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**SEALING CANALS OF TEETH WITH MINERAL TRIOXIDE EQUIPMENT
(ORTHOMTA) with REPEATED ENDODONTIC TREATMENT**

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A clinical study of re-endothrapy with subsequent canal filling is given. teeth with mineral trioxide aggregate (OrthoMTA) of previously endo-treated teeth with periapical pathology. We performed repeated endodontic treatment of 24 teeth with chronic periodontitis in 20 patients. previously endo-treated with periapical pathology. All 24 teeth have undergone repeated endodontic treatment with orthoMTA. Such advantages OrthoMTA, having a pH of 12.5, i.e. with high antimicrobial action, as the possibility of immediate final sealing channel, immediate sealing of the canal perforation, which increases the strength of the tooth and reduces the risk of its postmarginal permeability; reduction of the duration of treatment. Teeth with chronic periodontitis-MI, which were treated earlier, are not today an indication for their removal.

Key words: repeated dental treatment; chronic periodontitis; filling the canals of the teeth; OrthoMTA; XP Endo; crown down

**KAYTALAP ENDODONTIKALYK Darylodon Kyin
MINERALDIC TRIOXIDE AGREGATE MENEN (ORTHOMTA)
TISHTIN KANALDARYN PLOMBALOOOO**

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Tyuynd syzder: tishterdi kaytalap daryloo; neket periodontitis; tishterdin candaryn plombaloo; OrthoMTA; XP Endo; crown down

**THE ROOT CANAL FILLINGS WITH MINERAL TRIOXIDE (ORTHOUSE)
WHEN RE-ENDODONTIC TREATMENT**

RR Berdieva

This is a review of a chemical study. trioxidaggregate (OrthoMA), previously endoelectified teeth with periapical pathology. We had a re-root canal treatment 24 teeth with chronic periodontitis in 20 patients previously andelectric with periapical pathology. All 24 of the teeth has undergone endodontic treatment with the use of the OrthoMTA. The OrthoMTA such advantages as the possibility; the permeability; the shortening of the duration of treatment. Teeth with chronic periodontitis, which were previously treated are not today an indication for their removal.

Keywords: re-treatment of teeth; chronic periodontitis; root canal fillings; OrthoMTA; XPEndo; crown down

Relevance. In the dental practice are frequent iatrogenic complications arising with endodontic dentistry. Elimination of iatrogenic complications requires a good understanding of this problem and the possession of modern technological capabilities. Similar complications may occur as a result of insufficient attention or experience of the dentist and treatment without anatomical features of a particular tooth [1, 2]. To the most common iatrogenic complications with Endodontic dentistry includes: the natural path of the root canal, excessive root filling and perforation [3, 4]. All this leads to a negative result. Endodontic treatment and requires further re-treatment of these teeth. For the prevention of elimination perforation sealing material in the USA in 1993 it was introduced by MTA [5], and in 1998 it was allowed to use it in endotherapy [6, 7]. Currently, MTA is considered the material of choice for sealing the punch channels and possesses proven biocompatibility (inert and non-toxic. exposure for the first 24 hours) and bioactivity (promotes the formation of solid tissue). The effectiveness of MTA has been demonstrated and has been established through a series of experimental and clinical researches [1, 3, 4, 6]. MTA has the ability to create an inert barrier that helps to prevent contamination of the margin of defect due to edge permeability crown restoration. It is known that one of the leading causes of failure in the elimination of perforations during re-endotherapy is infectious contamination [7, 8]. Despite all technological advances and uses of bioactive materials, perforation elimination continues to be considered an experimental method. For a better understanding of the possibilities of living in such situations requires additional relevant clinical studies criteria for evidence-based medicine.

Material and methods. In the clinic "Carisma" 24 teeth underwent endo-treatment with chronic periodontitis in 20 patients. All teeth were endo-treated with periapical pathology and foci of rarefaction with a diameter of 0.3-0.7 mm. Of 24 teeth that have undergone re-endotherapy 10 teeth were 1-channel, 8 teeth - 2-channel, 6 teeth - 3-4 channels. Primary endotherapy was carried out in a period from 0.5 years to 3 years. Every 24 teeth have previously been treated for chronic periodontitis. Sealing material was used at the top of 10; underfilling

found in 14 teeth. All the indicated disadvantages were associated with medical practice. In 7 days back from 20 revealed the presence of lateral perforation, in the upper third - 3 teeth, in the apical - 4 teeth. All 20 patients underwent targeted dental X-ray examination of the teeth, as well as the same radiography. All 24 teeth have undergone repeat-endodontic treatment using OrthoMTA. Advantages of OrthoMTA - possible immediate final sealing canal, the immediate sealing of the perforation channel, which increases tooth strength and reduces there is a risk of fracture and marginal permeability; reduction in the duration of treatment.

The results of the study. Endo-repeat treatment included the following: after removal of old restorations in 24 teeth removed pins in 14 teeth; to create a rectilinear access to the mouths of the channels used ultrasonic Careful tips for thorough removal of cement residue. Next, they performed crushing gates of teeth with Gates Glidden number 1, 2. According to the sequence of actions repeated so much times as necessary to maximize but remove the filling material from straight linear section of the channel, maintaining the review. Then the canals were irrigated with a 2.5% solution of sodium hypochlorite. Further manual tools - K-files number 15, 20 - performed by clockwise and counter movements, exerting a little pressure and trying to Pour the difference in consistency and hardness. As is known, the apical regions of the canals root canals are characterized by significant anatomical diversity that imposes special requirements for their processing. First of all, to restore the course of the channel and remove the root fillings must be used tool K-file number 10, which was not previously used. If necessary, used "GP Solvent" for unsealing gutta percha in quantity 0.3-1.0 ml.

Channel irrigation was carried out but during the channel unsealing process with 2.5% sodium hypochlorite solution in an amount of 10.0 ml to 25.0 ml. After removal of the filling additional material was carried out structural processing of channels to impart an optimal shape. Determined the working length Well, tooth canals using Root ZX Apex Locator (Morita), for confirmation, they performed with K-file number 15. Then carried out the technique "Crown Down" for cleansing the tooth canals. Physiological contractions opened, formed apical emphasis master file. Additionally

smoothed and leveled the walls of the tooth canals H-files. To remove the smeared layer using a 17% solution of EDTA in the amount of 0.2-0.5 ml.

The main purpose of re-preparation is root canals have become high-quality sanitation and disinfection with preservation of natural strange configuration, especially near apical opening. In the course of re-endodontic We also experienced certain difficulties, as described earlier, due to the fact that during primary endotreatment took place iatrogenic error in the form of perforation of the channel nya [3]. In the absence of exudate, Calcium hydroxide paste from 1st week to 1 month depending on the size of the periapical of the hearth. Then in the absence of inflammatory phenomena exudate channels sealed material OrthoMTA scrap. OrthoMTA condensation is whether using a direct probe, manual condensers, files. The apical border of OrthoMTA should located within the root canal at the level of no physiological constriction without removing the rial per apex root due to non-resorbability this stuff. Quality of sealing whether on control radiographs.

When filling the channels, we used special tool kit OrthoMTA, South Korea (Figure 1).



Figure 1 - OrthoMTA-set for sealing root canals MTA

A typical example of under-filling perforation in the apical part of the root and the presence of bone loss from 0.3 to 0.5 mm serves as the following example (Figure 2).



Figure 2 - Chronic periodontitis of the 23rd tooth with side perforation

In the course of re-endotherapy, after canal filling, multiple irrigation with the help of sensitive K-file number 10 is possible bypass perforation, determining the working length channels, as shown in Figure 3.

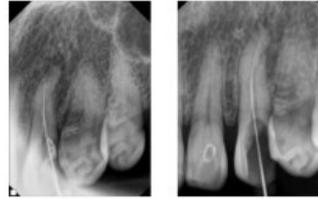


Figure 3 - Side Perforation Bypass K-file number 10

With repeated endotherapy, an calcium channel calcium obstruction for the purpose of subsiding of the inflammatory phenomena in 1 month.

After subsiding of the inflammatory phenomena Calcium hydroxide was replaced by permanent New filling of the Ortho-MTA material in the channel tooth and previously available perforation of the canal, and the permanent filling in the tooth was established as shown in Figure 4.

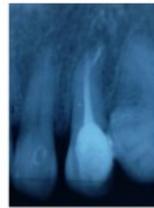


Figure 4 - Filling of the canal of the OrthoMTA tooth

It should be noted that the hardening time OrthoMTA material is very short, 10-15 minutes, which requires highly skilled dentist log, because during this time the doctor must carefully fill the channels and have time to spend Genological quality control of sealing. The technical difficulty lies in the fact that OrthoMTA is a cementitious material the filling of which is a shuya problem.

As you know, when perforating the prognosis of the tooth depends on many factors (table 1).

Conclusion Thus, teeth with chronic cic periodontitis that has been treated previously, they are not an indication today of their removal. niyu. Modern materials, which is

Table 1 - Factors affecting the prediction of root perforation elimination

Factors	Favorable	Unfavorable
Defect size	Small (file)	Large (drill)
Message from the oral cavity	Not	Yes
Term	Recently	Long
Bone defect	Not	Yes
Passability of channels	Yes	Not
Sealing material	AIT	Other
Pulp	Vital	Nevitalnaya
Periapical center	Not	there is

OrthoMTA with a pH of 12.5, i.e. with a high antimicrobial action; instruments; modern menstrual methods of re-endotherapy, thorough careful and consistent carrying out of the stages allow you to save these teeth for many years.

Literature

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