



### **CHEMICAL COMPOSITION OF CEMENT MTA AND TCP USED IN ENDODONTIC**

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Currently dentistry to preserve the tooth, new techniques and biomaterials are being innovated by the day. Inside there are certain clinical procedures in endodontic and parenodontic surgery requiring a specific cement sealer in order to obtain successful clinical treatment. Use of this cement should have as its main purpose the apical seal preventing communication between internal and external tooth. Endodontic surgical technique, one of the purposes is to use a filling material that encourages tissue repair and provides an effective apical seal. Hence the interest in researching the cement mineral trioxide aggregate (MTA) and tricalcium phosphate (TCP). The goal is to analyze the chemical composition and the presence of toxic elements that may interfere with the performance of osteoconductive cements. The samples were analyzed by means of characterization techniques: XRD, XRF and FTIR. The MTA used in the development of the research is a commercial material, and TCP is a material we get from the laboratory of graduate UFCG. The results of the tests were not found toxic materials that endanger the use of cements in dentistry.