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**A SOFTWARE FOR AGE ESTIMATION BY
PULP/TOOTH RATIO IN CANINES USING PERI-
APICAL X-RAYS**

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The authors declare that they have no conflict of interest.

Age estimation in adults is one of the most fascinating challenges for anthropologists and odontologists both in the forensic and biology fields. Many techniques have been studied to determine the age evaluating various anatomical districts, the pelvis, the ribs, the teeth, etc.

Most of these techniques presents serious problems regarding the estimation of the subjects in the elderly age and present very wide age range. Among the various districts teeth have proved those with possibility to study the most interesting, also for their ability to withstand overtime. In this context, several articles have been published regarding the apposition of secondary dentin especially apical x rays. Cameriere et al. since 2004 have studied this process by assessing the results of different samples.

This project, based on the results obtained in previous articles, is focused in the development of software to study and evaluate the images from the apical x-rays to automatically determine the age of the subject. Of the preliminary results have been obtained in the segmentation of the dental pulp.

The processing procedure is based on a particular spatial filter that takes into account the peculiarities of the problem. In fact the usual segmentation techniques generally give unsatisfactory results.

KEYWORDS: Forensic Odontology, Age Estimation, Cameriere.

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