

Human identification using frontal sinus comparison in computed tomography: case report

Victor Jacometti ¹

Yuri Melo de Carvalho²

Rhonan Ferreira da Silva³

Ricardo Henrique Alves da Silva²

¹ Forensic Odontology, University of São Paulo, Ribeirão Preto Medical School

² Forensic Odontology, University of São Paulo, School of Dentistry of Ribeirão Preto

³ Forensic Odontology, Federal University of Goiás

Corresponding author:

victor.jacometti@usp.br

POSTER PRESENTATION

J Forensic Odontostomatol
2017 Nov 1; Supp1(35): 121
ISSN :2219-6749

ABSTRACT

The frontal sinus is a relevant structure when approaching human identification, mainly due to its unique characteristics from a person to another. This anatomical feature might appear in some imaging exams, such as computed tomography (CT), whose forensic application it is already widely discussed in literature. However, physiological and pathological changes should be considered, as well as post-mortem changes in its morphology. In the present case report, it was observed that CT exams allows precise and trustworthy results, together with great reproducibility in this structure's area assessment. Shape and asymmetry of the sinus were some of the qualitative parameters analysed. The number of lobes were equal in the ante-mortem and post-mortem images. In conclusion, anatomical and imaginological knowledge have extreme importance in the forensic routine, in addition to identification processes apprehension. In this specific case, it was possible to establish positive identification of the questionable corpse through analysis of tomography axial plane images, obtained from the frontal sinus region, on ante-mortem and post-mortem instances.