

# Comparison between bone and dental methods for stature estimation in unknown skeletons

Paula Barreto Costa <sup>1</sup>

Fernanda Braz Romano <sup>2</sup>

Raffaela Arrabaça

Francisco <sup>3</sup>

Eduardo Daruge-Júnior <sup>4</sup>

Ricardo Henrique Alves  
da Silva <sup>5</sup>

<sup>1</sup> MSc Student, Forensic  
Odontology, University of São  
Paulo, Ribeirão Preto Medical  
School

<sup>2</sup> Forensic Odontology Specialist,  
University of São Paulo, School of  
Dentistry of Ribeirão Preto

<sup>3</sup> Post-Doc, Forensic Anthropology,  
Center of Legal Medicine,  
University of São Paulo, Ribeirão  
Preto Medical School

<sup>4</sup> PhD Professor, Forensic  
Odontology, University of  
Campinas, Piracicaba Dental  
School

<sup>5</sup> PhD Professor, Forensic  
Odontology, University of São  
Paulo, School of Dentistry of  
Ribeirão Preto

**Corresponding author:**

***paula.barreto.costa@usp.br***

POSTER PRESENTATION

## ABSTRACT

The identification process should be developed in an objective manner and in conjunction with the availability of resources and training of the multiprofessional expert team, who works to examine the possible characteristics of individuals who can assist in the search for the identity. The establishment of the human anthropological profile contains several parameters, including stature. Stature estimation is performed mostly from measurements of long bones and by applying regression equations that depend on the previous evaluation of the sex and the ancestry, in this way, the use of such formulas is of greater utility in countries with well-defined racial groups, which does not apply to Brazil due to its crossbreeding. Thus, Carrea (1920) developed a method based on the proportionality of dental dimensions to human stature, which may be an alternative in the process of estimating height. The objective of this study was to evaluate the level of agreement between bone and dental method for the stature estimation in unknown skeletons. For this, the sample consisted of 40 unknown cases that were sent for forensic anthropological exam. It was concluded that the level of agreement between the bone and dental method was considerable for 50% of the sample. Among the results, most showed that in the dental method, the interval between the minimum and maximal stature was higher than expected for identification of forensic cases.