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# ENDODONTIC DENTAL TREATMENT PREVENTION AND TREATMENT ATOEVA M.A. MASHARIPOV S.M.

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**Abstract:** There are many studies in this area, but they are not comprehensive. A.Yu. Turkina (2005) determined that an important factor in the appearance of pain after filling is the removal of sawdust of dentin into the periapical region with poor-quality instrumentation of the canal.

**Keywords:** The same author compared the "step-back" and "crown-down" preparation methods and proved that the "crown-down" method is the least conducive to pushing sawdust "beyond the apex".

#### Introduction

Analysis of literary sources shows that in all studies on this topic, traditional statistical analysis of the assessment of the influence of causative factors of post-filling pain is used. This does not take into account the mutual influence of factors, their interaction. Therefore, from our point of view, the strength of the influence of possible causative factors on the development of post-filling pain has not yet been finally determined, it is difficult to predict its occurrence [1.3.5.7.9.11.13.15.17.19].

There are conflicting data in the literature about their effectiveness. In this regard, we considered it necessary to conduct an in-depth study of the causes of the development of post-filling pain, evaluate the effectiveness of its prevention and treatment, and develop a method for predicting.

**Purpose of the study.** Improving the efficiency of predicting, preventing and treating pain that occurs after endodontic dental treatment.

The leading factors causing the appearance of post-endodontic pain are the level of filling of the root canals of the tooth and their number.

For the first time, an algorithm was developed for predicting post-filling pain and its prevention in patients undergoing endodontic dental treatment.

It was determined that, taking into account the results of individual prediction of post-endodontic pain, it is possible to use a single antibiotic injection for its prevention, and to combat pain in the first 3 days, the most effective use of magnetic laser therapy, with more prolonged pain - fluctuorization.

In endodontics, pain is mainly associated with inflammation, which, in turn, is caused by infection due to carious damage, penetration of infection from periodontal pockets and the hematogenous route; traumatic injuries (crown and root fracture, tooth dislocation) and iatrogenic factors (instrumental and drug treatment) [2.4.6.8.10.12.14.16.18.20].

#### **Characteristics of the examined patients**

Examination of patients and endodontic treatment of their teeth was carried out on the basis of a dental clinic. The results of the study were introduced into the practice of the dental center at the Bukhara State Medical Institute, the regional dental clinic and the clinical dental clinic No. 2, 68 patients were monitored, of which 15 were men and 53 were women.

Method of endodontic treatment of teeth



Periodontitis consisted in the treatment of a carious cavity or trepanation of the crown, opening the cavity of the tooth, searching for and expanding the orifices of the root canals, and examining the root canals. Instrumental processing of root canals was carried out by two methods - "step-back" and "crown-down". When preparing canals according to the "step-back" technique, K-reamers, K- and H-files were used. Fileling was used - longitudinal movement of the endodontic instrument with reciprocal rotation within 45° - 180°. The minimum channel expansion is ISO25, the maximum is ISO40. When preparing according to the "crown-down" technique, fully rotating instruments were used - profiles with a taper of 04, 06 and protapers - the only files that have a variable taper of the working part within one instrument. An electric micromotor with a rotation speed of 250- 400 rpm. The working length was determined by a diagnostic radiograph and by an electronic method using Lumen (Lithuania) and Foramatron (USA) apex locators. The final position of the master pin was controlled radiographically.

Pulpitis was treated by the method of vital (214 teeth) and devital pulpectomy (25 teeth). When performing the method of vital pulpectomy, infiltration or conduction anesthesia was used using modern carpool anesthetics based on articaine and lidocaine. To devitalize the pulp, the devitalizing paste "Arsenic" ("Omega") was used, which was applied to the opened pulp horn: in single-channel teeth - for 24 hours, in multi-channel teeth - for 48 hours. To test the hypothesis about the possibility of preventing post-filling pain by injecting an antibiotic into the transitional fold, a separate study was conducted in which 53 volunteers participated: 19 men and 34 women aged 18-57 years. Patients were randomly assigned to three groups. At the same time, in the first group ("A"), all patients were given injections - there were 15 people, in the second group "B" (18 people) such injections were not made. And in the third group ("B"), injections were made only to those patients in whom, according to the results of predicting post-filling pain, the risk of its development exceeded 50%. As an antibiotic, we decided to use lincomycin, since it has a tropism for bone tissue, is one of the popular, well-tested drugs; used an injection of a 30% solution of lincomycin in an amount of 1 ml into the transitional fold in the area of the causative tooth before its treatment (group "A") or immediately after X-ray quality control of root canal filling and predicting the risk of developing post-filling pain (group "B"). All patients were with chronic forms of pulpitis and periodontitis [21.23.24].

To test the assumption about the possible effective effect of various physiotherapy procedures on the relief of post-filling pain, we conducted another additional study, which involved 42 patients with severe post-filling pain (14 men and 28 women) using the ASB-2 apparatus. » A current of 0.5 to 2  $\mu$ A was used. We also used a laser device with a magnetic nozzle "Uzor - 2K", with a wavelength of 1300 nm and an LED laser device from Geosoft (Russia) with a wavelength of 830 nm. In the presence of pain after filling, those that were not stopped by taking painkillers, the patients were recommended physiotherapy, taking into account possible contraindications. Procedures such as ASB (18 patients) and magneto-laser exposure with a semiconductor laser device "Uzor - 2K" (15 patients) were performed in the physiotherapy department. Some patients (9 people) received physiotherapy directly in the dentist's office, using a portable diode laser device from Geosoft.

The choice of methods of physiotherapeutic influence in our study was due to purely practical considerations, since these methods of treatment are the most accessible to practitioners and are most often used in practice. At the same time, we understand that the arsenal of physiotherapy methods is quite wide and the doctor, taking into account the individual characteristics of each patient, indications and contraindications, can choose other methods not involved in our work. The purpose of this fragment of the study was to show that the effectiveness of the methods of physiotherapy of

post-filling pain is different and depends on the degree of its severity, as well as the individual characteristics of each patient.

#### **CONCLUSIONS**

- 1. At the same time, overfilling and underfilling of the root canal are equally unfavorable. In second place is the number of root canals in the tooth. Their interaction determines the appearance of pain by 48.53%.
- 2. When studying the frequency and characteristics of post-filling pain, the most informative method is the one that uses the questioning of patients.
- 3. In the scientific assessment of the causes of post-filling pain, the most informative is multivariate analysis of variance, which is superior in its informativeness to the methods of variational statistical analysis.
- 4. Preventive use of injections of broad-spectrum antibiotics immediately after root canal filling and prediction of post-filling pain prevents its occurrence, but it has known limitations and should be used strictly individually, taking into account possible contraindications.
- 5. Algorithm for predicting post-filling pain allows for its relief in the first 3-6 days to select the use of LED laser, magneto-laser radiation of the Uzor apparatus or fluctuorization as the most effective physiotherapy.

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