RADIOGRAPHIC TEST FOR AGE ESTIMATION WITH FORMULATION TOOTH CORONAL INDEX (TCI) IN RANGE OF AGE 9-21 YEARS

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The authors declare that they have no conflict of interest.

**Background:** The age estimation of living individuals is very important in cases such as age fraud in sports, inheritance rights, and child custody, where such cases often occur at the age of 9 to 21 years. The study was conducted to determine whether the estimated ages of 9 to 21 years old can be determined from radiographic analysis of pulp chamber with TCI method.

**Methods:** Radiographs were taken from 148 men and women with a mandibular premolar teeth normal at age 9 to 21 years who came to the Clinic of Radiology, Clinic of Orthodontic, and Special Pavilion of Teaching Dental Hospital at Faculty of Dentistry Universitas Indonesia. Crown height (CH) and crown pulp chamber height (CPCH) were calculated using analysis Tooth Coronal Index (TCI).

**Results:** There were significant differences between the age of the TCI analysis ($p < 0.05$) with specific prediction equation.

**Conclusion:** Formulation of TCI-Benindra method can be applied to estimate the age of 9-21 years.

**KEYWORDS:** Forensic Odontology, Age estimation, Tooth Coronal Index.