

TO CONDUCT A CLINICAL X-RAY EXAMINATION BEFORE AND AFTER THE SEPARATE AND COMBINED USE OF DEPOT, APEX - FORESIS WITH THE JOINT APPLICATION OF THE METHOD OF FLUCTUATION IN CHRONIC APICAL PERIODONTITIS

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Relevance. The inflammatory process in the periodontium in people over 50 years of age is the cause of tooth extraction in more than 50% of cases. Currently, during an X-ray examination of teeth after previously performed endodontic treatment using resorcinol-formalin and zinc oxide-eugenol pastes, periapical destructive changes were detected in 80% of cases and poorly sealed root canals in 50% of cases. Methods of filling root canals with "one paste" and resorcinol-formalin method in poorly passable root canals do not guarantee their high-quality obturation and can lead to the development of periapical foci of chronic infection.

Objects of research. out of 48 examined patients for the period 2019-2021 in the scientific and practical dental center at the Bukhara State Medical Institute, 31 patients with granulating and granulomatous forms of chronic apical periodontitis were identified.

The subject of the study. For the clinical study, patients aged 18 to 55 years with granulating and granulomatous forms of chronic apical periodontitis were taken. For bacteriological research, quantitative sectoral seeding was carried out on media.

For the first time, the high antibacterial and anti-inflammatory effectiveness of the separate use of these techniques will be revealed in comparison with the traditional method of treating the disease, and even high efficiency - with their combined use.

The effect of combined endodontic treatment with the use of depot-, apex – foresis with the combined use of the method of fluctuation on the effectiveness of traditional treatment of periodontitis will be established, based on an assessment of the number of complications and the process of bone regeneration in the area of apical periodontitis.

The expediency of complex endodontic treatment of chronic apical periodontitis with the use of new methods of copper-calcium hydroxide depoforesis, apex– foresis using a silver-copper conductor and the joint application of the method of fluctuation [1.3.5.7.9.11] will be proved.

Quantitative indicators were evaluated for compliance with the normal distribution, for this purpose the Shapiro-Wilk criterion (with the number of subjects less than 50) or the Kolmogorov-Smirnov criterion (with the number of subjects more than 50), as well as indicators of asymmetry and kurtosis were used.

In the case of describing quantitative indicators with a normal distribution, the data obtained were combined into variational series in which arithmetic averages (M), standard deviations and standard error (m), boundaries of 95% confidence interval (95% CI) were calculated [21.22.23.24.25].

When comparing average values in normally distributed sets of quantitative data, the Student's t-test was calculated.

The obtained values of the Student's t-test were evaluated by comparison with critical values. The differences in the indicators were considered statistically significant at a significance level of $p < 0.05$.

Nominal data were described with absolute values and percentages.

The comparison of nominal data was carried out using the Pearson criterion χ^2 , which allows us to assess the significance of differences between the actual number of outcomes or qualitative characteristics of the sample falling into each category and the theoretical number that can be expected in the studied groups with the validity of the null hypothesis [2.4.6.8.10.12].

Initially, the expected number of observations in each of the cells of the conjugacy table was calculated, provided that the null hypothesis about the absence of a relationship was valid. To do this, the sums of rows and columns (marginal totals) were multiplied, followed by dividing the resulting product by the total number of observations.

The value of the criterion χ^2 was compared with the critical values for $(v-r-1) \times (c-1)$ the number of degrees of freedom. In the event that the obtained value of the criterion χ^2 exceeded the critical one, it was concluded that there was a statistical relationship between the studied risk factor and the outcome at the appropriate level of significance.

In cases where the number of expected observations in any of the cells of the four-field table was less than 5, the exact Fisher criterion was used to assess the significance of the differences.

Analysis of the results of treatment of chronic apical periodontitis with the use of various types of therapy showed that 6 (28.5%) patients who received traditional treatment had complications in the form of pain and gum hyperemia in the area of the mine tooth on day 7-14. And with the use of dental root canal depoforesis, similar complications were observed in 2 (10%) patients, with apex-foresis - in 1 (5.5%) patients, and with the combined use of depot-, apex-foresis with the combined use of the method of fluoridation, complications were not observed at all. When complications were detected, patients were prescribed analgesics and anti-inflammatory drugs (analgin, aspirin, and paracetamol).

As the results of repeated X-ray examinations showed after 6 and 12 months, with traditional treatment, the number of positive X-ray pictures is 6 (28.5%) cases for 6 months and 4 (19%) cases for 12 months of the study. With depoforesis, these indicators are respectively equal to 8(40%), 9(45%) cases, and with apex-foresis - 12 (66.6%) and 15 (83.3%) and they significantly ($P < 0.05-0.001$) differ from traditional treatment. When combined with depot, apex - foresis and the combined use of the method of fluoridation, a positive X-ray picture was revealed after 6 and 12 months, respectively, in 20 (90.9%) and 22 (100%) cases. These indicators are 1.3-2.2 times higher than similar data when using depot and apex- forez separately [13.15.17.19.21.23.25].

Analysis and comparison of the results of X-ray studies in the long term (6 and 12 months), depending on the type of treatment used, showed that the positive dynamics of X-ray data corresponding to a decrease in observations evaluated by 4 and 5 points of the modified PAJ index occurred in 4 (19%) patients with traditional treatment, in 16 (80%) - with depoforesis, in 15 (83.3%) - with apex-foresis and in 22 (100%) - with combined treatment with depot-, apex - foresis with the combined use of the method of fluoridation.

After 6-12 months after the end of combined treatment with depot-, apex - foresis with the joint use of the method of fluoridation, all patients had no complaints and when examined, the gum in the area of the cured teeth had a normal picture. Pathological periapical changes were not observed on the X-rays of the cured teeth.

Thus, the use of depot- and apex - fosis in the complex endodontic treatment of chronic apical periodontitis leads to a significantly ($P < 0.05-0.001$) rapid acceleration of the processes of regeneration of periapical tissues compared with the traditional method of treatment. At the same time, the combined use of depot-, apex - fosis with the combined use of the method of fluoridation has a 1.3-2.2 times effective effect on the condition of the periapical tissue of the teeth than using them separately. This is expressed in reducing the number of complications, accelerating the process of bone regeneration in the area of apical periodontitis and thereby reducing the number of visits of patients to a dental institution.

Based on our own research, we recommend the following ways to improve the quality of complex endodontic treatment of chronic apical periodontitis with difficult and impassable root canals of teeth. So, it's no secret that, despite the undoubted successes achieved by domestic therapeutic dentistry, the quality of endodontic treatment in some cases remains unsatisfactory.

At the same time, foci of acute and chronic inflammation in the pulp and periodontium cause physical and moral inconvenience to the patient, can serve as a source of odontogenic inflammatory processes in the maxillofacial region and neck, can complicate the course of diseases of internal organs and systems, provoke the development of focal-conditioned (general somatic) diseases. Therefore, timely, adequate and effective endodontic treatment is one of the most important areas of work of a dentist-therapist.

In this work, we want to offer practical healthcare a number of measures that, in our opinion, will significantly improve the quality of endodontic care.

Firstly, we believe that in conditions of insufficient funding, it is advisable to organize a specialized endodontic reception in budget dental clinics with the use of physical factors affecting root canals. Secondly, we consider it expedient to recommend practical healthcare to organize endodontic care on a three-level principle [14.16.18.20.22.24.25].

Once again, we would like to emphasize that with "free" endodontic treatment, the patient must necessarily be informed about the absence of a guarantee for the quality of such treatment. When carrying out impregnation methods of treatment, the patient should be informed about the high probability of complications, and as an alternative, tooth extraction should be offered to him. In addition, the patient should be provided with objective information about the possibility of paid treatment.

At the second level, in our opinion, it is possible to treat about 90% of multi-root and all single-root teeth. Tooth-preserving operations should also be widely used here. At the same time, the volume of endodontic care at the first level may change depending on the amount of budget funding. The third level provides highly qualified endodontic treatment, including the use of expensive and time-consuming techniques and technologies. In our opinion, a doctor who claims to provide highly qualified endodontic care should have a high classification. Thirdly, in connection with the question of guarantees for the quality of endodontic treatment, the question arises about the appropriate professional standard [21.22.23.24.25].

In addition, it is advisable to be guided by a list of quality criteria, individual endodontic manipulations and the entire treatment as a whole ("standard for manipulation"), according to which we propose to evaluate the quality of paid endodontic treatment of permanent teeth with formed roots. It has been established that the immediate and long-term results of endodontic treatment of chronic apical periodontitis using the combined method of depot-, apex - fosis with the combined use of fluoridation in our modification can be evaluated as positive and recommend their use in clinical dentistry.

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