Perbandingan hasil pengukuran panjang kerja antara dua sistem alat elektronik dan radiografik terhadap panjang kerja aktual : deskriptif laboratorik = Comparative study of two electronic measuring system and digital radiographic in determining root canal working length

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Abstrak

Alat elektronik pengukur panjang kerja multifrekuensi adalah alat mutakhir yang datang setelah alat elektronik dua frekuensi.
Tujuan Penelitian: Membandingkan ketepatan hasil pengukuran panjang kerja dua sistem alat elektronik tersebut dan radiografik terhadap panjang kerja aktual.
Metode: Empat puluh gigi anterior rahang atas atau rahang bawah dipotong pada daerah servikal gigi. Dari arah labial, gigi dironsen untuk mengukur panjang kerja radiografik. Kemudian Semua gigi diukur dengan alat elektronik dua frekuensi dan multifrekuensi. Kemudian gigi dibelah dua vertikal dan diukur panjang aktual gigi. Kemudian data dianalisis dengan uji statistik chi-square dan kolmogorov-smirnov.
Hasil: Alat elektronik pengukur panjang kerja mempunyai ketepatan lebih baik dari radiografik dengan hasil berbeda bermakna.
Kesimpulan: Alat elektronik memiliki ketepatan lebih baik dari radiografik.
<hr>Multifrequency Electronic root canal length measurement device is the one that comes after two frequencies based device.
Objective: To compare the accuracy of the two electronic root canal length measurement device and radiographic with the actual working length.
Methods: Forty maxillary or mandibular anterior extracted teeth were sectioned at the cervical area. All samples were exposed with x-ray to measure radiographic working length. All samples then were measured with two frequencies and multifrequency electronic root canal length measurement device. To confirm the actual length of the teeth all samples were sectioned vertically. Then the data were analyzed by chi-square statistical test and the Kolmogorov-Smirnov.
Results: Electronic root canal length measurement devices accuracy are better than radiographic with significantly different results.
Conclusion: Electronic device has an accuracy of better than radiographic.