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Analysis of Errors and Complications in the Use of Endocal Structures Used in Dentistry

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Abstract

1. In clinical practice, in 77.2 ± 2.8% of cases, various clinical errors and complications occurred during the restoration of defects in the crown part of sc teeth. Molar was less detected in the recovery of SC defects in solid tissue (75.2 ± 2.5%) and premolecular (76.5 ± 2.3%) with significantly higher levels of errors and complications in the recovery of SC defects, and sc defects in the coronary coronary part. teeth (64, 5 ± 2.3%).

2. High indicators of defect levels of completed SC treatment are determined (1,67 ± 0.08). Significantly large indicators of completed treatment defects were detected in the lower jaw (1.84 ± 1.07), defects in the corronal part of the teeth (0.64 ± 0.04), sc teeth during crown restoration. premolars (1,78 ± 0.05) and molars (1,80 ± 0.11).

3. The methodological approaches we propose will help prevent and eliminate clinical errors and complications in the treatment of patients with dental structures with severe dental defects.

Keywords:

Introduction

Restoring defects in the hard tissue of teeth is one of the current problems of prosthetic dentistry. Restoring rotting teeth using endocal pins has always been one of the main problems of dentistry. Choosing the type of needle and determining the number of numbers depends on the size and permeability of the channel after endodontic treatment, the number of root channels, the loss of dentin mass, the distance to antagonists and neighboring teeth. Needles should ensure that the crown-root part of the teeth is restored in the simplest way, taking into account the long life of endodontic obturation, the anatomy of the tooth canal. However, many doctors do not take into account the anatomical properties of loss of dentin mass or the properties of the pims used. At all stages of production of pinned constructions (SC), mistakes can be made that lead to the development of immediate or long-term complications. It is worth noting that in general it is impossible to

talk about the benefits of pim constructions, only in a certain clinical case can you talk about instructions or contraindications for the application of a certain pinned structure. In orthopedic dentistry, the percentage of premature replacement of fixed structures remains high due to improvement of clinical techniques and technological processes, complications and inability to use them. The main reasons for removing the rigid structures of dental prosthesis are medical errors in preparing the patient's oral cavity for prosthesis, unfounded selection of the design of prosthetics and materials for them, failure to follow treatment stages and manipulation rules. the use of technology, tactical errors, imperfect technologies during odontopreparate. Therefore, the need to investigate this problem is urgent and timely in order to prevent and eliminate clinical errors, as well as complications that arise in orthopedic treatment of patients with defects in the crown part of the teeth with pin structures.

Purpose of the study

Analyze complications in restoring defects in the crown part of the teeth with endocal pin structures.

Materials and research methods

To achieve this goal, an comprehensive examination was carried out on 84 patients aged 20-55 who had previously undergone dental treatment for defects in the solid tissue of KK teeth. In total, the quality of orthopedic treatment of SC defects in the crown part of 122 teeth was determined and studied. Of these, 79 are in the upper jaw and 37 are in the lower jaw. The dental condition was studied using a standard set of instruments (windows, probes, tweezers) under artificial light. Traditional methods have been used to assess the condition of pinned structures (checking, checking, checking, etc.) for oral cavity. Medical records of the "Dental Patient" recorded clinical errors and complications. An occludogram analysis method was used to detect early connections, because determining the interclusive connectivity of teeth is an important diagnostic criterion for assessing the quality of dental orthopedic treatment. Okklyudograms were obtained in accordance with the generally accepted technique. [39]. Patients with direct oral cavity have been diagnosed with occlusive links of antagonistic teeth in the area of existing postconstructions. A total of 126 olyudograms were taken and analyzed. For the calculation and analysis of the indicator describing the degree of defect of completed orthopedic dental treatment, we M.Z. Mirgazizov [39]. To apply this indicator, a list of defects that may result from clinical errors has been compiled and the weight coefficient of each type of defect has been skillfully identified:

1) rational use of the length of the root canal;
2) breakdown of the topography of the root canal arrow;
3) piercing of the root of the teeth;
4) excessive expansion of the root canal;
5) poor quality filling of the post bed;
6) obturation of the root canal of low quality at the stage of endodontic treatment;
7) improper restoration of occlusive relationships;
8) tegmaslik aesthetic;
9) Presence of remote periodontium pathology
10) the availability of a functional overload;
11) The design does not satisfy the patient for various reasons.

In the absence of clinical errors, the defect rate of completed treatment is 0.

In addition, testing and assessing the quality of the crown part of the tooth is noted the following indicators: color, shape, level of mechanical abrasion, violation of the integrity of the edges and chewing surfaces, correspondence to anatomy. form

Results of the study:

The results of the study show that in 77.2 ± 1.9% of cases in clinical practice, there were various clinical errors and complications in the recovery of defects in the crown part of sc teeth. It is reported that reliable indicators of clinical errors and complications ($p < 0.05$) have been identified in evaluating the results of molar teeth (76.3 ± 2.5%) and restoration of defects in the hard tissue of premolar teeth. 76.5 ± 2, 3%) and less - during the restoration of the crown part defects of the cut teeth - in 67.5 ± 2.3% of cases, dentists made the following clinical errors and complications: rational use of the length of the root duct, violation of the topography of the root duct arrow, excessive expansion of the root duct. Poor quality filling of post bed with cement, poor quality obturation of root channels. A study of cases of unwarranted use of the length of the root canal in the restoration of solid tissue of SK teeth revealed that this clinical error occurred in 28.9 ± 2.9% of cases. Dentists allowed the rational use of the length of the root dune in the production of tail compresses so that dental tissue could be restored by 36.2 ± 5.0%, teeth - 28.1 ± 5.1%, premolars - 29.1 ± 2.6%. and teeth - in 21.0 ± 1.9% of cases, respectively.

We found significant differences between the speed of unwarranted use of the length of the root canal in the ticking of teeth and molars. However, when we assessed the quality of molar SC recovery, we noted a much larger ($p < 0.05$) value of the studied mark.

An assessment of the quality of solid tissue restoration of SK teeth found an over-enlargement of the root canal in 8.3 ± 2.2% of cases. Most often ($p < 0.05$), these erroneous premolars are identified in assessing the quality of the recovery of KK - in 15.4 ± in 3.8% of cases and rarely, in the study of the recovery of molar cylinders - at 1.8. ± in 2,4% of cases. Cases of excessive expansion of the diameter of the root canal during the restoration of defects in the hard tissues of various groups of teeth with toothpaste occur frequently, violation of the topography of the root channel axis in the restoration of hard tissue of P ± S. SK teeth occurred in 19.8 ± 2.6% of cases. Analysis of the study's results showed that during the restoration of solid tissue of SK teeth, 26.5 ± 6.9%, tooth decay was found to be 6.9%, and tooth decile ± at 21.7 ±, tooth decay was found to be a violation of axis topography. 3.4%, teeth 18.0 ± 3.7% and premolars 17.9 ± 2.0%. Frequent violations of the topography of the root canal axis in the restoration of defects in the solid tissues of different groups of pim structural teeth, P ± S.

The study showed that during the restoration of defects in the hard tissue of SK teeth, doctors allowed root permeation in 3.7 ± 1.8% of cases, including: molars 7.9 ± 1.1% of cases, and rarely in premolars and an intersection of teeth. 3, 7 ± 2.5% and 3.0 ± in 2.0% of cases. With the help of pin constructions, the speed of root permeation during the recovery of defects in the solid tissues of different groups of teeth, P ± S.

Analysis of clinical studies findings showed that poor quality saturation of post-bed cement was detected during sc treatment of teeth in 8.8 ± 1.2% of cases.

Frequent encounters of poor-quality filling of post-beds with cement during the restoration of defects in the solid tissue of different groups of post-structural teeth.

Often, we discovered this clinical error when we evaluated the recovery of threaded KS in 11.5 ± 1.3% of cases, and rarely in 2.4 ± 2.2% of cases, and during the restoration of KK of solid tissue. Incision teeth and premolars in 13 and 5 ± 3.8% and 6.9 ± 2.0% of cases.

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