Conservative endodontic access cavity design. Is it viable? - a literature review

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Conservative endodontic cavity (CEC) is a new technique used as an alternative to traditional endodontic cavity (TEC), aiming at less removal of tooth structure. The aim of this study was to verify the effects of this procedure. A literature search was carried out in the LILACS and PubMed databases. For a comparative analysis of data, 12 scientific articles were selected. The CEC showed to be more effective than the TEC in the removal of filling root material in retreatment with TRUShape instruments. About instrumentation efficacy of the root canal system, there was a drop in the quality of the distal root of lower molars. In relation to fracture resistance, there was a significant increase in lower molars, however, the literature diverged in relation to the lower premolars. It should be concluded, based on the scientific literature, that few benefits were found on TEC. It is also emphasized that, for this technique to be well performed, it depends on longer clinical time and use of specific equipment, such as cone beam computed tomography, operating optical microscope and ultrasonic. Clinical research is suggested for long-term data collect.

Keywords: Dental pulp cavity; Endodontics; Instrumentation; Minimally invasive; Pulp chamber.

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