

odontitis in the temporary teeth and the increased or decreased percent in the number of patients with post-treatment complications.

**Materials and methods:** The study was based on the clinical assessment examinations and dental radiographs in 53 patients of 5-11 years old and we estimated only the treatment of temporary teeth, which are treated for one year period. Then we made statistic analysis related to clinical forms of chronic granular apical periodontitis, to the method of treatment and its results.

**Results:** We have treated 13 temporary teeth with chronic apical periodontitis using the conservative method. According to our analyses 3 teeth were considered failures; teeth were extracted because they remained less than two years before the eruption of permanent teeth. In 9 cases we observed regeneration bone, in one case tooth bud damages due to periodontal abscess.

**Conclusions:** The main objective in treatment of temporary teeth with chronic apical periodontitis is keeping the tooth from preventing dental migrations and prevention with orthodontic treatment. Apical periodontitis results suggest that successful therapy in children with deciduous teeth is due to root canal treatment and effective materials.

**Keywords:** treatment, periapical, pathologies, processes, children, chronic.

## MAINTAINING PULP VITALITY AFTER A TRAUMATIC INJURY

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**Introduction:** For an optimum patients' care we need to understand the impact of trauma on the pulp and the importance of pulp vitality for the tooth development, the type of injury, stage of the root development and the level of infection these are factors that effect the circulation to the injured area and impact of the pulp vitality. Traumatic dental injuries may result in endodontic complications. Endodontic therapy generally involves removing the pulp to save a tooth, but for young people keeping the pulp alive will help the tooth survive. Treatment strategies for traumatized immature teeth are based on preserving pulp vitality to ensure further root development and tooth maturation.

**Purpose:** The aim of this study is to prove that keeping the pulp alive after a traumatic injury in an immature permanent tooth is important for the apexogenesis of the tooth. When the tooth is mature, the therapeutic aims will also be directed towards preserving pulp vitality, especially as the patient is young.

**Case report:** A 9-years-old boy who had suffered a concussion injury to the maxillary anterior teeth he fractured his tooth and exposed the pulp, immediately after injury the. Radiographs reveal that the injured tooth has an immature root with an open apex. The apical opening is greater than 1 mm, the pulp chamber had been accessed. Vitality testing will not be useful in determining the status of the tooth pulp. Maintaining pulp vitality is a primary concern in the treatment of an immature tooth.

The goal in this case will be to allow the apex to mature and the dentin walls to thicken sufficiently to permit successful root canal therapy. The patient's pulp exposure is large and there has been bleeding. His injury requires a shallow pulpotomy to remove contaminated pulp tissue. After anesthesia, the tooth is isolated with a rubber dam. The exposed dentin is cleaned and any extruding pulp tissue is removed with a spoon excavator. The pulp tissue is gently removed to a depth of about 2 mm below the exposure. Wet cotton pellets are used to stop hemorrhage, and a hard-setting calcium hydroxide dressing is placed over the exposed pulp. The fractured tooth surface is acid etched and restored using a bonded resin composite.

The treatment is considered effective if there are no signs of clinical or radiographic pathosis and if the root continues to develop apically and thicken laterally. The boy had received prompt treatment (Apexification), the entire root canal system is cleaned, then filled with a soft non-setting calcium hydroxide paste to the level of the open apex. After six to twelve months a calcify barrier usually forms. Follow-up examinations should occur every three months. If there are any signs or symptoms of infection or pathosis, the canal is re-cleaned and refilled with calcium hydroxide, Radiographs should be taken at three, six and twelve month intervals to control the apical development. When it can be clinically and radiographically confirmed that the apex has closed or a bridge has formed at the level of the calcium hydroxide, the canal is ready to be filled with gutta-percha, and the tooth also ready for the restoration, so the little boy patient can smile again.

**Conclusions:** According to the results from the case report we had maintained pulp vitality after traumatic injury in young people it is important for the apexogenesis of the tooth and its maturation.

**Keywords:** pulp vitality, pulpotomy, pulp capping, apexification.

## THE CLINICAL PICTURE OF THE SUBTOTAL AND TOTAL DESTRUCTION OF THE TOOTH CROWN THE TREATMENT WITH THE USE OF THE CAST DOWELS AND CORES

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**Introduction:** One of the most frequent pathologies in dental practice is a partial and complete destruction of the crown of the tooth. The pathogenesis of destructions can be different: secondary caries, trauma. The goal of contemporary dentistry is to rehabilitate and restore the tooth regardless of the degree of the crown destruction. Dentists have adopted the method of substitution by double prosthetic piece as a technique of treatment. It consists of making two complete separate prosthetic pieces that are cemented separately: the cast dowel and core, the artificial crown. The cast dowels and cores are appreciated for resistance against rotation and a good adaptation in the root canal.

**Purpose:** The analysis of the particularities of the clinical picture in subtotal and total destruction of the tooth crown and the treatment with the use of cast dowels and cores.

**Objectives:** Analysis of the features of the clinical pictures of the subtotal and total destruction of the tooth crown; optimizing the method of treatment with the use of cast dowels and cores.

**Materials and methods:** In order to achieve the objectives set, have been selected, examined and treated 7 patients (4 women and 3 men, aged between 45-61 years), diagnosed with subtotal and total destruction of the tooth crown. The patients were assessed clinically and paraclinically and were treated with the use of cast dowels and cores.

**Results:** Based on the results of clinical examination and laboratory findings, the diversity of the clinical pictures in subtotal and total destruction of the tooth crown was found. The planning of the prosthetic construction was carried out given the morphological appearance of the root stump and its report to the gumline, alveolar ridge, and in accordance with the biomechanical analysis of future prosthesis.

**Conclusions:** The clinical picture of subtotal and total destruction of the tooth crown varies depending on ethiological factors, age, types of occlusion. The design of the cast dowels and cores is determined by the morphological appearance of the root stump and aims to ensure its stability.

**Keywords:** subtotal and total destruction of the tooth crown, cast dowels and cores.