ABSTRACT: This article takes as a principal objective the determination of the quality of the measurements when they were obtained for apex locators of national manufacture, comparing with the locator of foreign manufacture Root zx. Among several proceedings of the treatment endodontic, the location of the top apex is what probably has been producing some discussions. To locate with precision the top apex of the dental channels, with the objective to model, removing the bacteria in this region and, consequently, obtaining the success in the endodontic treatment is of great importance for the dentistry professional. For so much, there is made necessary the determination of the length of the roots and the choice of the files to be used in the preparation and cleaning of same. Traditionally, the most precise and used form to measure this length is through of the X-ray image. However, even with the use of the X-ray, the measure can contain error, principally when the roots are curved, which might take the professional to make a mistake in the location of the point apex and in the choice of the file. In this work there was applied the theory and the methodology of the control graphs to compare the locators apex.

KEYWORDS: Calibration of models; control graphs; apex locators; endodontic; tooth apex; dental pulp cavity.