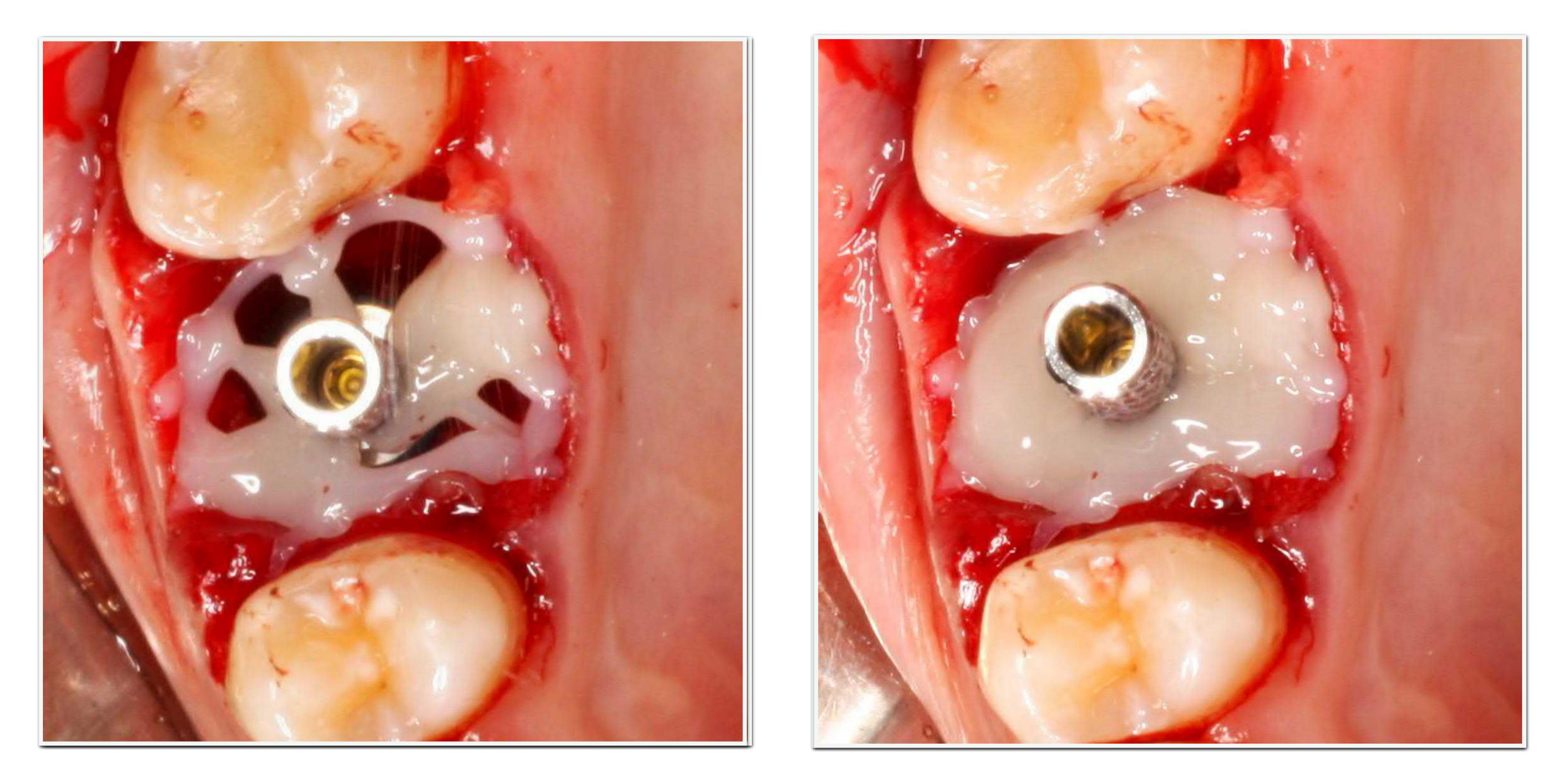
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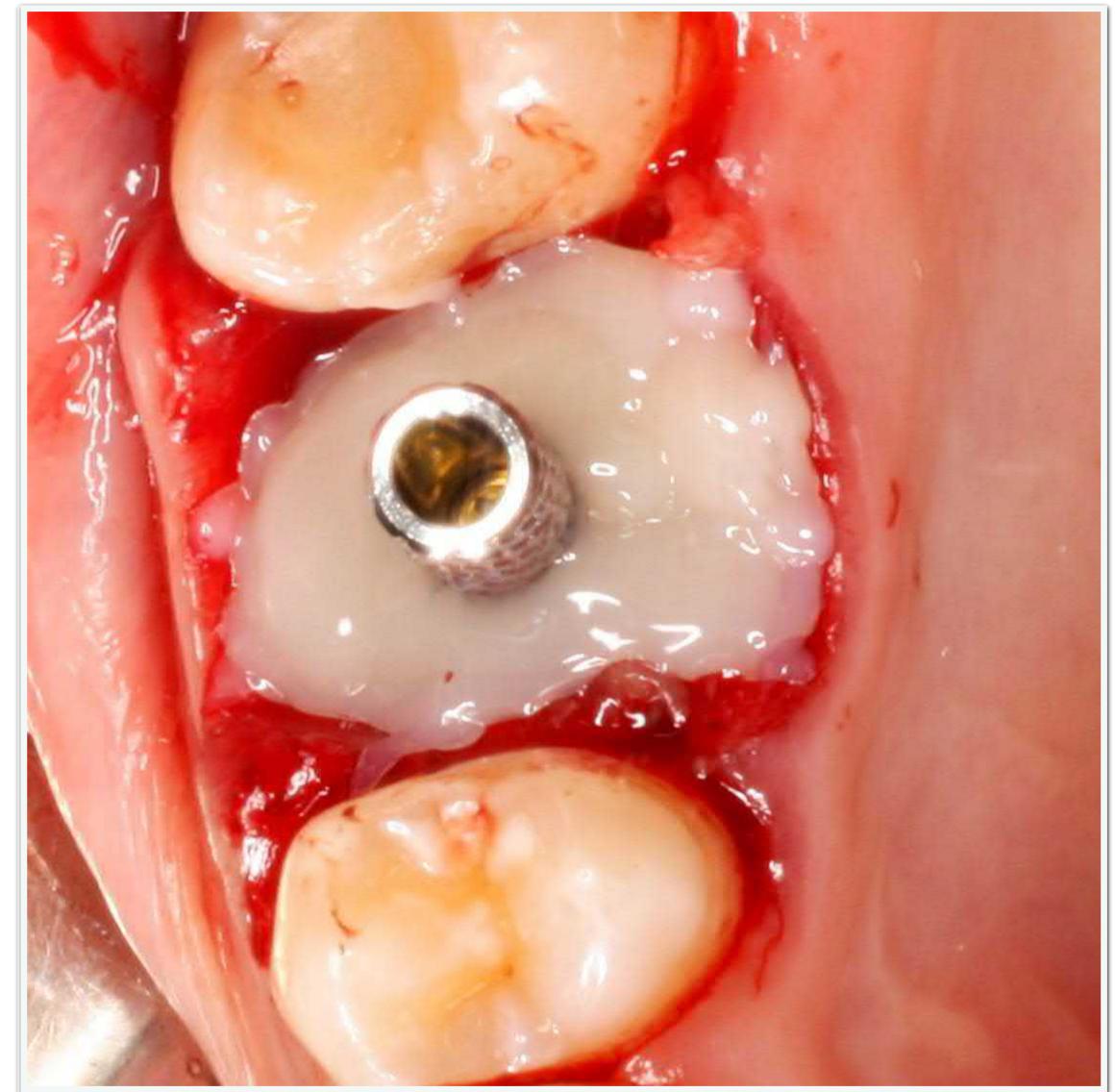
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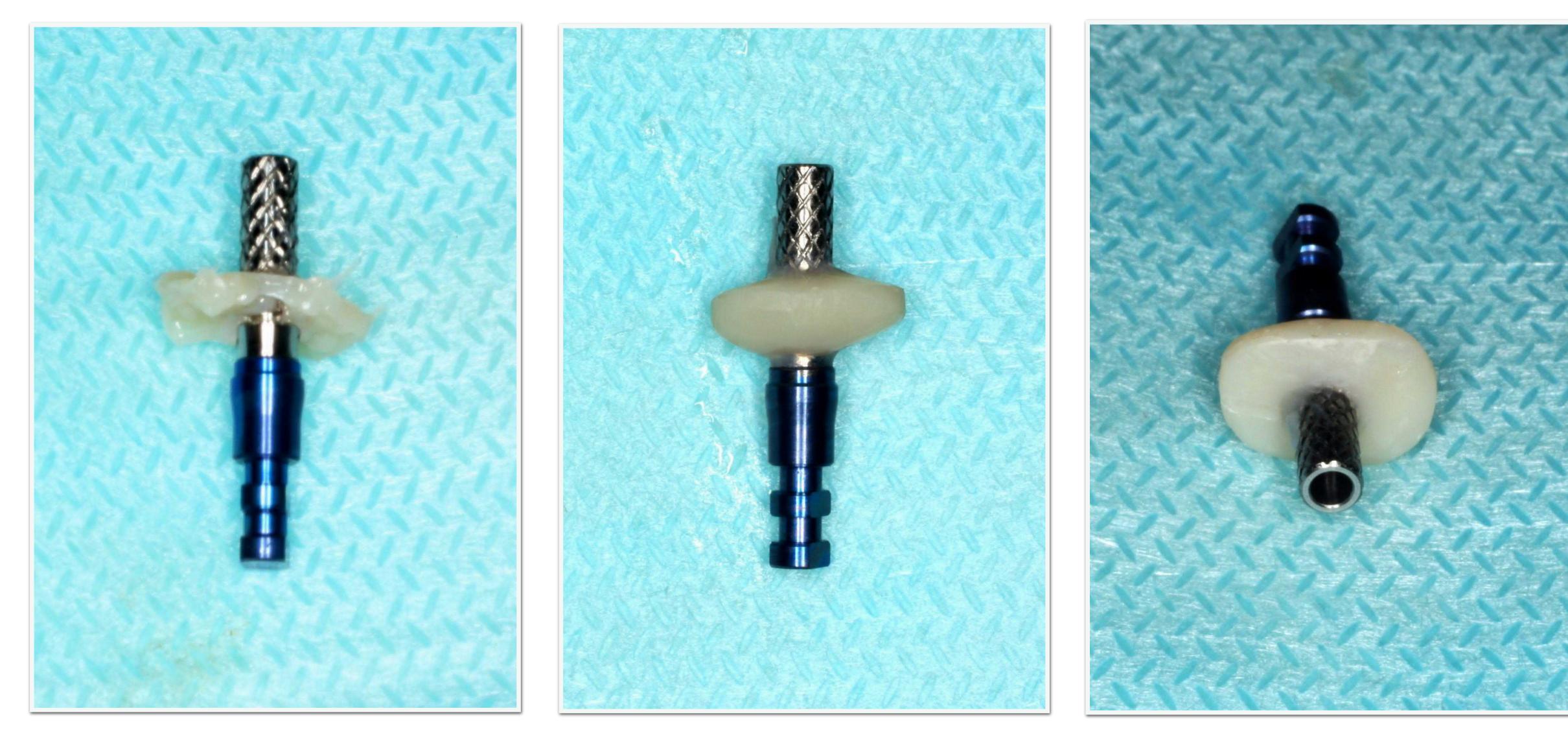
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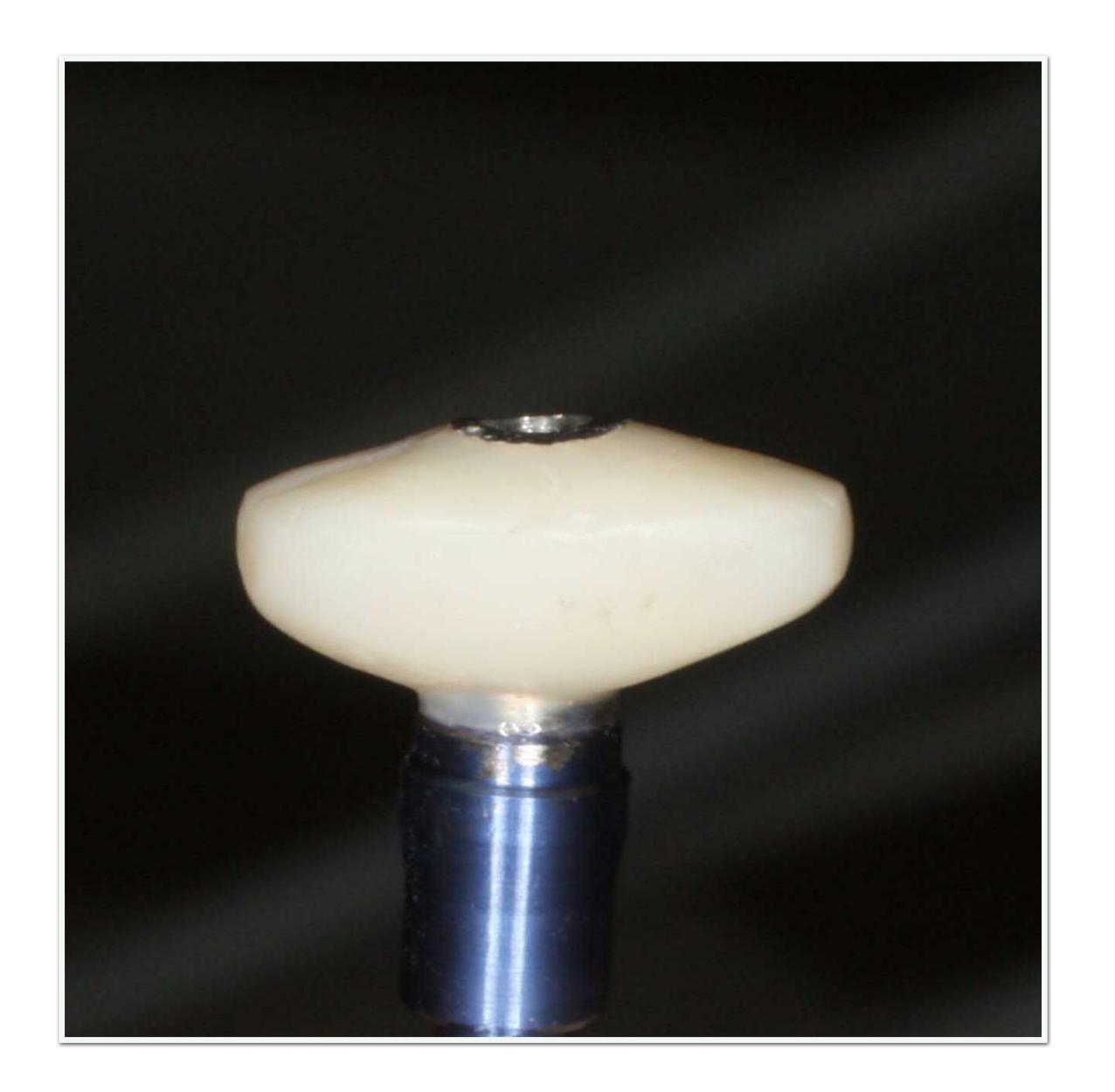


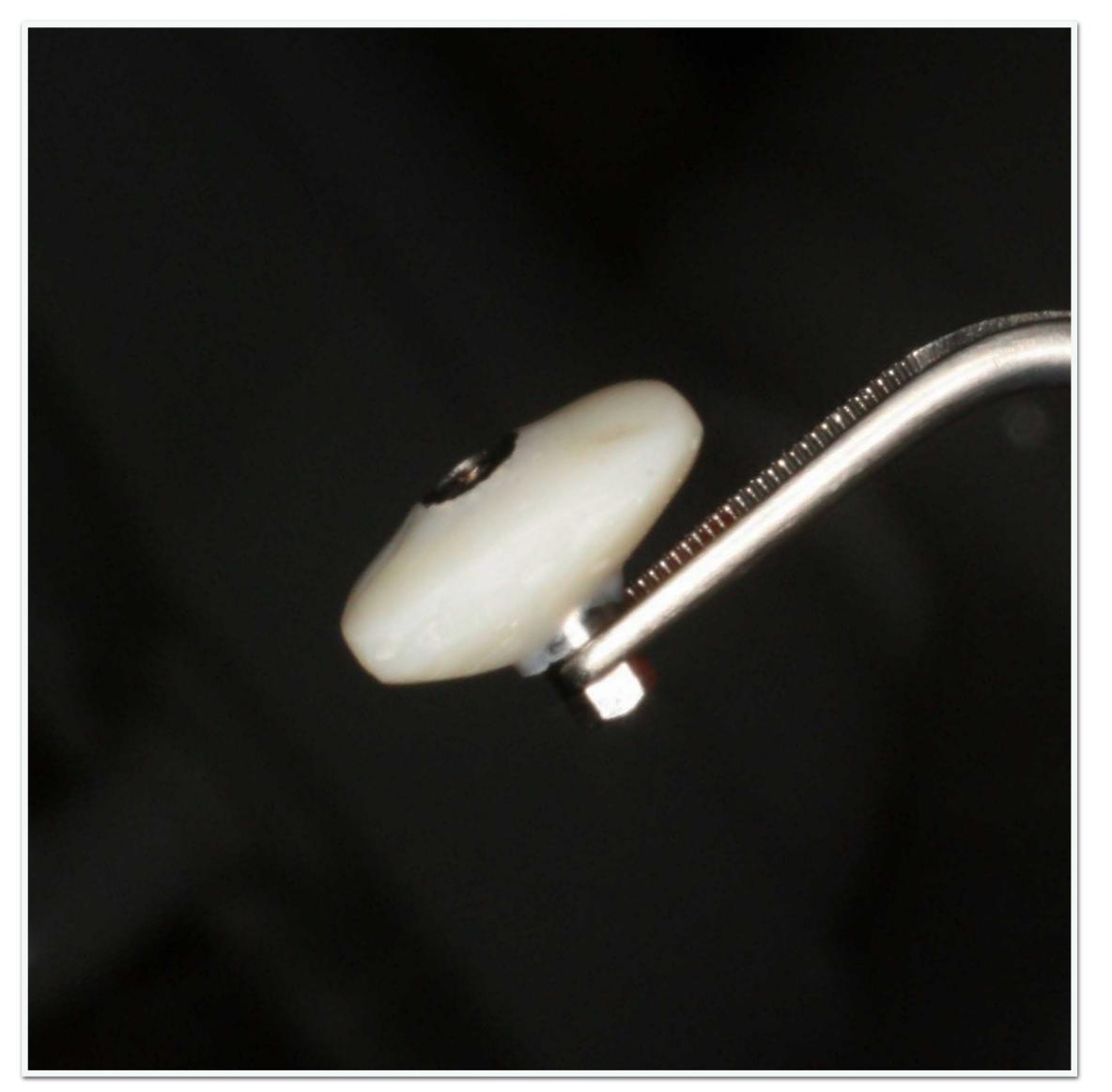


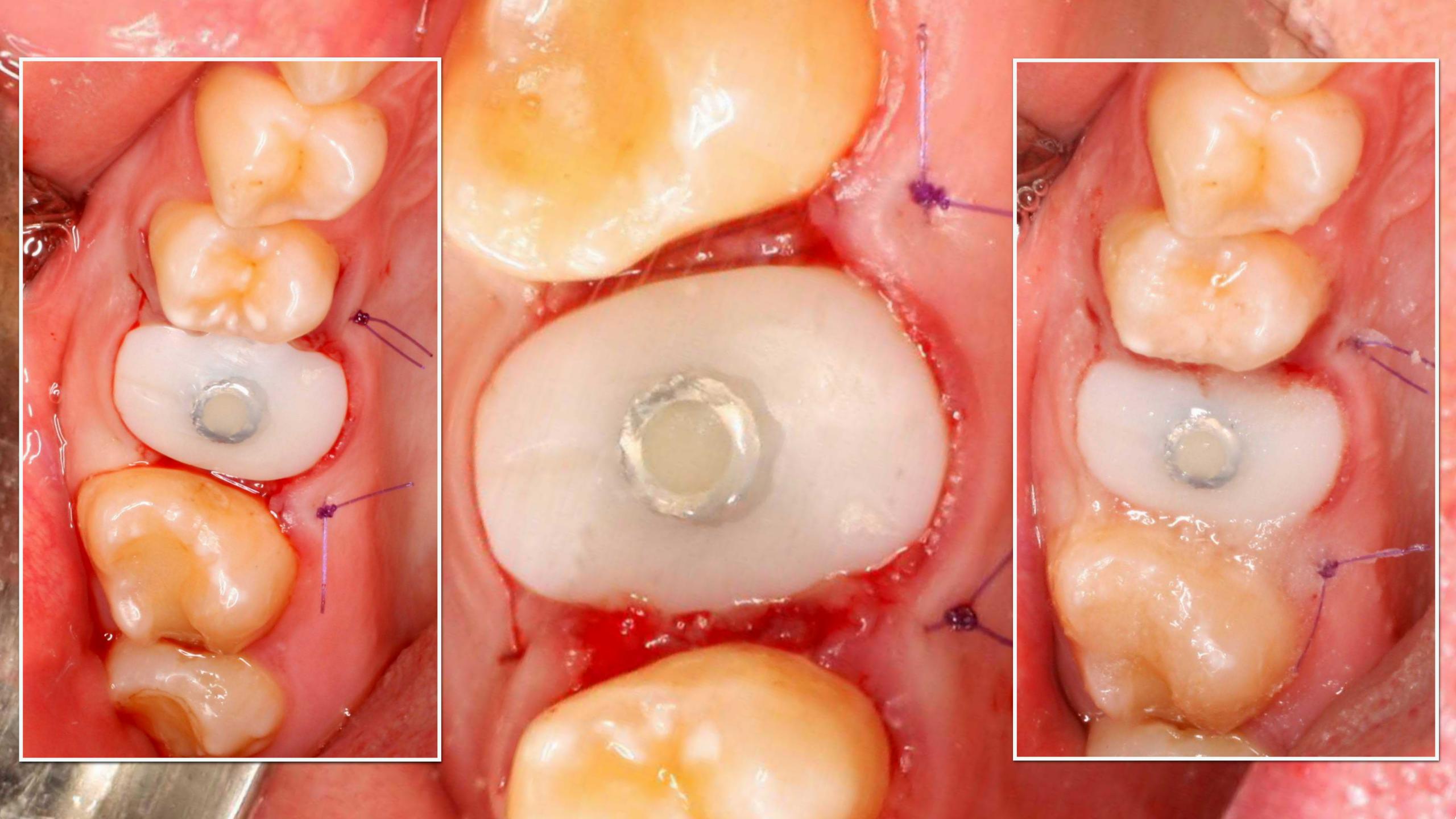


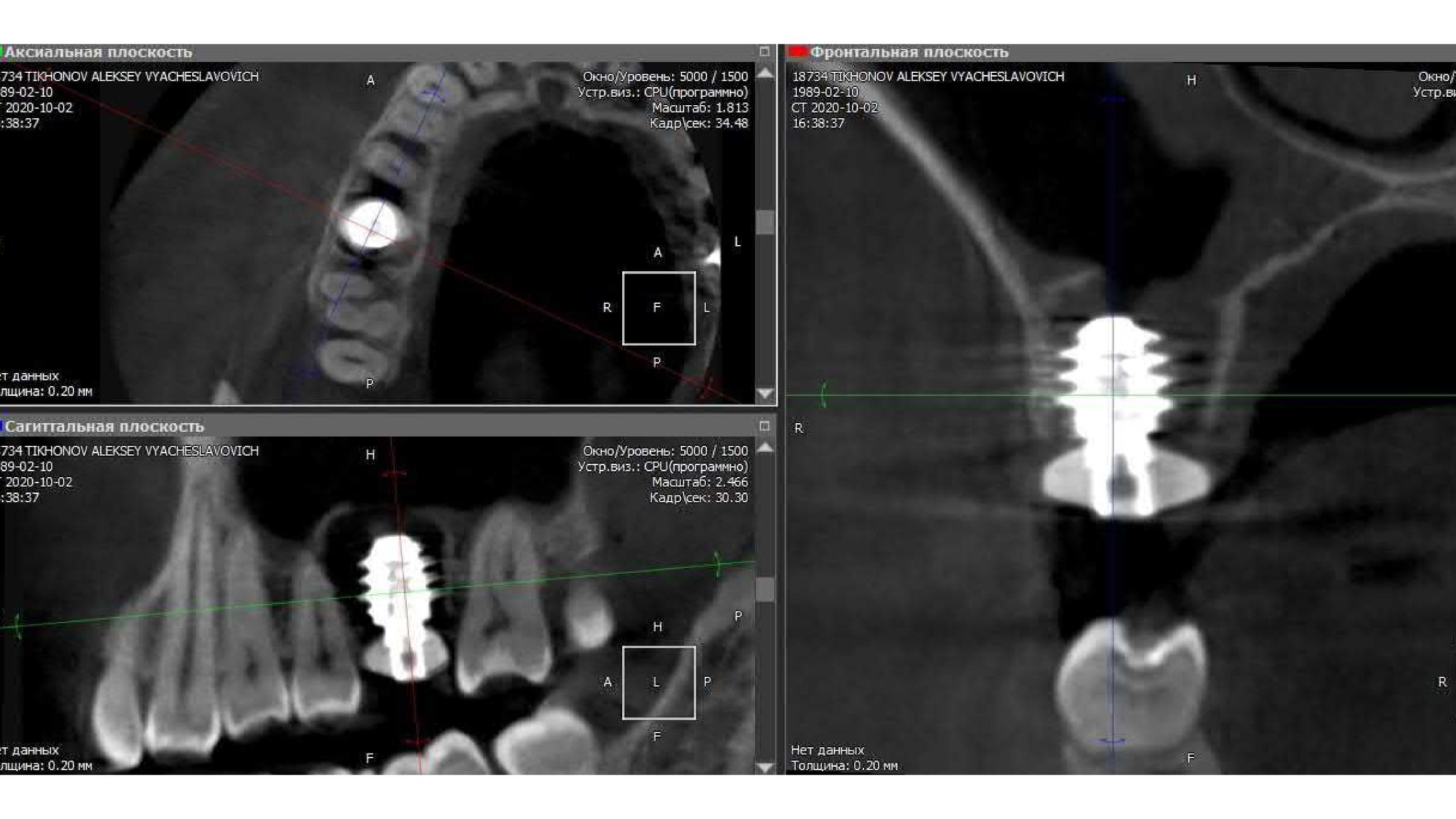


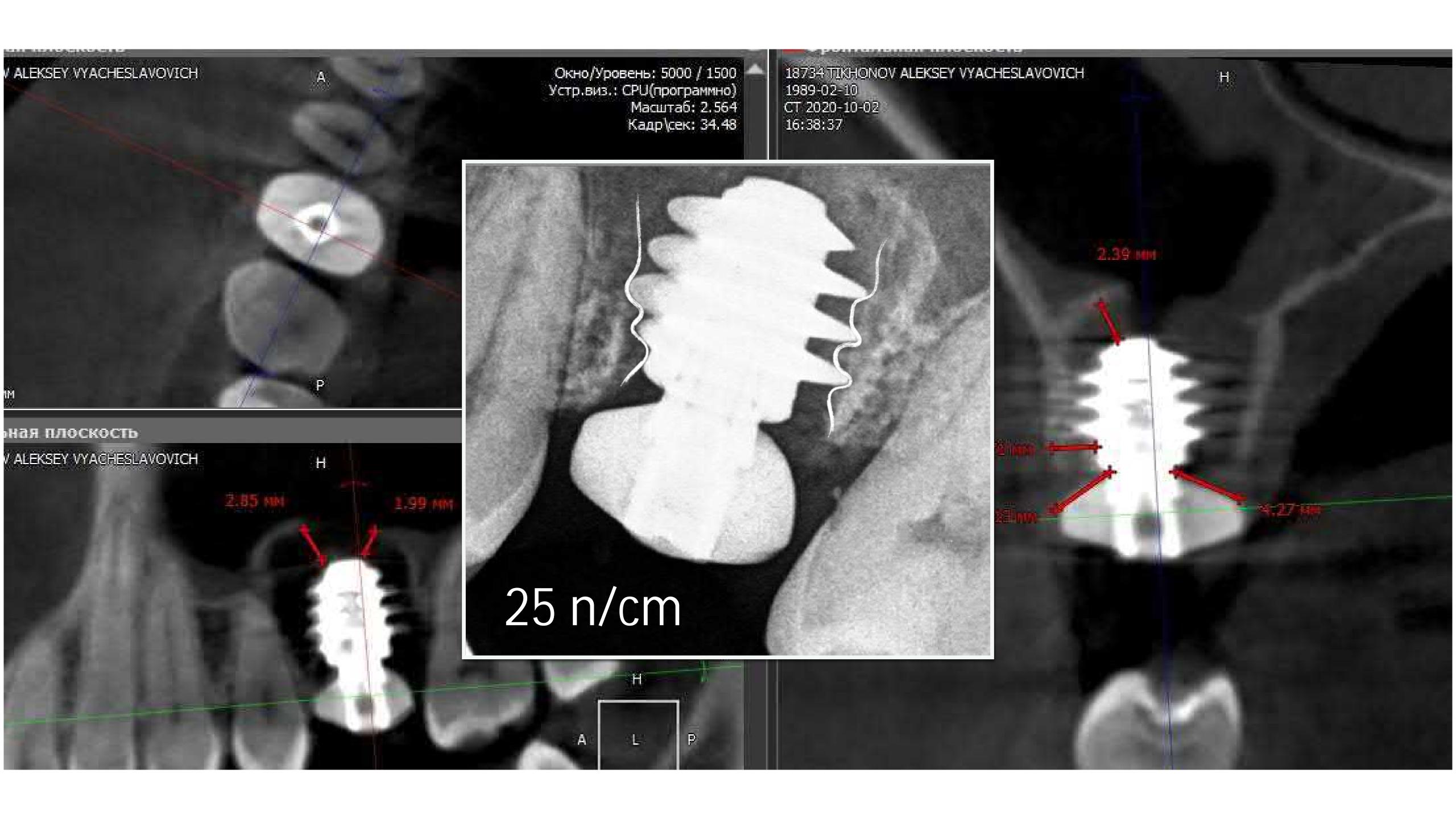


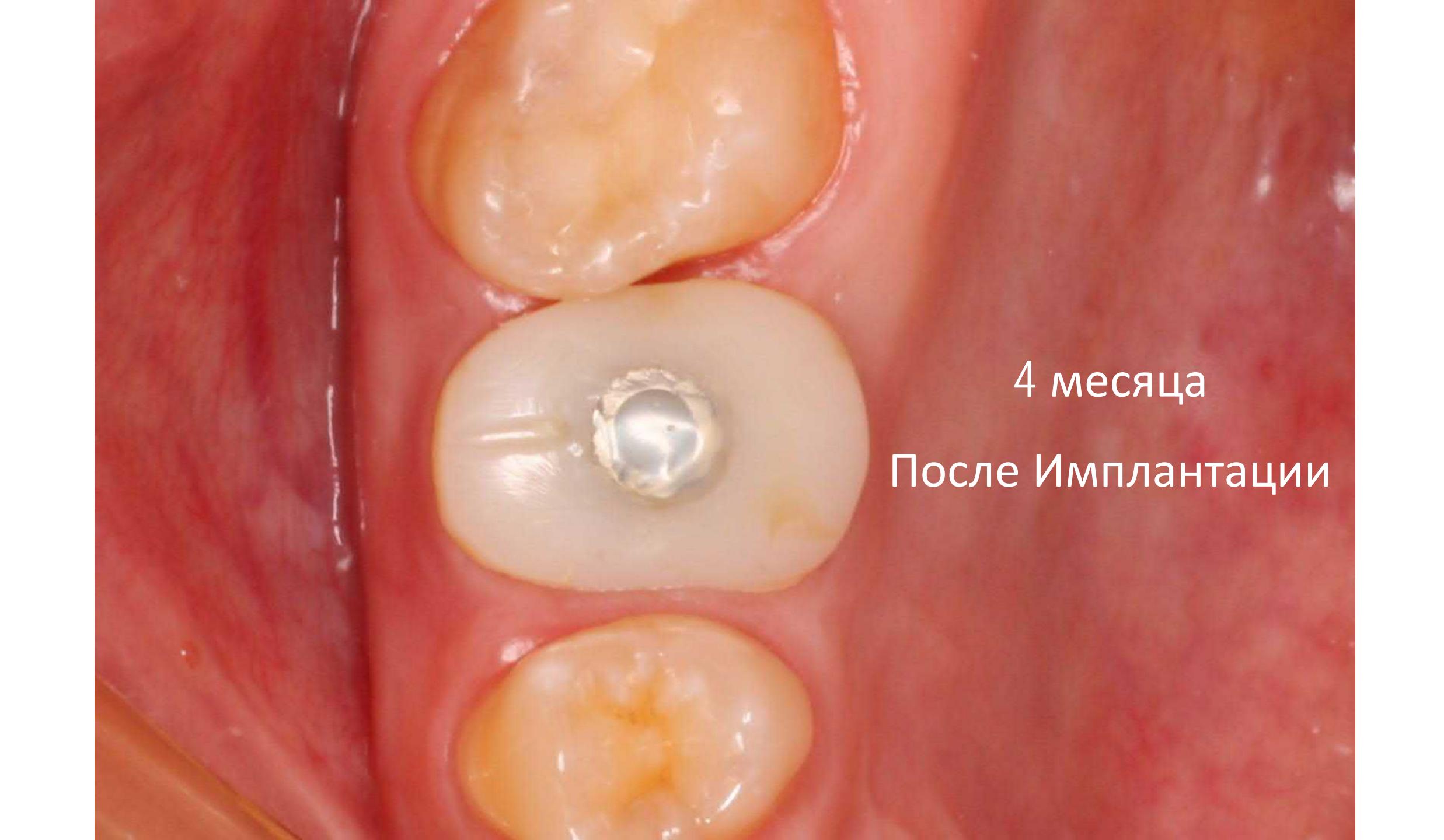


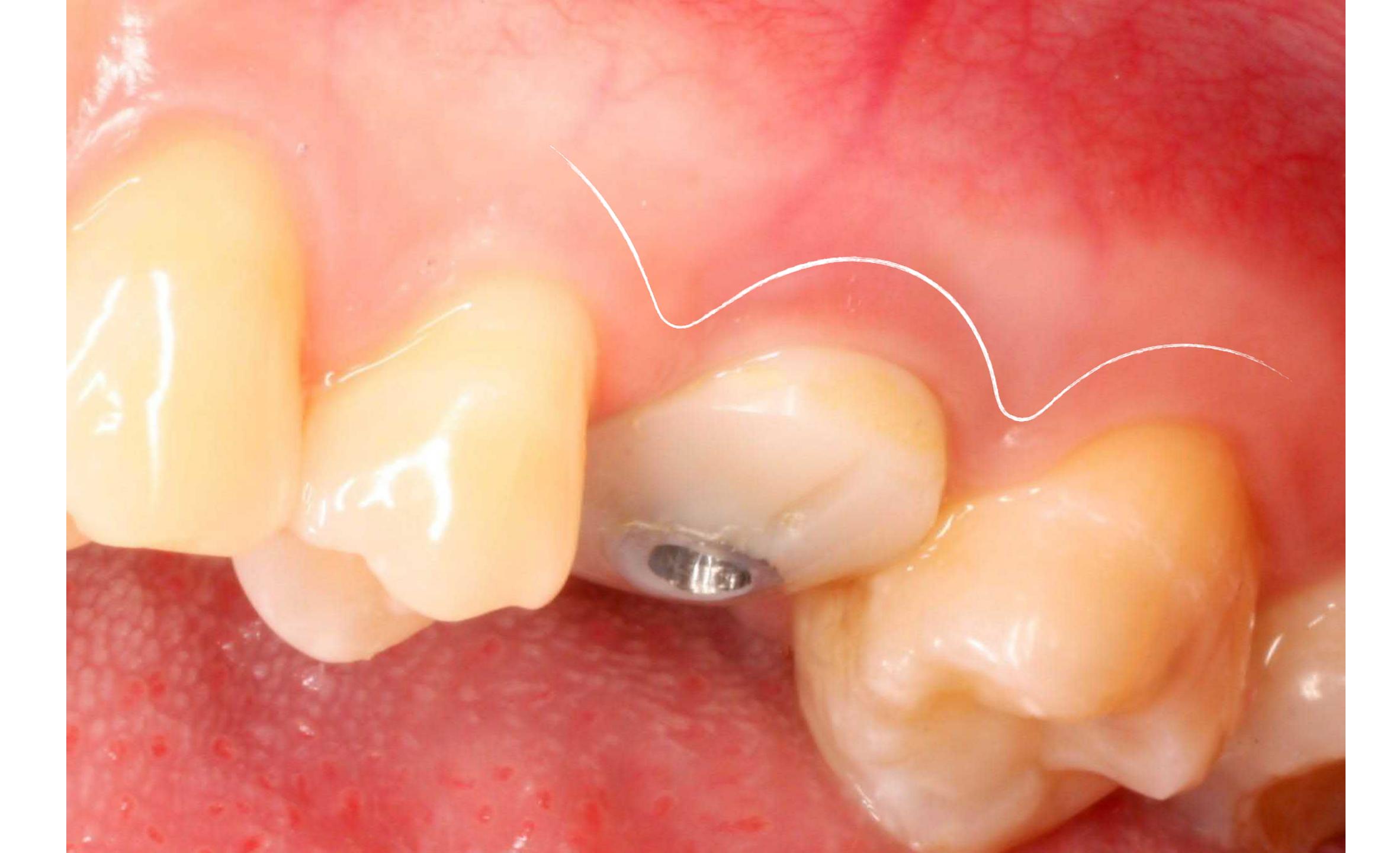


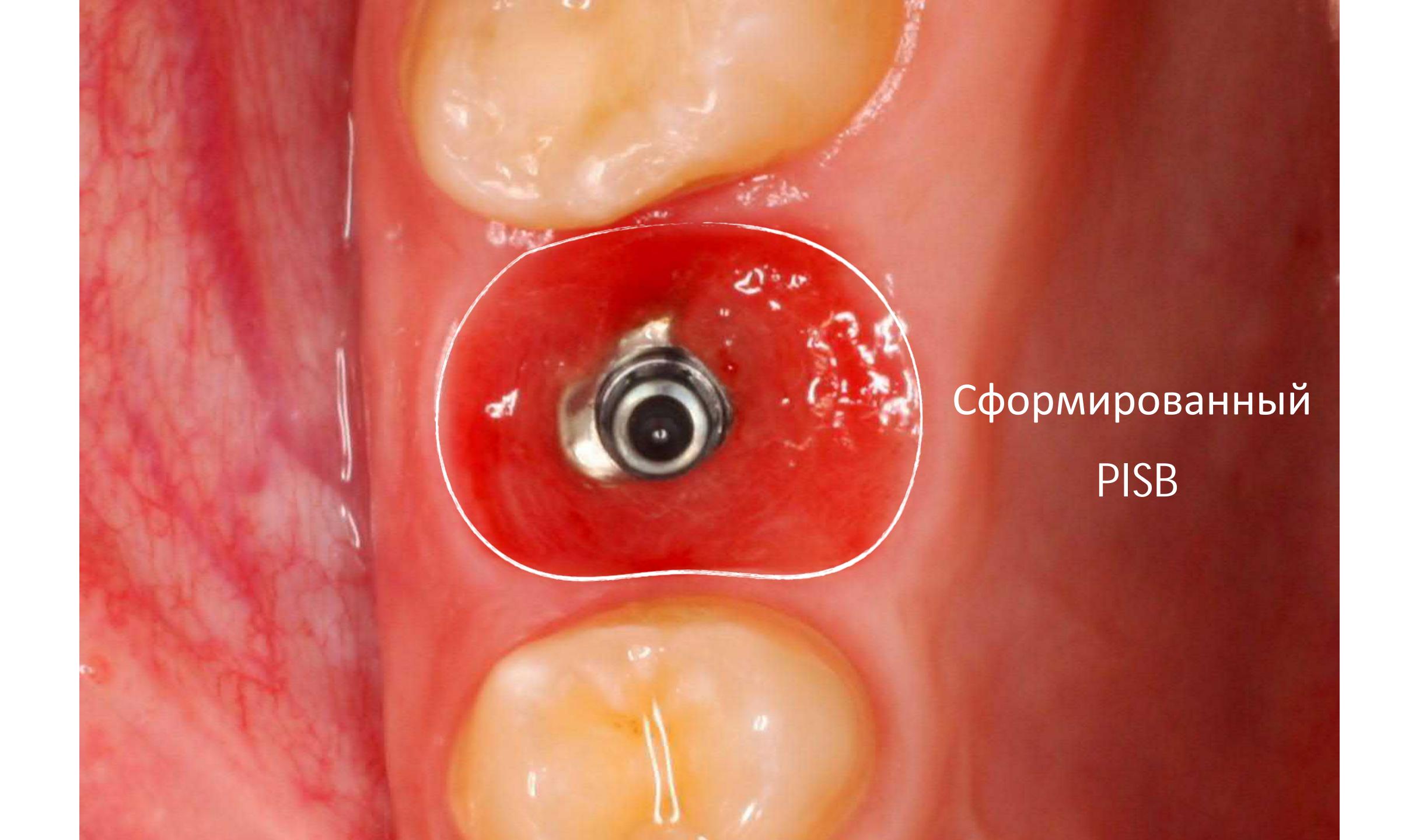


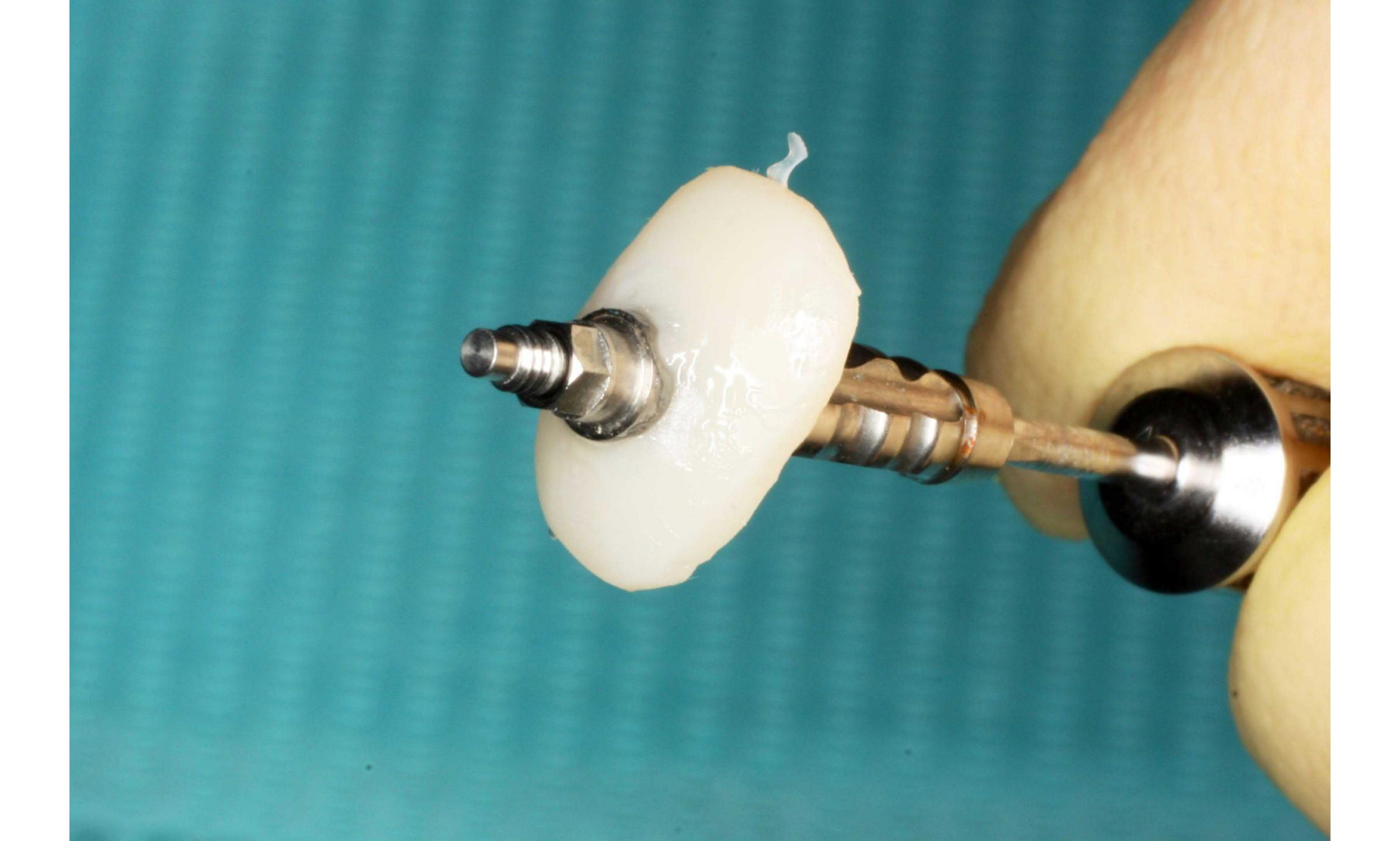


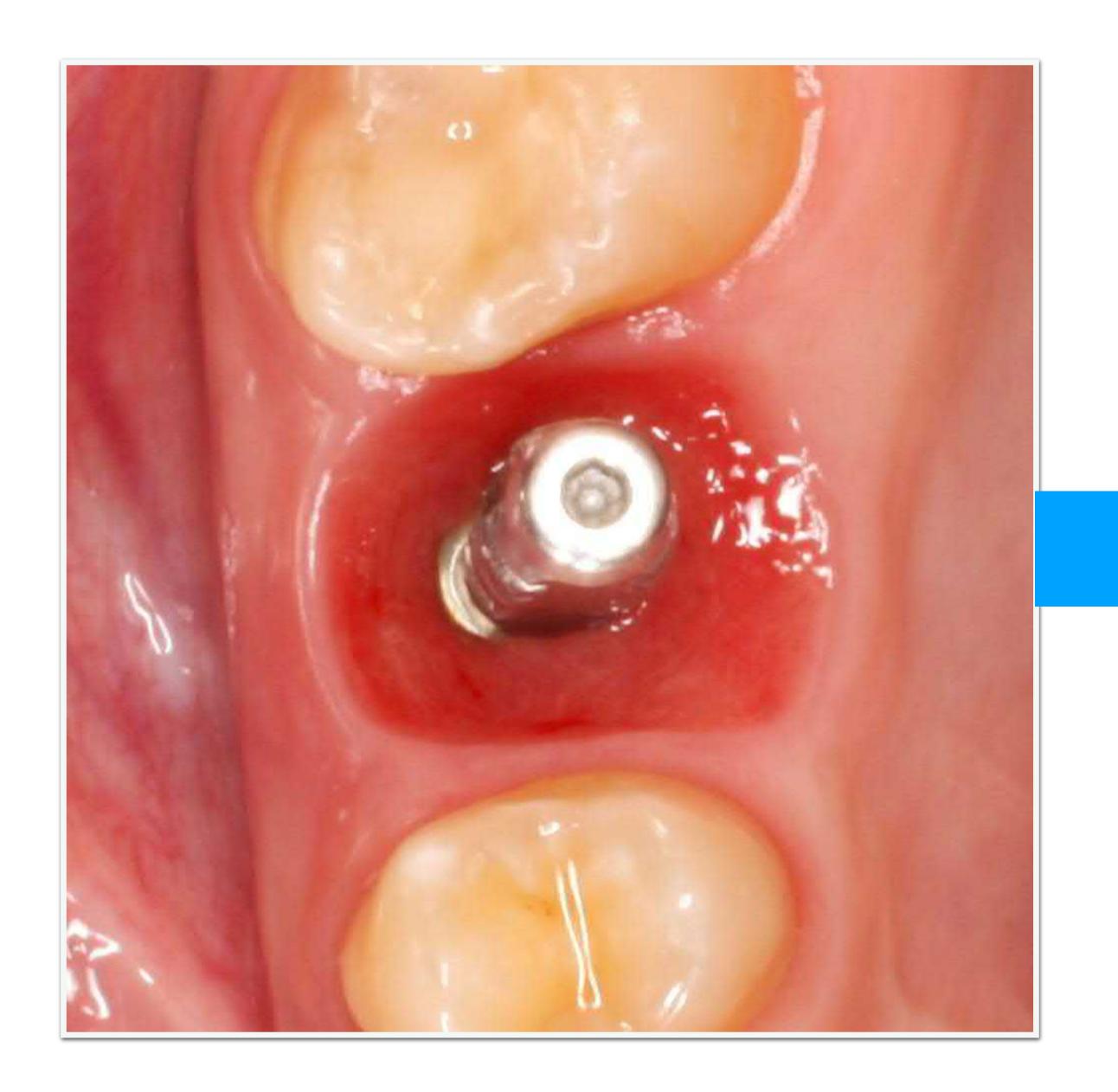


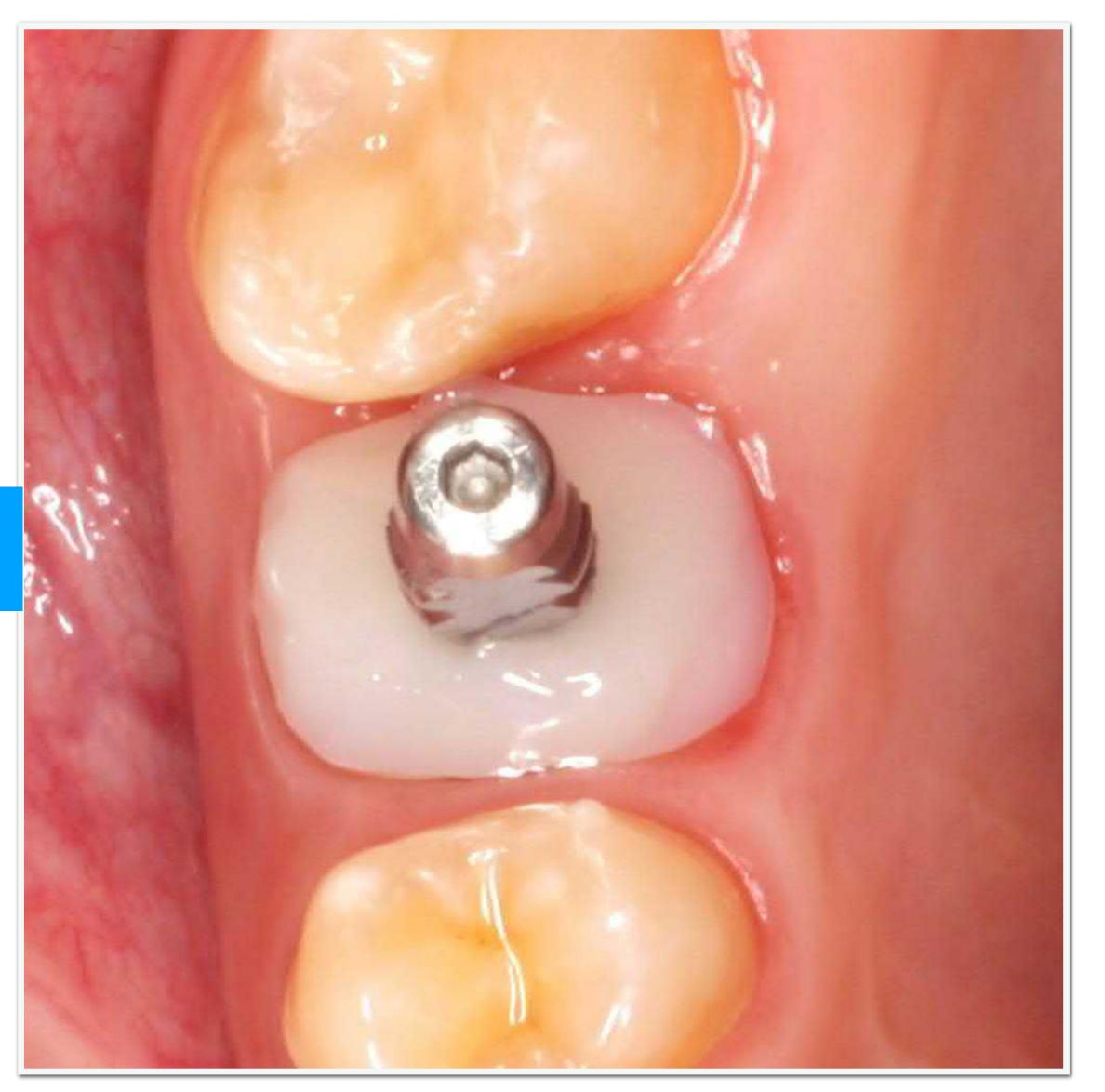


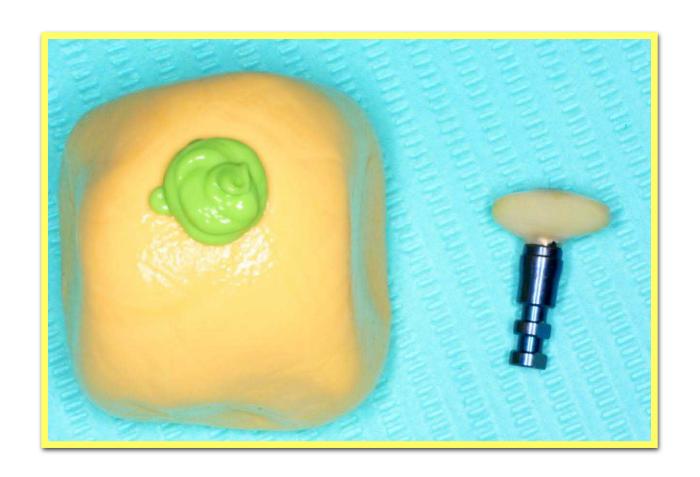


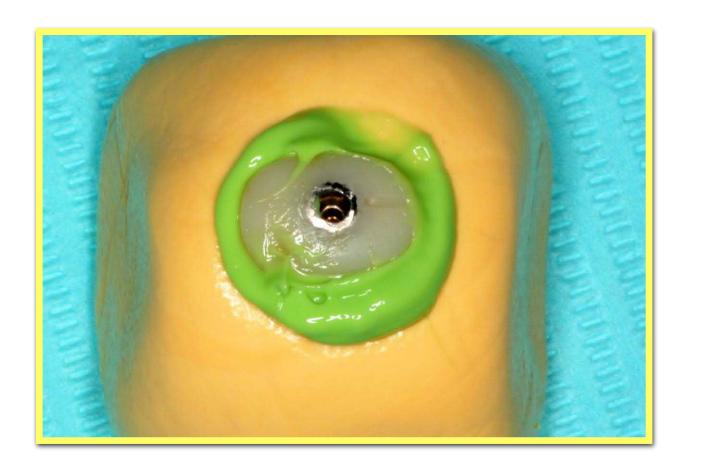






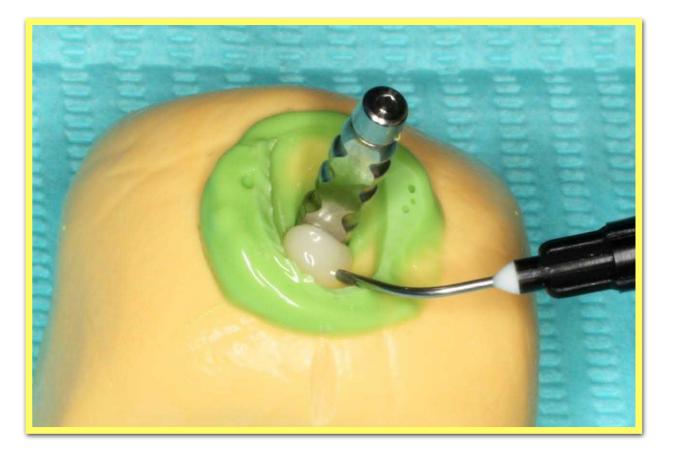










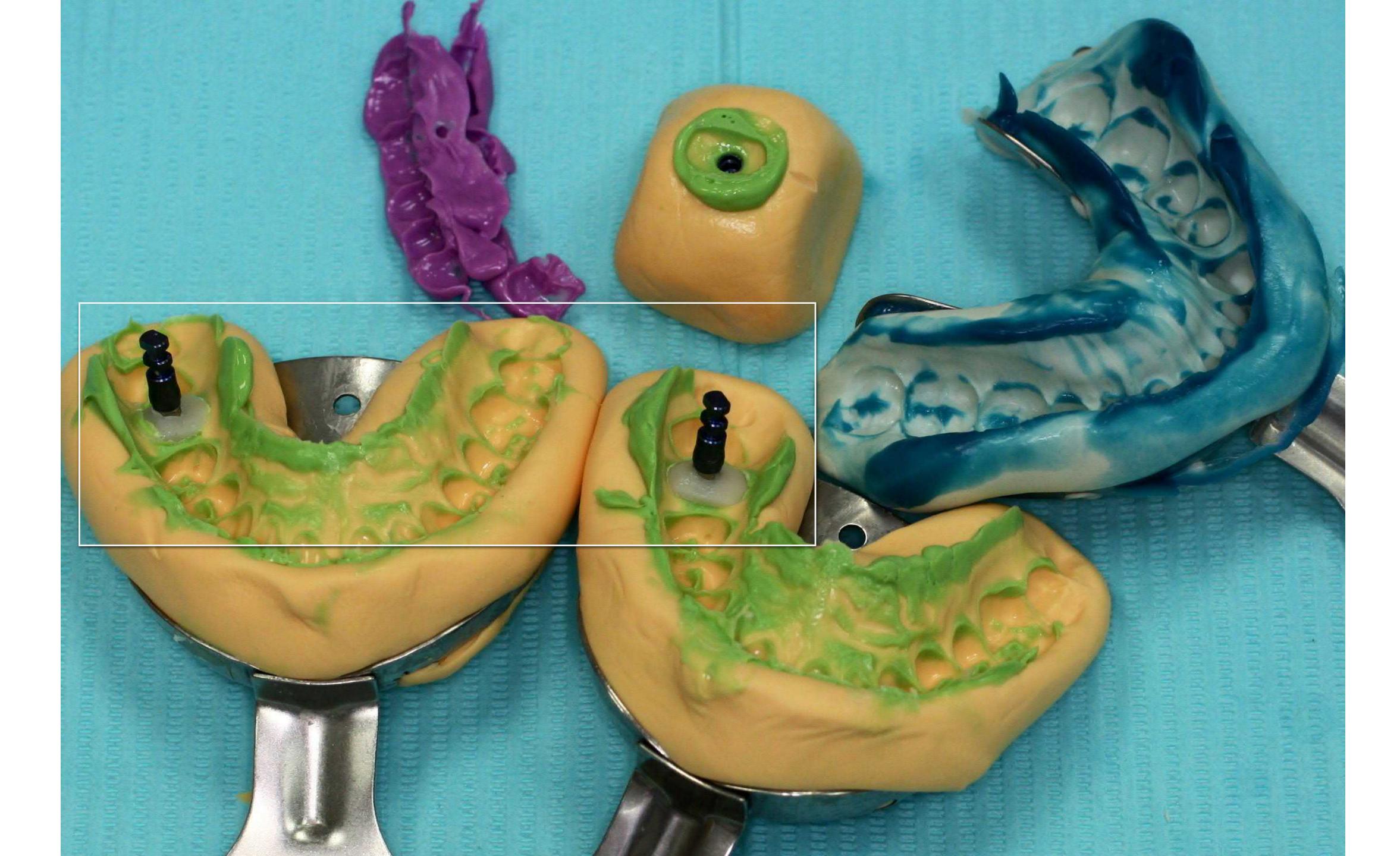


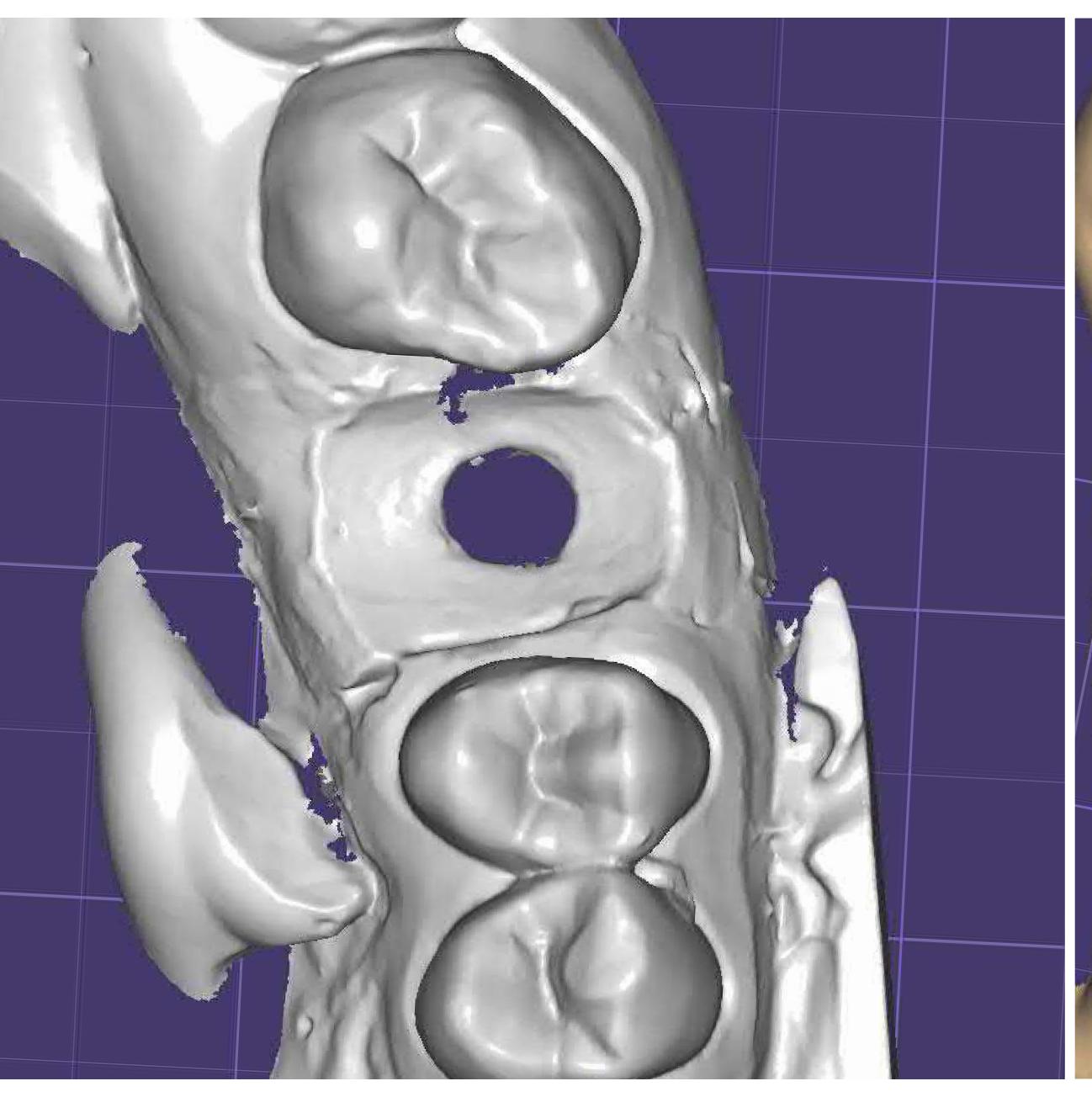


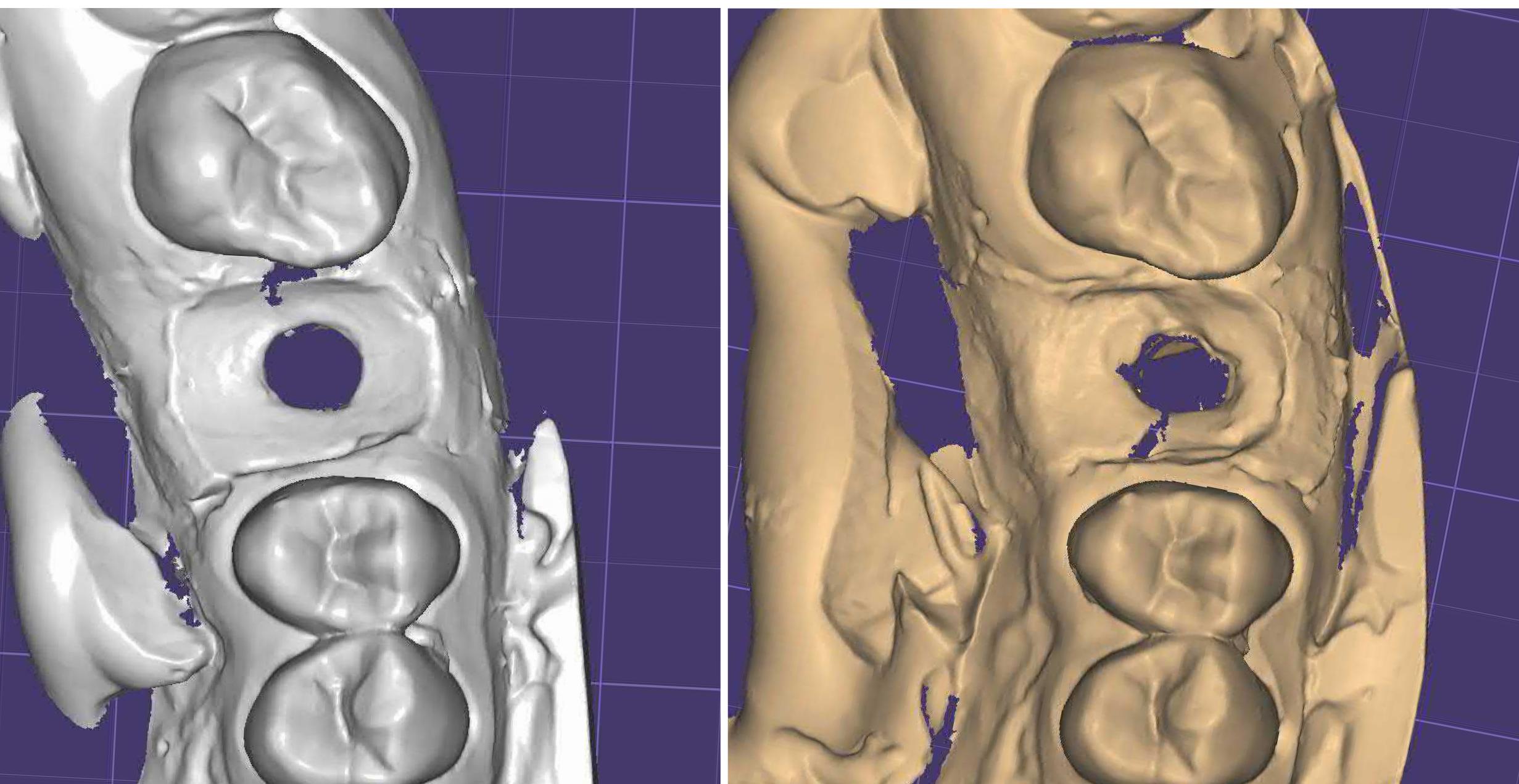


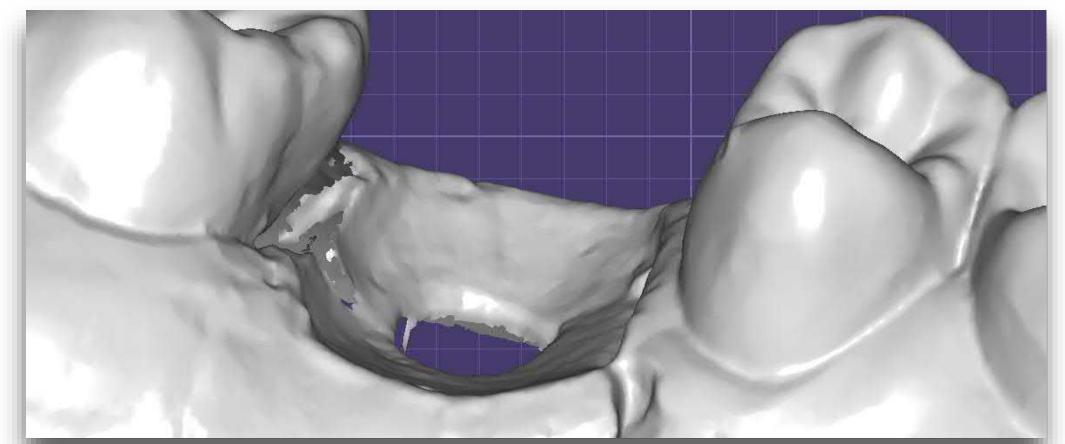


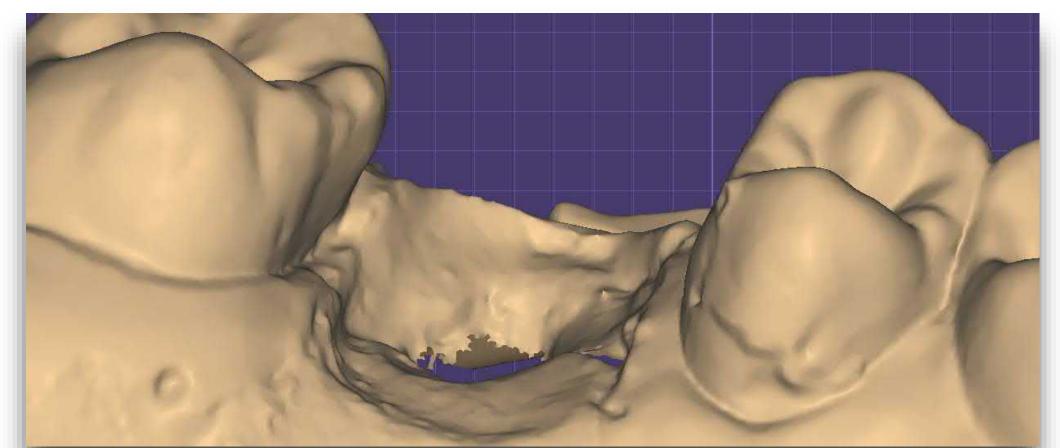




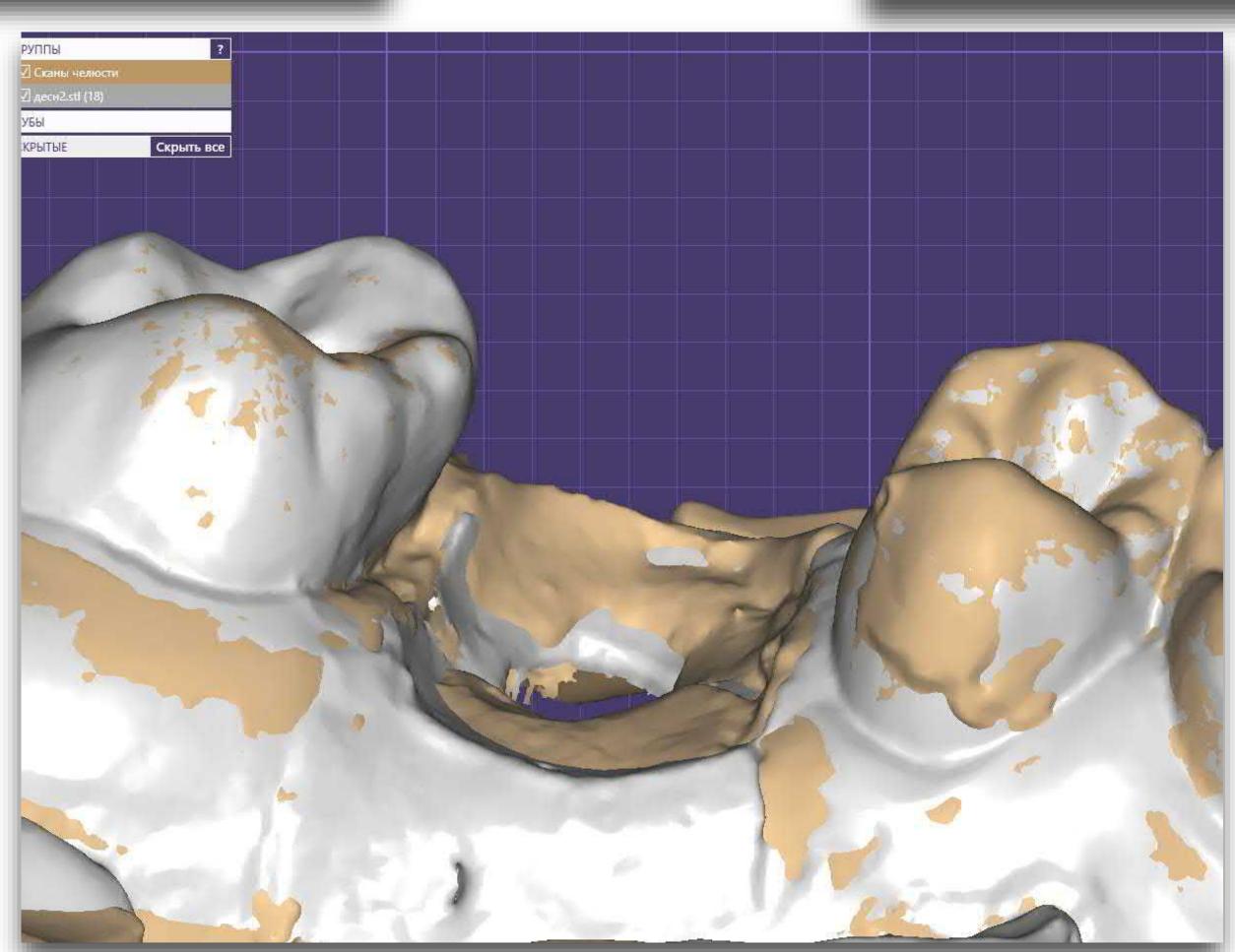




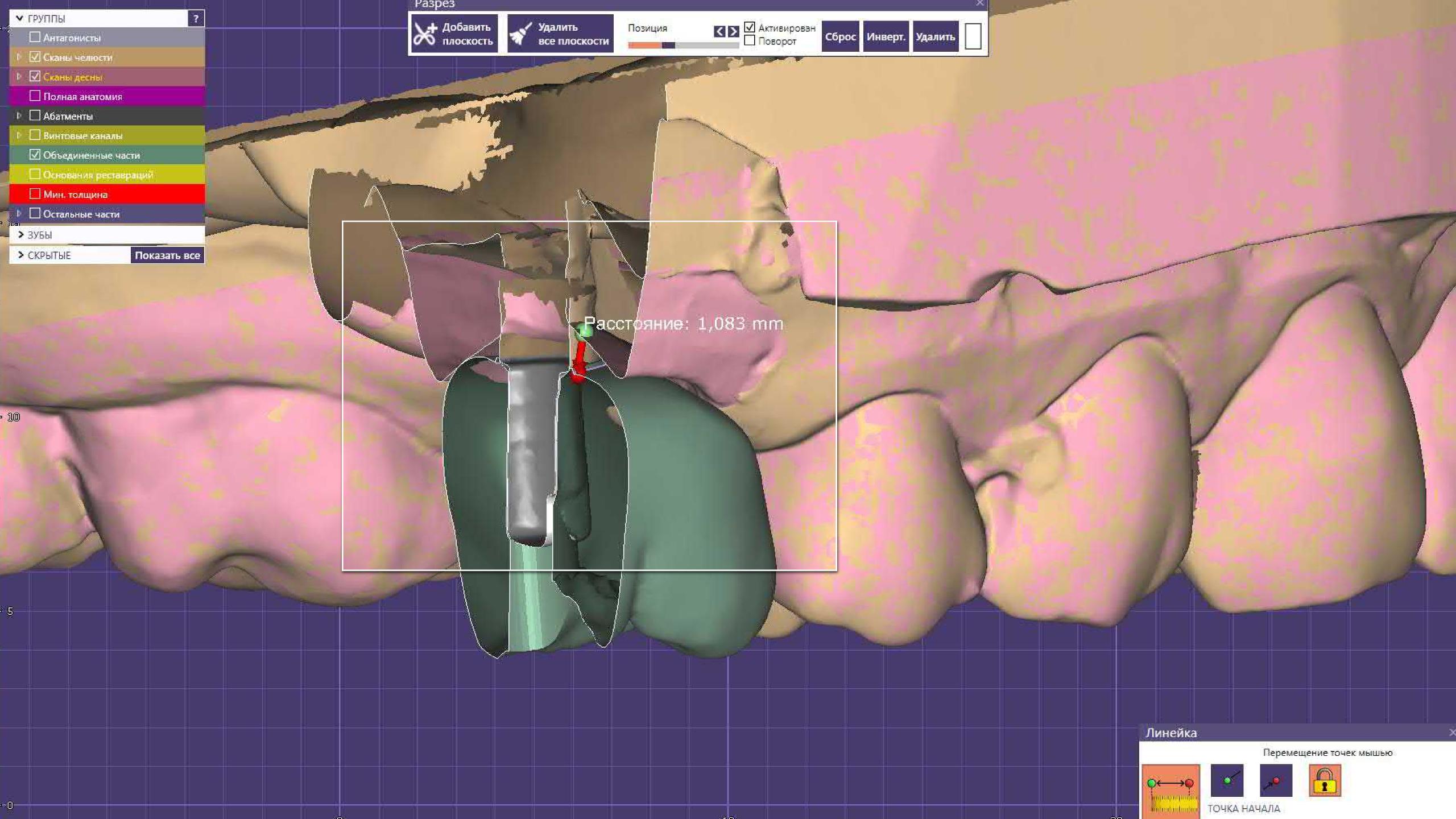




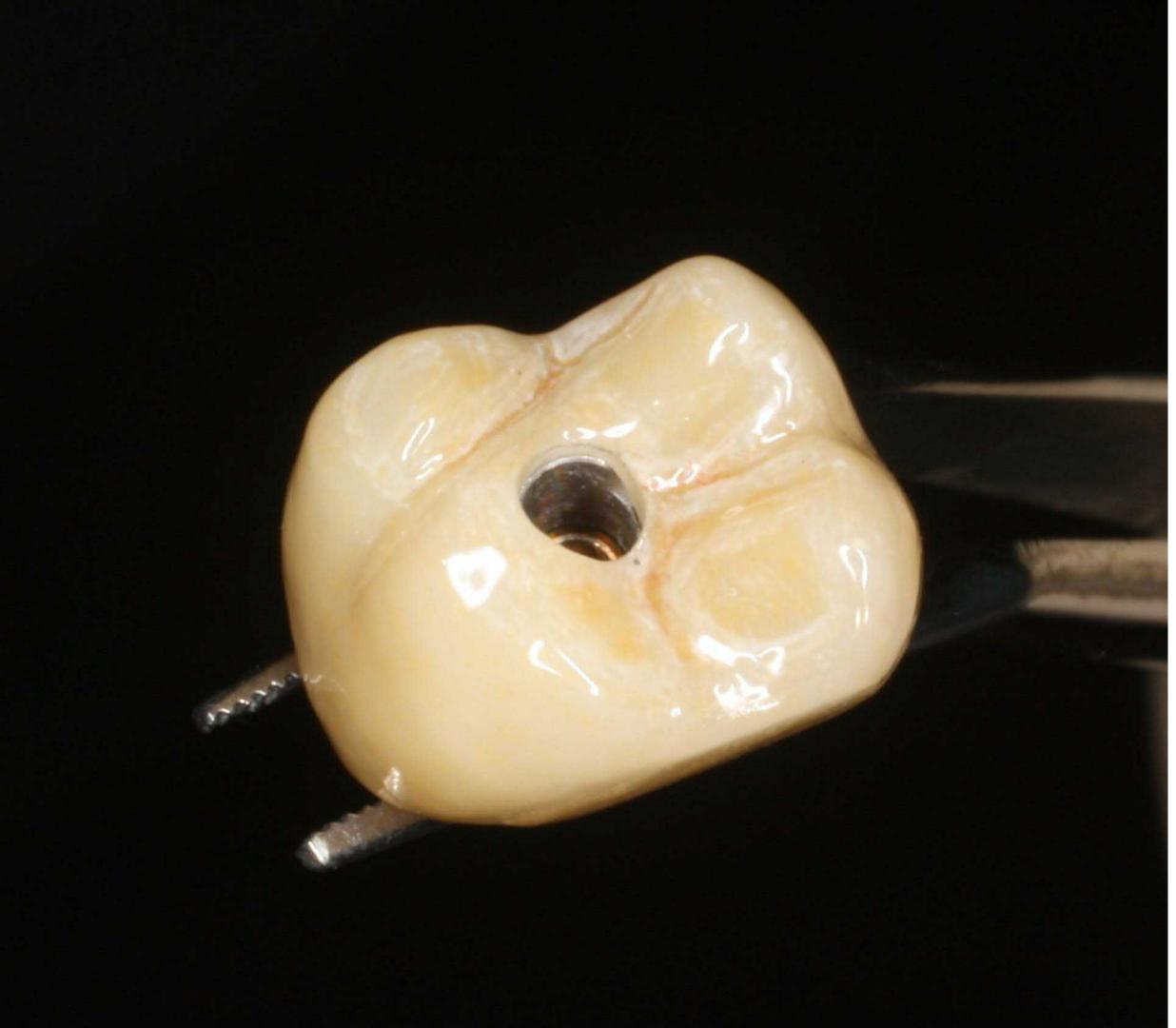




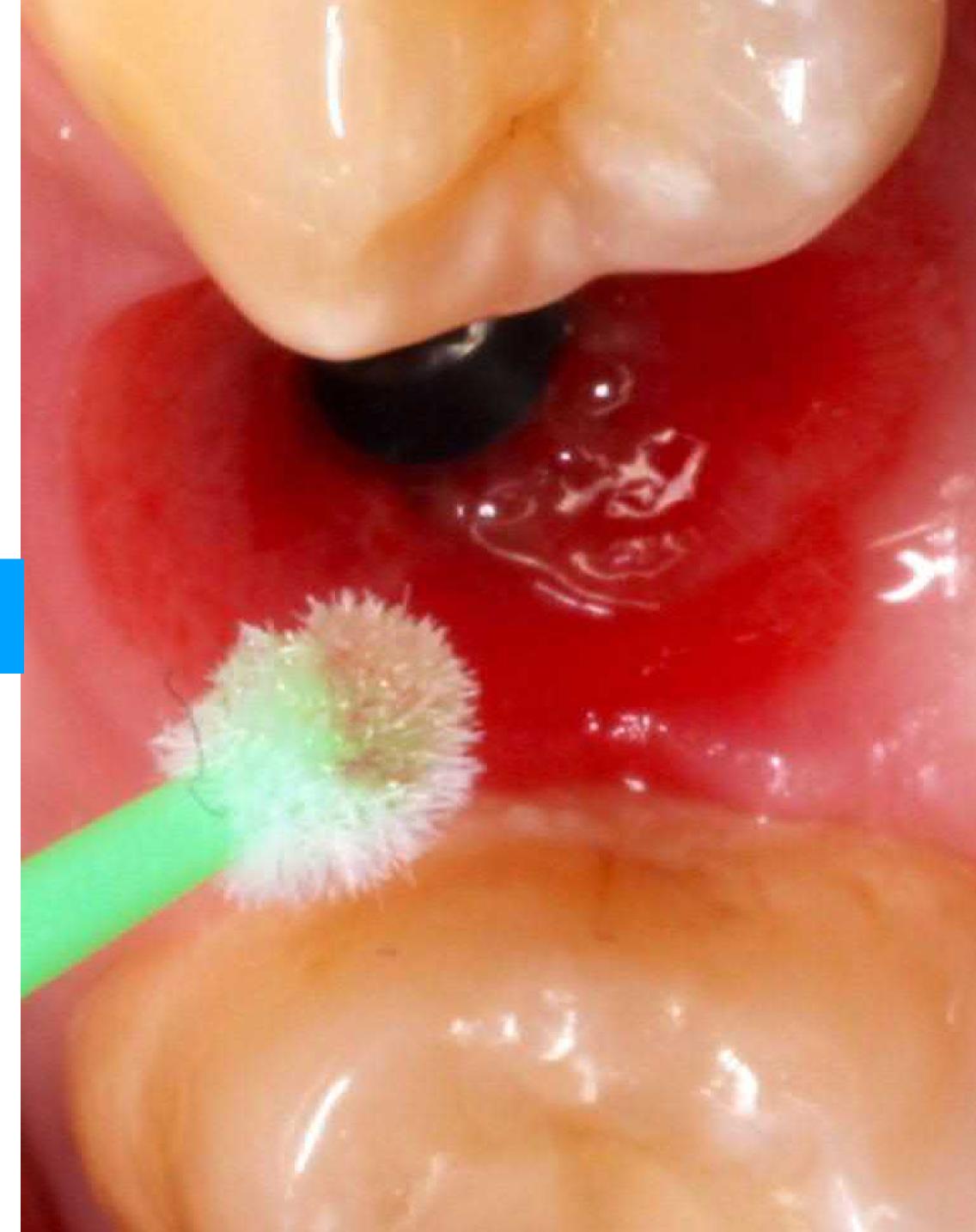




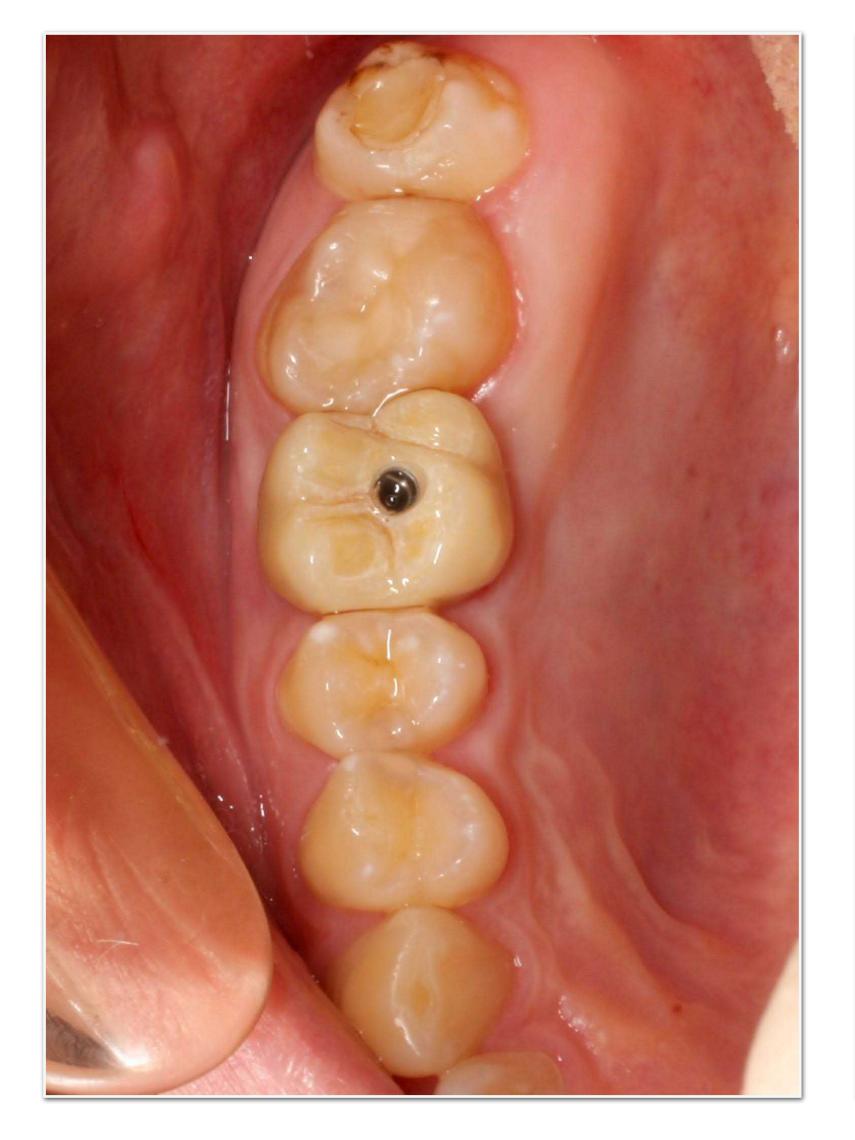


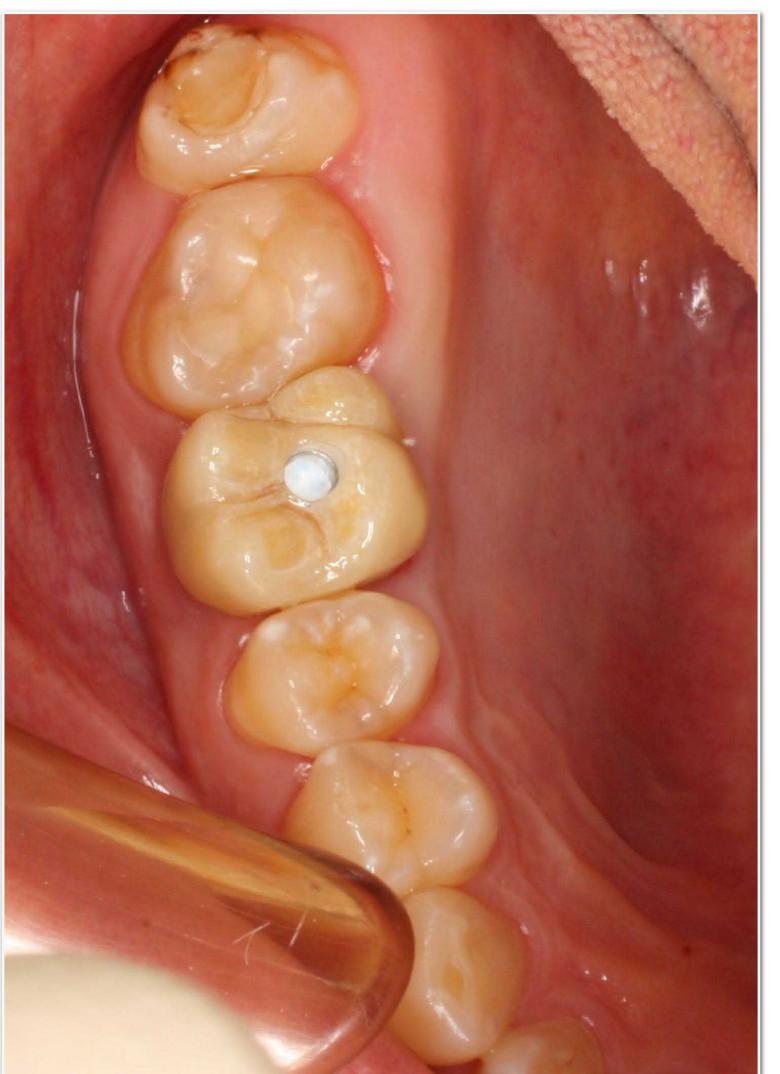


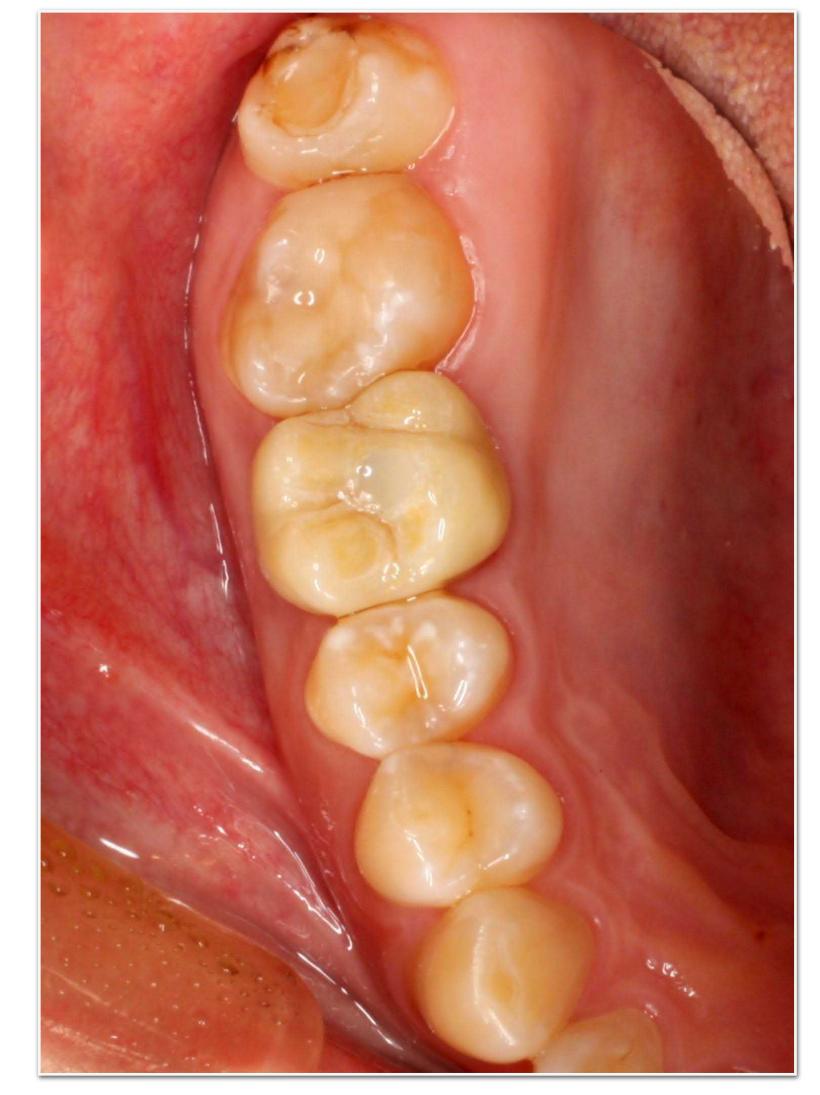


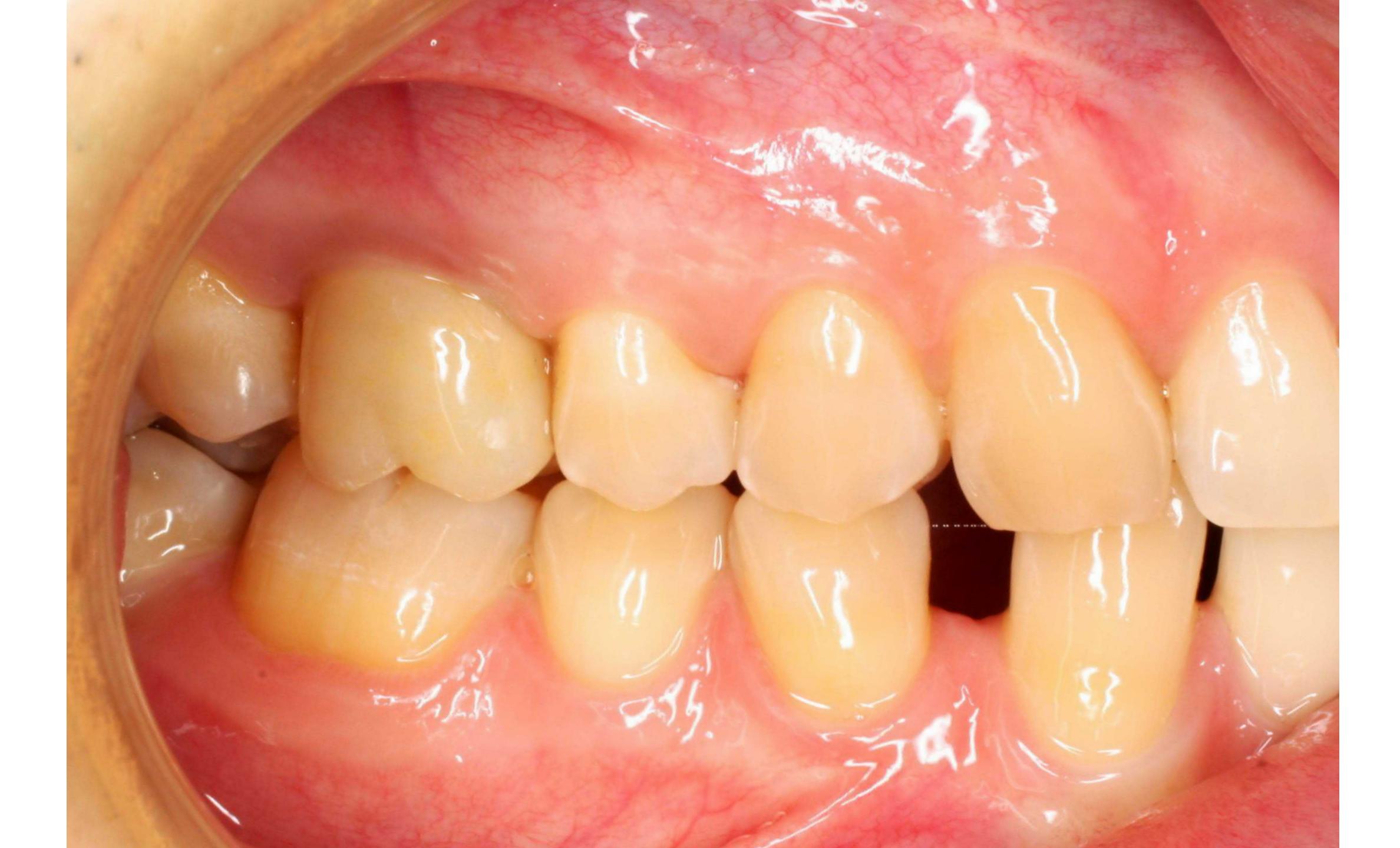






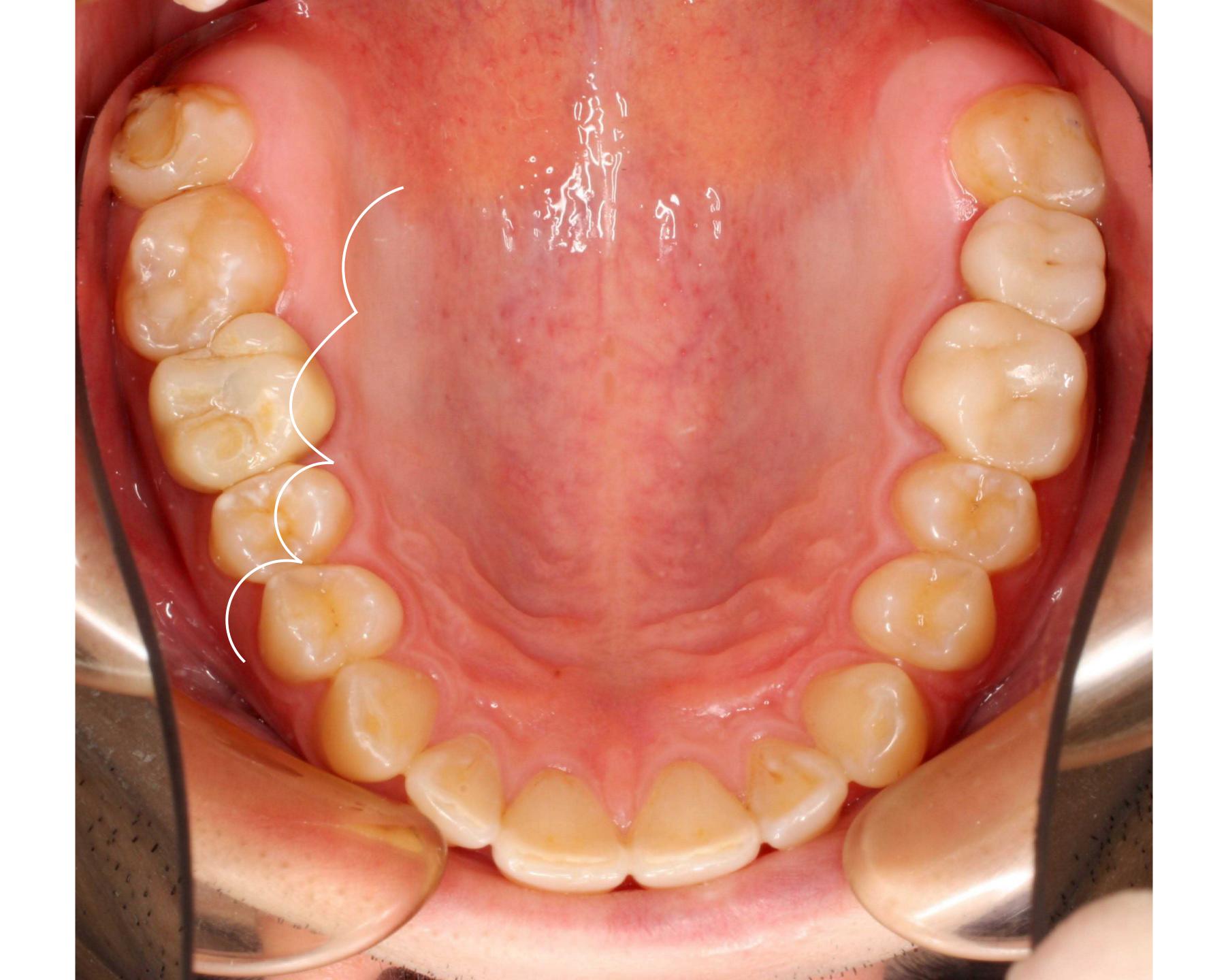


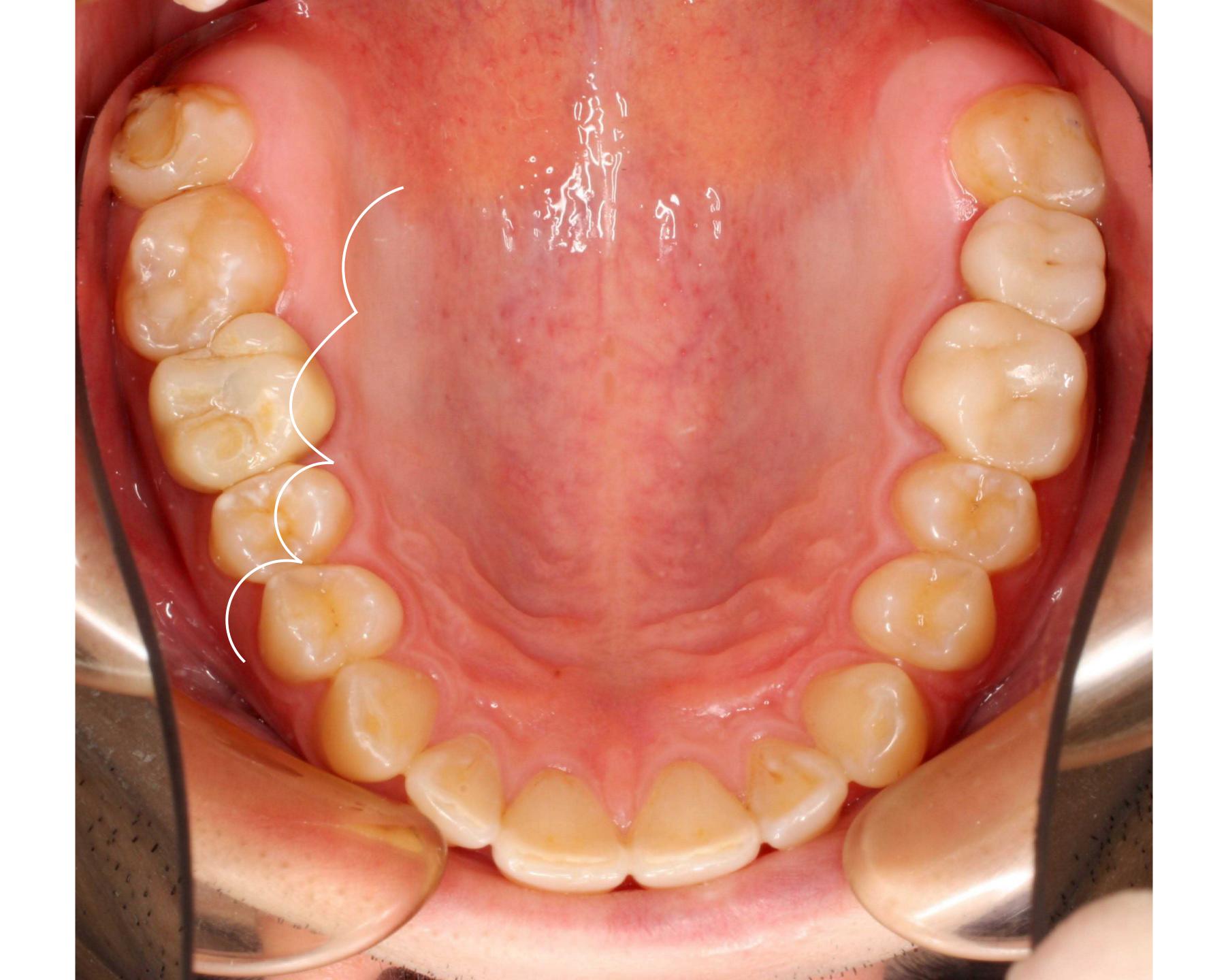








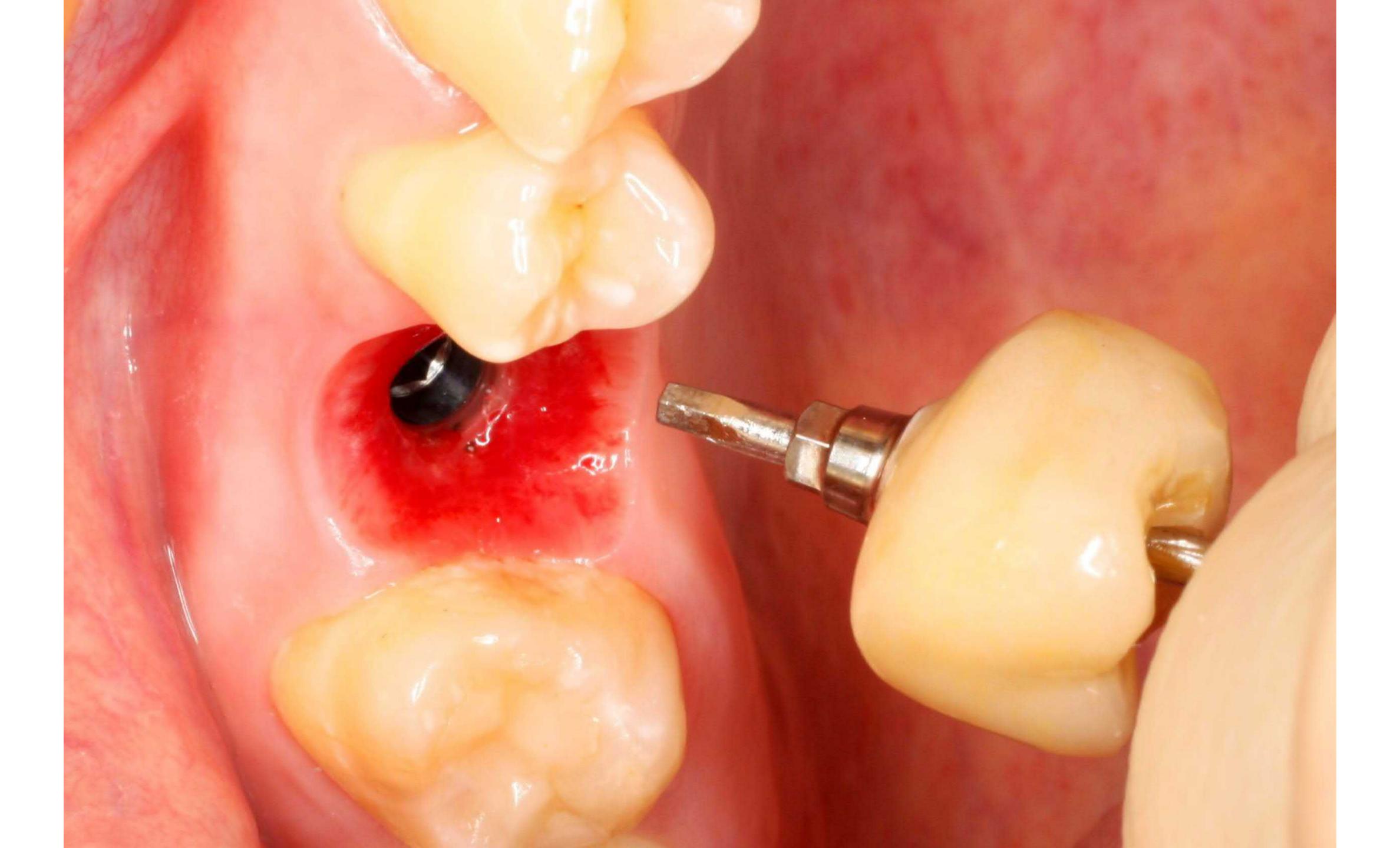




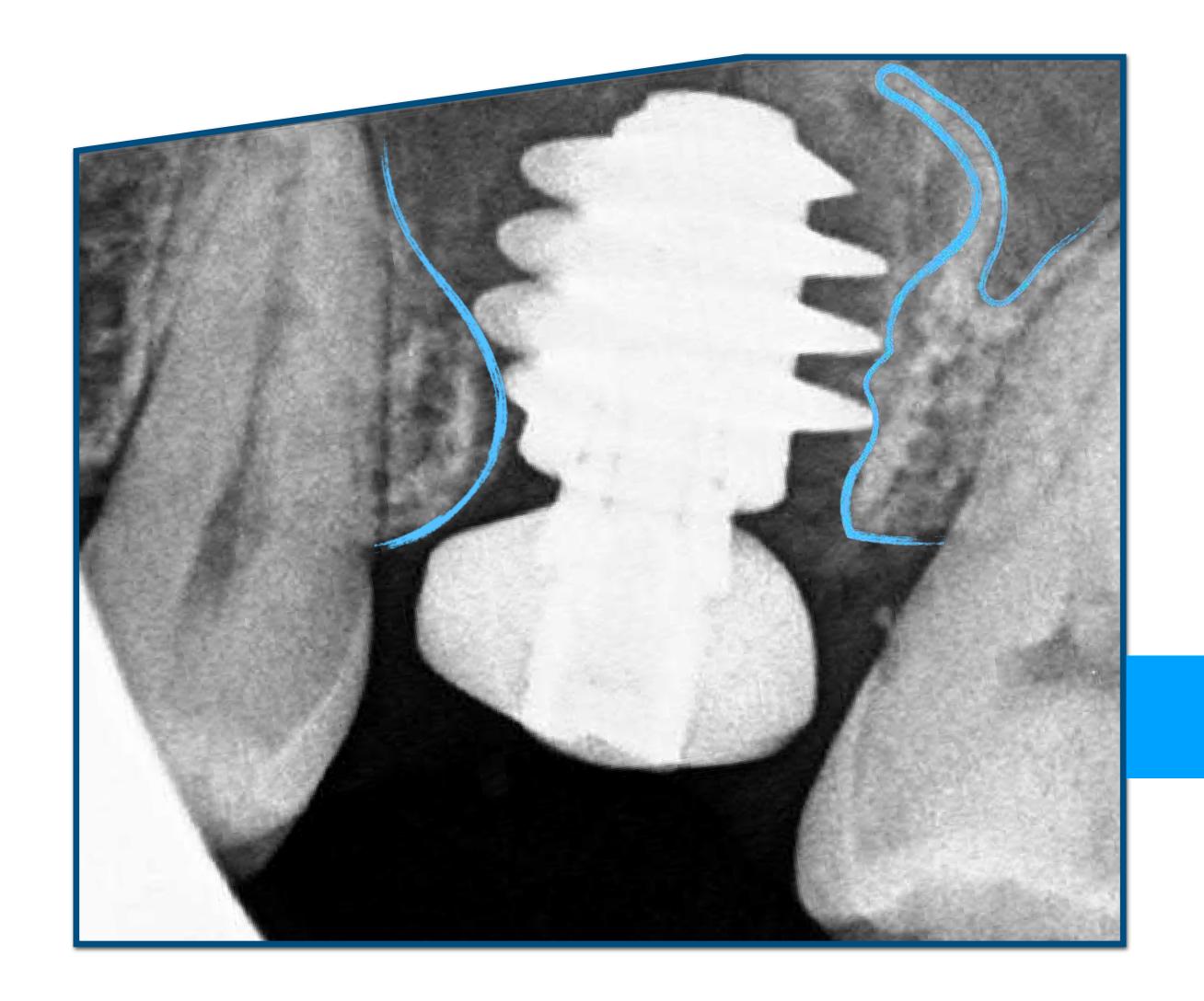
## Анализ отдаленных результатов

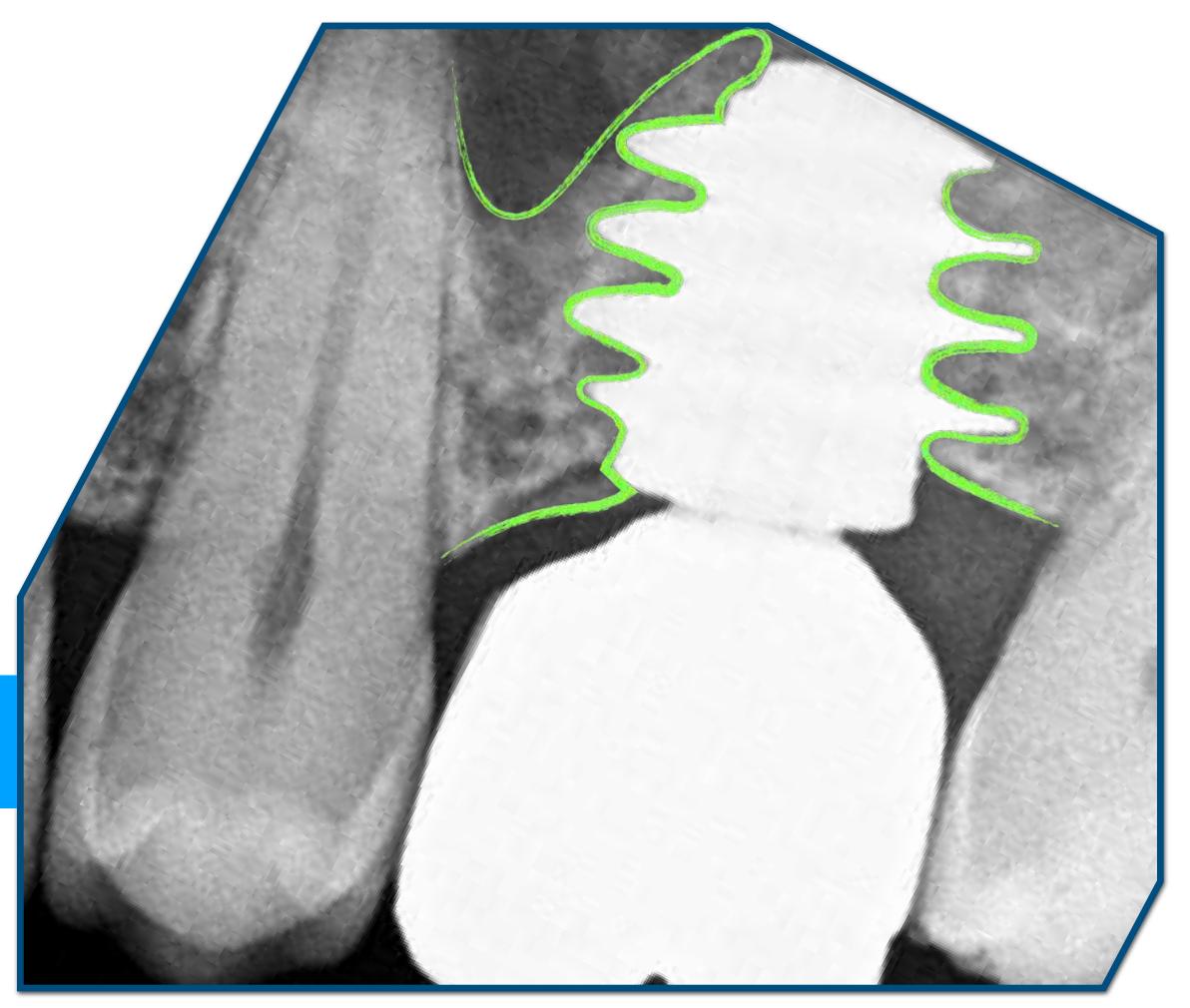


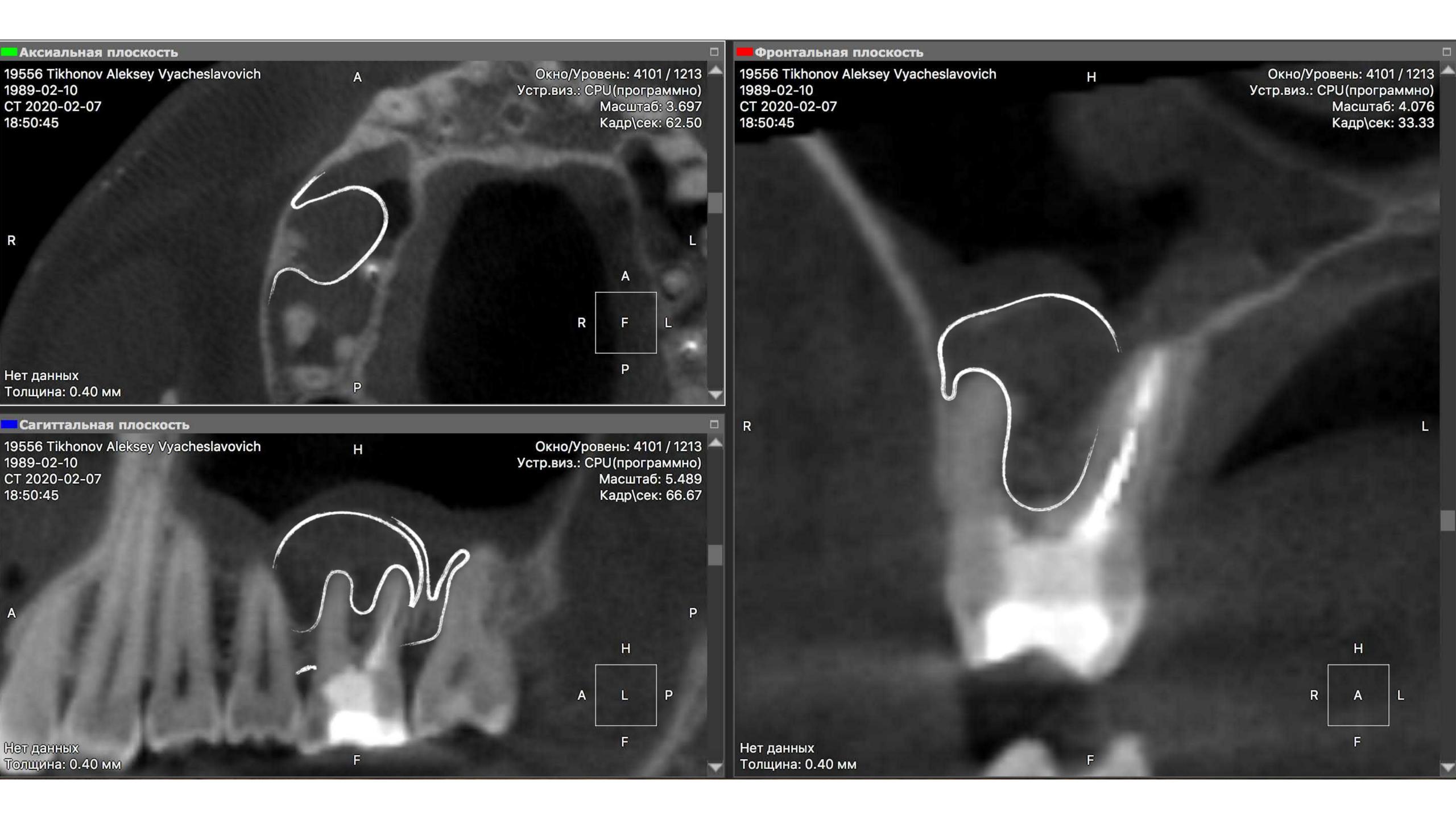


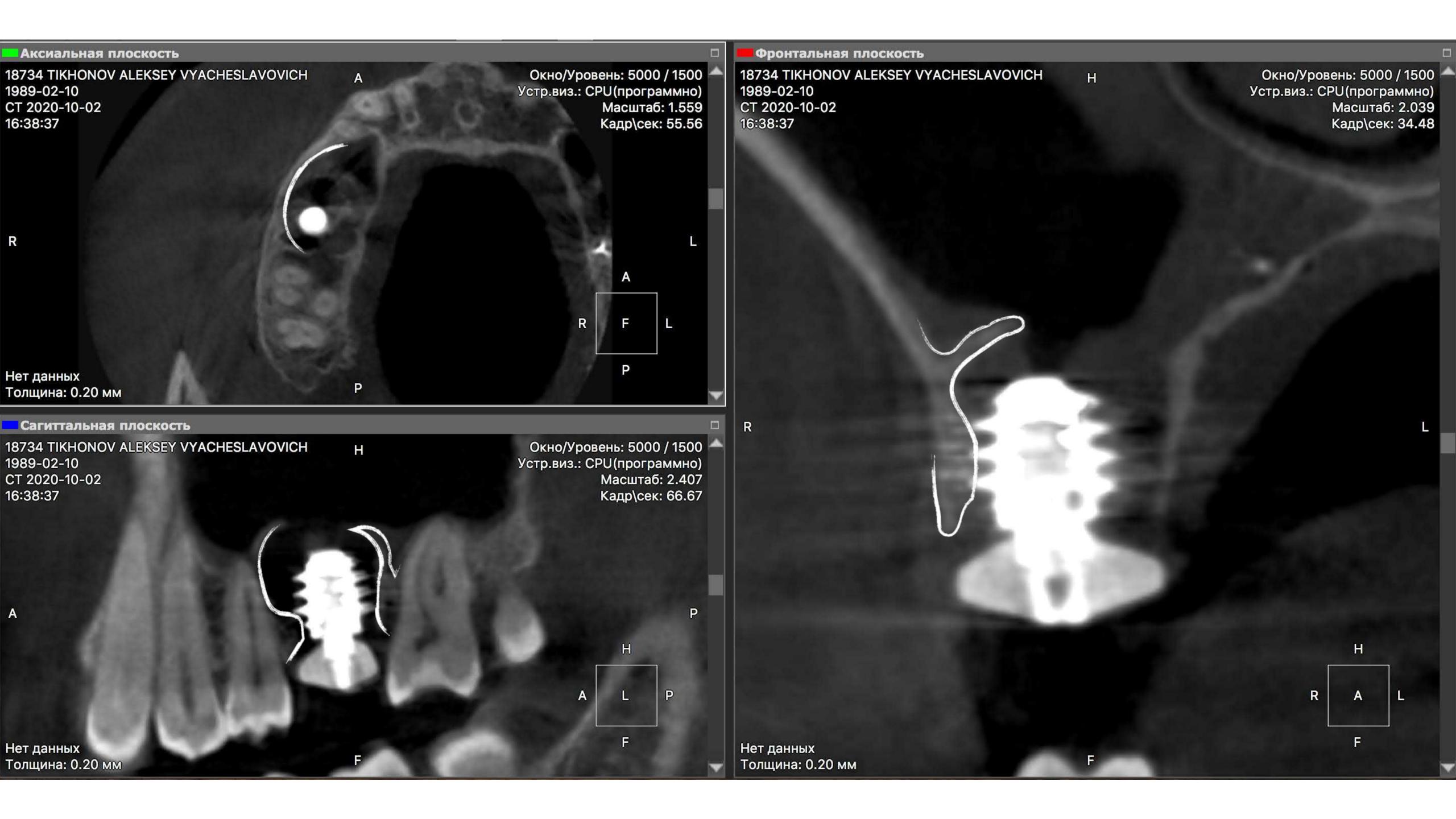
















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(case report by Dr. Alexander Lysov, DDS, PhD)



