

NEW MODERN METHODS OF TOOTH EXTRACTION

Abduvaliyev Nodirbek Abduxoshim o'gliAssistant at the Department of Orthopedic Dentistry
and Orthodontics, Andijan State Medical Institute

Annotation: A variety of dental plaque removal techniques are currently at the disposal of stomatologists and dental hygienists. A comparative analysis of the efficacy of the two up-to-date dental plaque removal techniques, ultrasound and AIR-Flow methods, was performed. The oral health status was assessed using hygiene indices. Oral health assessments were performed during the initial dental visit and one week later. After cleaning with ultrasound or AIR-Flow teeth become lighter and the risk for the development of periodontal diseases is significantly reduced. The dental plaque removal technique must be tailored to the individual needs [1].

Keywords: dental plaque, ultrasound technique, Air-Flow technique, oral hygiene.

Tooth extraction is still the most common operation in dental surgery. Often the indication for extraction is the absence of the crown of a tooth and the impossibility of its conservative treatment using direct or indirect restoration. Often such teeth were used as supporting teeth for fixed and removable orthopedic structures.

Removing a tooth with a missing crown is not an easy task even for an experienced dentist [2]. The absence of a tooth crown makes it impossible to use forceps for extraction, and the use of elevators, luxators and periotomes often leads to ruptures of the mucosa, fracture of the wall of the socket, and the need for additional manipulations (folding the mucoperiosteal flap, compactectomy, etc.). Such removal often becomes very traumatic, and its consequences manifest themselves over a long period of time: atrophy of bone tissue in the area of the socket of the extracted tooth, reduction and often complete disappearance of the zone of keratinized attached gum, atrophy of the gingival papilla, development of recession on adjacent teeth, etc.

For many people, tooth extraction is a very unpleasant and even frightening procedure. In fact, such fears are a consequence of those times when this manipulation was done without anesthesia using rough instruments. Today dentistry has stepped far forward, so removal takes place in much more comfortable conditions. You should not be afraid of the procedure, because the right psychological attitude is also one of the important conditions for the success of the operation.

To ensure that no incidents occur during tooth extraction, you must inform the surgeon about your state of health. If you have allergies, chronic or acute illnesses, be sure to tell your doctor. The same goes for the medications you take. Avoiding complications will also help avoiding alcohol and cigarettes the day before the procedure.

Tooth extraction is a rather painful procedure, so it is almost never performed without anesthesia [18]. The exception is people with allergies to anesthetic drugs. Most often, when extracting teeth, local anesthesia is used using an injection. Usually we are talking about the so-called conduction anesthesia, which is injected directly into the nerve and has an increased concentration of the active substance. Naropin, ultracaine, ubistezin, etc. are used as the latter. In addition to local anesthesia, general anesthesia may also be used during tooth extraction. Today, sedation is the most popular. This is a procedure in which the patient is given a strong sedative. He is in fact conscious, but does not feel pain and remains as if in a dream. Anesthesia is a more serious procedure that involves complete loss of consciousness, which in turn entails a longer recovery period.

General anesthesia for tooth extraction is used if the patient is intolerant to drugs for local anesthesia. In addition, it is used if a person has mental disorders, as well as if he experiences severe fear of the procedure. It is also justified if several teeth are to be removed at the same time. For example, sedation is often used when wisdom teeth are extracted. The procedure is done under the supervision of an anesthesiologist. Before the manipulation, the patient undergoes tests, performs a cardiogram and other procedures to diagnose the condition of the body.

Ultrasound tooth extraction is a modern minimally invasive extraction method. This method is painless, fast, minimizes the risk of complications and is mainly used to extract difficultly located teeth. Ultrasonic tooth extraction in dentistry is called piezosurgery. A special device acts on bone tissue with ultrasonic waves, resulting in the formation of a kind of "scalpel". It has a targeted effect on the operated area, without affecting healthy tissue. The piezosurgical unit allows you to make the incision small and shallow, the wound heals faster. During the procedure, the operated area is cooled, the patient only feels a buzzing sound and water flowing [3]. Despite the advantages of the method, piezosurgery is usually used for complex extractions. The usual method is quite effective. In addition, not all dentists are equipped with special equipment.

In some cases, ultrasonic tooth extraction is contraindicated. The method is not used if the patient:

- diseases of the cardiovascular system;
- pathologies of the central nervous system;
- respiratory diseases: bronchial asthma, emphysema, asthmatic bronchitis;
- diseases transmitted by airborne droplets - tuberculosis, herpes;
- HIV infection;
- hepatitis.

ADVANTAGES:

- complications occur rarely and are less intense than after conventional surgery;
- the procedure is carried out faster by 15 – 20%;
- there is no heavy bleeding;
- soft and bone tissues are preserved, which is especially important for subsequent dental implantation;
- antiseptic effect – antibiotics are rarely required after piezosurgery;
- high accuracy - the ability for the doctor to fully control actions and easy access to remote areas.

Summarizing the results of our research, we can conclude that the use of ultrasound in the daily practice of a dentist today is a necessity.

Using a handy blaster is an air-abrasive method and allows you to remove biofilm from hard-to-reach places where other tools are completely ineffective [4, 5]. I would also like to note that the handyblaster cannot remove thick subgingival tartar. Therefore, if this is required, then before cleaning, tartar is removed using the ultrasonic method. Since this is an abrasive method, in rare cases, with certain structural features of the tooth enamel, it may crack after the procedure. It is well known that when using soda as a powder, the number of visits can be no more than two times a year, and it is extremely undesirable to use this type of powder in patients with implants, braces, composite and ceramic restorations, as well as in those patients who have foci of demineralization on the enamel and hyperesthesia of various origins [6, 7].

Modern methods of dental treatment

Depending on the diagnosis made, the method of dental treatment chosen by the doctor depends. Dental treatment can be roughly divided into three categories:

- Therapeutic dental treatment. Here we include all manipulations of therapeutic dentistry. This is the treatment of caries and its complications (pulpitis, periodontitis).
- Orthopedic treatment. All pulpless teeth, especially those with a large loss of hard tissue, and in particular dentin, must be covered with orthopedic crowns to protect the tooth from possible chips or splits [12,13]. Orthopedic treatment is also used in aesthetic dentistry.
- Gum treatment. Yes. After all, gum disease can also lead to the loss of teeth, sometimes completely healthy ones. This occurs due to the destruction of the ligamentous apparatus and the appearance of tooth mobility [8]. So, professional oral hygiene and periodontal treatment can be classified as one of the methods of dental treatment.

Depending on the disease, you can use not only invasive, but also minimally invasive methods of dental treatment [19]. Undoubtedly, nothing is more effective than prevention, but sometimes you have to resort to treatment. In the early stages of the disease, when stains appear on the teeth (which indicate demineralization of the enamel), there are still no signs of caries penetration into hard tissues, it is possible to use one of the most effective and safest methods – infiltration [9]. The ICON system has widely proven itself in this matter, thanks to which it is possible to stop caries at an early stage of development. This treatment lasts no more than 20-30 minutes and consists of chemical-mechanical treatment of the damaged area.

The gel used has a gentle and selective effect. At the end of the procedure, the enamel is “sealed”. This makes it possible to avoid further development of caries. This method is in great demand for treating children, because there is absolutely no pain, as well as sounds from operating equipment that can frighten a child. As long as the destruction of the hard tissues of the tooth is relatively shallow, treatment of the carious cavity using the air-abrasive method is effective. Removal of softened, affected tissue occurs under the influence of an air flow that contains special abrasive particles. Healthy tissues remain unharmed. Laser treatment is also possible. Using a laser beam, we not only remove the affected tissue, but also disinfect the cavity [10, 12].

It should be noted that performing only professional oral hygiene, carried out once every six months using ultrasonic scalers, is not enough to obtain consistently good results. The specialist should place an important emphasis on maintaining oral hygiene by the patient himself. For more effective treatment of periodontal diseases and their prevention, it is possible to use ultrasonic and sandblasting devices during professional teeth cleaning.

List of used literature:

1. Qodirov M. BOLALARDA GINGIVIT KASALLIKLARNING PROFILAKTIKASI VA DAVOLASH //Евразийский журнал медицинских и естественных наук. – 2023. – Т. 3. – №. 4 Part 2. – С. 39-42.
2. Кадыров М. М. У. Нарушения развития жевательного аппарата в постэмбриональном периоде //Science and Education. – 2023. – Т. 4. – №. 4. – С. 313-317.
3. Кадыров М. М. У. Тканевые изменения в жевательно-речевом аппарате при ортодонтическом лечении аномалий //Science and Education. – 2023. – Т. 4. – №. 4. – С. 374-378.
4. Muhammadsolik o'g'li Q. M., Zulfiqorovich T. T. SYMPTOMS OF INJURY THAT OCCUR IN THE DISEASES OF THE MOUTH //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 4. – С. 377-380.
5. Kodirov M. M. U. EARLY METHODS OF PREVENTION OF CARIES IN CHILDREN'S TEETH //Academic research in educational sciences. – 2021. – Т. 2. – №. 4. – С. 1887-1890.

6. Muhammadsolik o'g'li, Q. M., & Zulfqorovich, T. T. (2022). SYMPTOMS OF INJURY THAT OCCUR IN THE DISEASES OF THE MOUTH. *Galaxy International Interdisciplinary Research Journal*, 10(4), 377-380.
7. Muhammadali Mahamadsoli Ugli Kodirov (2021). EARLY METHODS OF PREVENTION OF CARIES IN CHILDREN'S TEETH. *Academic research in educational sciences*, 2 (4), 1887-1890. doi: 10.24411/2181-1385-2021-00814
8. угли Абдувалиев Н. А. и др. Кўкрак ёшидаги болаларда краниометрик кўрсаткичларнинг ўсиш динамикасини ўрганиш //Science and éducation. – 2021. – Т. 2. – №. 5. – С. 82-86.
9. Ravshanbek o'g'li R. R. et al. INFECTIOUS DISEASES OF THE MOUTH OF THE MOUTH //Galaxy International Interdisciplinary Research Journal. – 2022. – Т. 10. – №. 4. – С. 374-376.
10. Раимжонов Р. Р. У. ИЗУЧЕНИЕ ВЛИЯНИЯ ФАКТОРОВ ПИТАНИЯ НА РАЗВИТИЕ ЗУБОЧЕЛЮСТНОЙ СИСТЕМЫ У ДЕТЕЙ //Re-health journal. – 2022. – №. 2 (14). – С. 202-206.
11. Раимжонов Р. Р., Пулатов Х. Т. Кукрак ёшидаги болалар бош соҳасига оид курсаткичлардаги жинсий тафовутларини баҳолаш //Polish Science Journal. – 2021. – №. 5. – С. 38.
12. Усмонов , Б. . (2023). ТИШЛАРНИ ЭНДОДОНТИК ДАВОЛАШ АСОРАТЛАРИНИНГ КЛИНИК, РЕНТГЕНОЛОГИК ВА НЕВРОЛОГИК КЎРИНИШЛАРИНИНГ ХУСУСИЯТЛАРИНИ АНИҚЛАШ. *Евразийский журнал медицинских и естественных наук*, 3(3), 76–80.
13. Раимжонов Р. Р. Иммунологического и морфологического особенности развития зубов у детей грудного возраста //Tibbiyotda yangi kun.-2019. – 2019. – Т. 3. – №. 27. – С. 218-221.
14. Atakanov Azizbek Abdisalomovich. (2023). AESTHETIC REQUIREMENTS IN CHOOSING ARTIFICIAL TEETH. *Ethiopian International Journal of Multidisciplinary Research*, 10(11), 98–100. Retrieved from <http://www.eijmr.org/index.php/eijmr/article/view/439>
15. Atakhonov Azizbek Abdisalamovich. (2023). OBSERVATION OF INDICATORS OF PROSTHETIC STOMATITIS IN PATIENTS USING PROSTHESES MADE OF ETHACRYL AND FTOROX. *International Multidisciplinary Journal for Research & Development*, 10(11). Retrieved from <https://www.ijmrd.in/index.php/imjrd/article/view/280>
16. Ataxanov A. BOLALARDA OG'IZ BO'ZISH SHILLIQ QAVATI KASALLIKLARI TUZILISHINI YOSH BO'YICHA XUSUSIYATLARI //Евразийский журнал медицинских и естественных наук. – 2023. – Т. 3. – №. 4. – С. 92-95.
17. Abduxoshim o'g'li, A. N. (2023). NEW STAGES AND MODIFICATIONS OF TOOTH EXTRACTION. *International Multidisciplinary Journal for Research & Development*, 10(11).
18. Mirzakarimova, D.B., Hodjimatova, G.M. and Abdukodirov, S.T., 2024. FEATURES OF PATHOGENESIS, CLINICAL PICTURE AND DIAGNOSIS OF CO-INFECTION OF THE LIVER WITH HEPATITIS B AND C VIRUSES. *International Multidisciplinary Journal for Research & Development*, 11(02).
19. Taxirovich, A. S. (2023). The Main Etiological Factors, Methods of Prevention and Treatment of Meningitis. *Inter-national Journal of Scientific Trends*, 2(2), 141-148.
20. Abduxoshim o'g'li, A. N. (2023). FEATURES OF CONSERVATIVE TREATMENT. *International Multidisciplinary Journal for Research & Development*, 10(11).
21. Usmanov B.A., . (2020). Application Of Balm "Asepta" In Treatment Of Inflammatory Periodontal Diseases In Adolescents. *The American Journal of Medical Sciences and Pharmaceutical Research*, 2(09), 86–88.