

## **Errors and Complications in the Diagnosis and Treatment of Dental Caries**

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During treatment of dental caries, doctor performs a variety of manipulations, not very thorough or improper performance of which can lead to some kind of complications. These errors can occur both during the actual surgical treatment, preparation of carious cavities and on the stages of carious cavity filling and at a different times after sealing. It is therefore advisable to divide them into complications arising during the preparation of carious cavities and during filling of carious cavity, and the complications that arise after treatment of caries. Errors and complications arising during carious cavity preparation are: 1. insufficient carious cavity preparation may lead to secondary caries, thus progressing of caries process and possible development of pulpitis or filling loss. 2. Perforation of the carious cavity bottom or carious cavity wall and fracture of the carious cavity wall may happen due to not proper fixed hand of clinical thus leading to such complications. Perforation of carious cavity floor may happen in the case of acute deep dental caries, when bottom is softened and thin layer of demineralised dentine separates carious cavity from tooth cavity. 3. Injury of adjacent tooth crown by bur may happen when visible control of operative field is not provided. 4. Injury of gingival margin by bur may happen during preparation of carious cavities that goes deep under the gums or good vision of operative field was not provided. Errors and complications arising during carious cavity filing are: 1. Absence of a contact point, hanging edges of a filling and placement of a single filling in adjacent carious cavities will lead to inflammation papilla, thus causing pain to the patient and development of periodontal diseases. That is why during restoration of proximal cavities it is necessary to use matrix holder and matrices in order to restore contact point, thus preventing these complications. 2. Formation of high occlusion usually happen when filling is not adjusted to the bite, when high spots are left, this will lead to development of apical periodontitis in future, such tooth will change its color to grey shades and will be painful while biting. Errors and complications arising after dental caries treatment are: 1. Inflammation or necrosis of the pulp. 2. Inflammation of an intradental papilla or papilitis. 3. Acute or chronic course of an apical periodontitis. 4. Color change of the tooth crown. 5. Displacement, fracture and loss of filling. 6. Inadequate color of filling to the color of tooth enamel. The main task of therapeutic dentistry is to prevent dental caries and its complications – pulpitis, periodontitis, papilitis. Knowledge of possible mistakes and errors during carious cavity preparation and filling material placement will prevent young clinician from the complications arising as the result of mistakes.

**Key words:** *Errors, complications, mistakes, caries, prevent.*