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IMPACTION OF MANDIBULAR THIRD MOLARS AND THEIR IMPORTANCE FOR HUMAN IDENTIFICATION: CASE REPORT.

Impactação de terceiros molares inferiores e sua importância para identificação humana: relato de caso.

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ABSTRACT

Teeth are one of the last elements to suffer damage, as tooth enamel is highly resistant to physiological phenomena, such as decomposition, trauma and carbonization. Therefore, Forensic Dentistry plays a fundamental role in the process of human identification, which can be done by comparing ante-mortem (AM) and post-mortem (PM) records. The identity of the individual is reached when there is a positive correlation between them. Based on this, the objective of the study was to present a case report where impacted lower third molars helped the forensic dentist in identifying the victim, based on the comparison of an ante-mortem panoramic x-ray, with the records of the remains of a decapitated and charred individual during a rebellion in an agricultural penitentiary in State of Roraima (Brazil). During the analysis, it was possible to compare the remains where the dental elements were present, with the panoramic x-ray brought by the family. Coinciding points made it possible to positively identify this victim. Impacted lower third molars were proved to be of great value in the process of human identification, with dental documentation, especially radiographic images, being important auxiliary elements in arriving at the identification of an individual.

KEYWORDS

Forensic dentistry; Panoramic radiography; Third molar.

INTRODUCTION

Identity is described as a set of physical, functional, and psychological characteristics, whether innate or acquired, that make a person different from others

and identical to themselves¹. Human identification involves comparing these characteristics and looking for matches between previously recorded data to individualize a person's uniqueness².

In dentistry, identification can be performed using bite marks, skull anatomy, cheiloscopy, palatal roughness, age estimation through teeth, smile photography, and others³⁻⁴. Some cases are difficult to solve because the human body can be found in various stages, including charred, decomposed, disfigured, torn, and skeletonized⁵.

Dentists work in the forensic field by providing expert testimony, particularly in human identification procedures. Police and judicial authorities often require technical and scientific information to clarify facts of a dental nature, and they turn to professionals who specialize in forensic dentistry⁶.

In the human body, teeth have a greater chance of preservation because they are protected by the lips, tongue, and cheeks. Dental enamel is highly resistant to physiological phenomena such as decomposition, trauma, and carbonization, making it indispensable in the identification process².

The most common form of analysis in forensic dentistry is the comparison of ante-mortem (AM) and post-mortem (PM) data. This type of identification is considered one of the most effective and reliable; however, dental identification depends on ante-mortem records⁷⁻⁸ such as dental radiographs. This demonstrates the importance of correctly completing the information in dental records⁹.

Pinchi et al.¹⁰ and Iscan¹¹ reported that radiographic comparison in forensic medicine is a technique primarily aimed at identifying bodies in various stages of decomposition, skeletonization, or

carbonization. In these situations, when conventional methods cannot be used, a single radiograph taken in life, compared with another postmortem radiograph, can often provide a positive identification.

Wood¹² described the following steps for identification by radiographs:

1. *Examine ante-mortem radiographs, and assess their quality, type, and examination time;*
2. *Examine the body and take radiographs of the areas of interest on the ante-mortem radiographs;*
3. *Use a system for marking or assembling the ante- and postmortem films;*
4. *Compare the radiographs;*
5. *Tabulate and, if possible, explain the concordances.*

Several conclusions can be drawn after comparing ante-mortem and post-mortem records. The American Board of Forensic Odontology (ABFO) recommends four conclusions: positive identification, possible identification, insufficient evidence, and exclusion. Positive identification is only possible if there is a database to compare¹³.

Few studies have attempted to describe the importance of the presence of impacted lower third molars in human identification. Based on the above, the purpose of this study was to present a case report in which impacted lower third molars assisted the forensic dentist in identifying the victim.

CASE REPORT

In 2016, there was a riot in an agricultural prison in Roraima that resulted in the deaths of ten prisoners. Three of the bodies were found to be decapitated and charred. The remains were sent to the local

Forensic Medical Institute (FMI) to determine the identities of the victims and the cause of death.

Because of the deaths, several family members were present at the FMI to identify these bodies. On the first day, three decapitated bodies and only two heads were found for examination. After the riot ended, on the third day, new fragments were collected, including the third head, which was deformed and crushed. In an attempt to determine the identities of the individuals, family members were asked for

documents and information about the prisoners. One of the families reported that their relative had a "gap in the upper front tooth" in the upper jaw and no dental records, while a second family brought a panoramic x-ray. The last family sent only a frontal photo without showing the teeth.

The radiograph sent by the second family showed characteristics compatible with the head found on the third day, highlighting the presence of impacted third molars - Figure 1.



Figure 1 – Radiograph showing missing person 2, with the presence of impacted lower third molars.

Missing persons 1 and 3 were discarded due to their facial and dental characteristics that disagreed with the X-ray presented by the family. They were later identified using other identification techniques.

Inside the package sent to the FMI was a cluster of hard and soft tissues

covered by a layer of blackish color, compatible with the result of thermal action. It was found that they were fragments of human bodies, including cranial and maxillofacial skeletal structures. The anterior view of the fragment showed a deformed face, with the lower third and the left part of the middle third visible, as well

as the mouth, the protruding tongue, and the depressed nose. The left lateral view showed a disfigured head, exposing the cranial cavity without its walls, with only part of the occipital bone covered by blackish and stiff epithelial tissue, with visceral remains on the inside and partially preserved dental arches. Dental necropsy

revealed the presence of restorations, orthodontic brackets, and missing teeth. The upper third molars were below the occlusal line and the lower molars (teeth 38 and 48) were positioned in a mesioangular manner, Pell & Gregory position B, class I - figure 2.



Figure 2 – Remnants of the upper and lower dental arches.

By comparing the morphological and therapeutic characteristics found in both the AM radiograph and the PM necropsy examination, several points of similarity (coincidence) were evidenced, which allowed the determination of a positive correlation between the skull examined and the panoramic radiograph

presented by the second family (Figures 3 to 6).

In Table 1, all the characteristics found in the AM radiograph and those evidenced in the PM examination were compiled, performing the AM x PM comparison for each tooth, obtaining a conclusion: similarity or discrepancy.

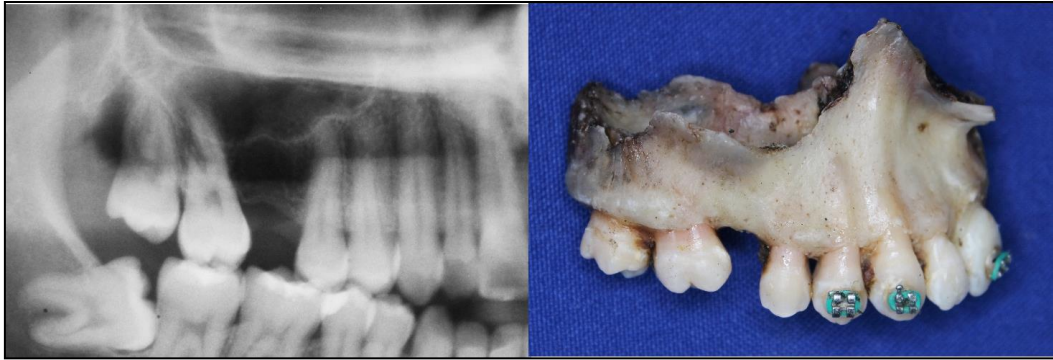


Figure 3 – Comparison of AM and PM of the upper dental arch – right side.

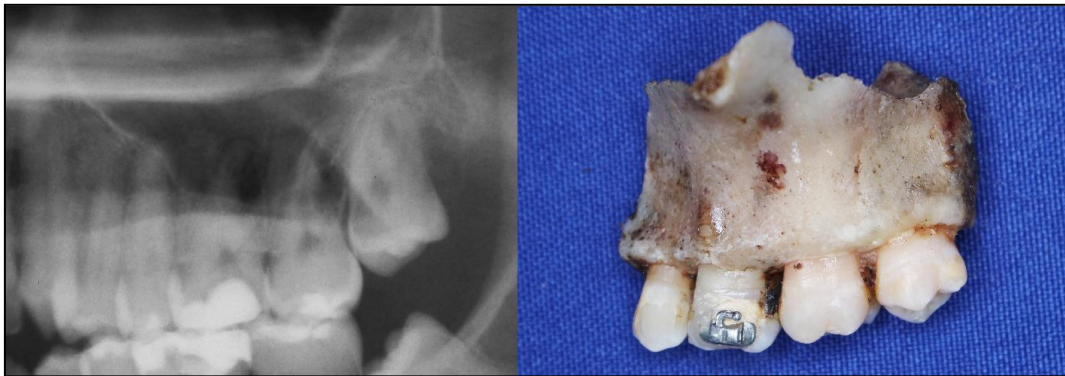


Figure 4 – Comparison of AM and PM of the upper dental arch – left side.

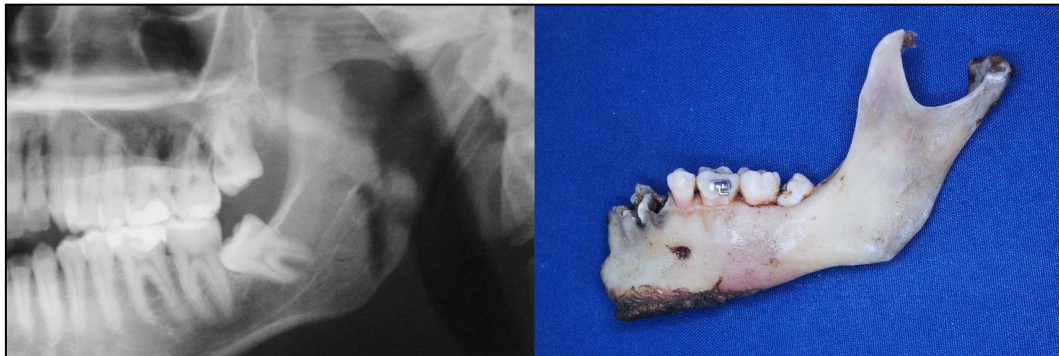


Figure 5 – Comparison of AM and PM of the lower dental arch – left side.

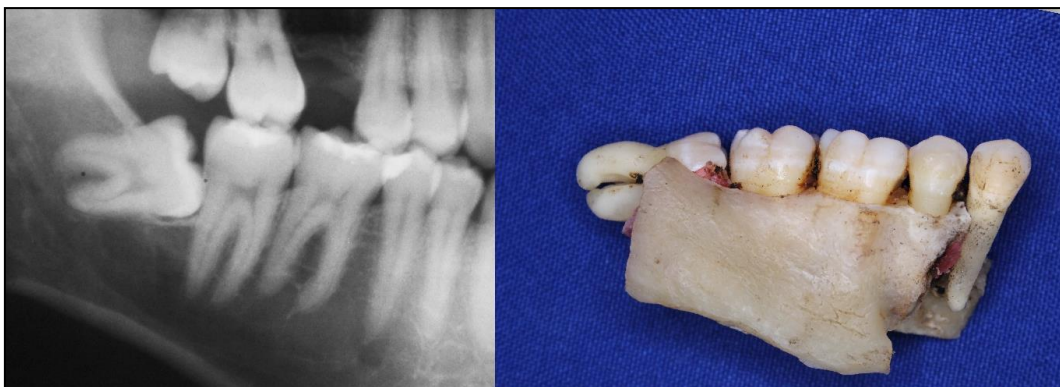


Figure 6 – Comparison of AM and PM of the lower dental arch – right side.

Table 1 – Compilation of AM and PM information, and result of the comparison for each tooth examined.

TOOTH*	AM FINDINGS DESCRIPTIONS	PM FINDINGS DESCRIPTION	CONFRONTATION
18	Healthy	Healthy	Similarity
17	Healthy	Healthy	Similarity
16	Missing	Missing	Similarity
15	Healthy	Healthy	Similarity
14	Healthy	Healthy with bracket	Explainable discrepancy
13	Healthy	Healthy with bracket	Explainable discrepancy
12	Healthy	Healthy	Similarity
11	Incisal-mesial restoration	Mimetic restoration with bracket	Explainable discrepancy
21	Healthy	Missing bone fragment	Insufficient evidence
22	Healthy	Missing bone fragment	Insufficient evidence
23	Healthy	Missing bone fragment	Insufficient evidence
24	Healthy	Missing bone fragment	Insufficient evidence
25	Healthy	Healthy	Similarity
26	Metal restoration	Mimetic restoration with bracket	Explainable discrepancy
27	Metal restoration	Mimetic restoration	Explainable discrepancy
28	Healthy	Healthy	Similarity
38	Impacted, Pell & Gregory position B, class I	Impacted, Pell & Gregory position B, class I	Similarity
37	Metal restoration	Mimetic restoration	Explainable discrepancy
36	Metal restoration	Mimetic restoration with bracket	Explainable discrepancy
35	Healthy	Healthy	Similarity
34	Healthy	Post mortem loss	Explainable discrepancy
33	Healthy	Post mortem loss	Explainable discrepancy
32	Healthy	Post mortem loss	Explainable discrepancy
31	Healthy	Post mortem loss	Explainable discrepancy
41	Healthy	Missing bone fragment	Insufficient evidence
42	Healthy	Missing bone fragment	Insufficient evidence
43	Healthy	Missing bone fragment	Insufficient evidence
44	Healthy	Healthy	Similarity
45	Healthy	Healthy	Similarity
46	Healthy	Healthy	Similarity
47	Healthy	Healthy	Similarity
48	Impacted, Pell & Gregory position B, class I	Impacted, Pell & Gregory position B, class I	Similarity

*Dental notation recommended by the International Dental Federation (IDF)

DISCUSSION

The method of identification is chosen according to the state in which the body is found, selecting the most qualified one for each case, which may be fingerprints, forensic dentistry, or DNA; these methods are internationally recognized as primary identifiers¹⁴.

For this reason, the forensic dentist plays a crucial role when visual identification is impossible or in the absence of fingerprint data¹⁵, through identification by teeth, comparing

anatomical, therapeutic, and/or pathological characteristics present in the victim's dental arches and the dental documentation presented².

It is the responsibility of every dentist to keep their patients' dental records and, in the case of digital documents, to process them correctly, as there may be future requests for information to assist in identification processes¹⁰. In particular, panoramic radiographs, due to the amount of information they contain, can be used as an important tool in identity investigations¹⁵.

¹⁶⁻¹⁷⁻¹⁸. According to Garbin et al. (2006)¹⁹, who studied the behavior of dentists regarding the documentation of their patients and observed that many professionals are negligent concerning this documentation, despite it being an ethical guideline and the risk of legal proceedings. The present study highlights the need for dentists to be aware of the proper storage and archiving of the dental records of the patients they treat.

Article 17 of the Brazilian Dental Code of Ethics states that dentists are required to make a dental record and keep it in an appropriate place²⁰.

Dental documentation, including radiographs, is an important and indispensable tool for human identification and provides a set of unique and relevant characteristics for expert comparison. On the other hand, teeth and dental materials must be resistant to environmental influences so that dental structures and dental interventions, if any, can be compared with AM records²¹⁻²².

Ante-mortem dental radiographs are readily available to the public, as routine panoramic radiographs, which provide a broad view of the entire dentition, are increasingly being requested due to their low cost and high effectiveness in human identification²³. Post-mortem radiographs can reveal unaltered dental characteristics, showing detailed images of teeth, dental treatments performed ante-mortem, alveoli, anatomical accidents, and trabecular patterns of bone¹⁰.

In the present study, the skull in question suffered a blunt force trauma that caused extensive destruction and

comminuted fracture of the bones that make up the cranial cavity. According to police authorities, decapitation has become routine in Brazilian prisons, as it reinforces the power of rival factions and often marks the end of a command²⁴.

The remains of the dental arches were compared with the X-rays sent for scientific comparison, and several undeniable coincidences were found. All the teeth present in the remains were visible on the x-ray.

Although the radiographs did not show any metal parts compatible with the orthodontic brackets found in the analyzed teeth, and the restorations observed in the remains were incompatible with those observed in the radiographs, these facts can be explained.

First of all, it should be noted that the location of the restorations, especially the tooth, the surface of the tooth, and the extent of the dental procedures, coincide with the same location observed in teeth 11, 26, 27, 36, and 37, in which mimetic restorations remained, assuming that the metal restorations were replaced by silver amalgam for composite resin, as is common today. The orthodontic brackets were installed after the radiographs were taken and sent for expert examination. Next, another coincidence is observed regarding the absence of tooth 16. This tooth was lost more than two years before the fatal outcome, because the corresponding alveolus is remodeled and there is a mesialization of the posterior tooth, invading the edentulous space with consequent reduction of the latter, which shows that its loss is old and it can be said

that it occurred more than two years before the radiograph. The upper right fragment includes teeth 11, 12, 13, 14, 15, 17, and 18, and when placed laterally, the corresponding portion can be observed on the radiograph, visualizing congruent anatomical characteristics, the small edentulous space of tooth 16, the shape of the remaining alveolar ridge of tooth 16, the mesial position of tooth 17, the discrete space between the crowns of teeth 17 and 18, the distal rotation of tooth 18 allowing visualization of the mesial-lingual cusp, the shape and size of the edges of the mesial and distal vestibular cusps of tooth 18 (Figure 3).

The upper left fragment shows teeth 25, 26, 27, and 28, and the design of the edges of the buccal and mesial-lingual cusps of tooth 28 can be seen as coincidental. It can be seen that between the time of the radiographic recording and the fatal outcome, the eruption of tooth 28 continued with the occlusal line following the predecessor tooth, but with conservation of the outline and size of the aforementioned cusps (Figure 4).

The lower left fragment corresponds to the left hemimandible, in which the maintenance of the positioning of tooth 38 stands out, due to its impaction against tooth 37, the design of the edges of the buccal cusps of the third molar, the shape of tooth 35, the anatomy of the coronoid process, the arch that forms the mandibular notch and the antegonial notch that is directed to the region of tooth 38 (Figure 5).

The lower right fragment describes the position of tooth 48 and its anatomical

design, as well as the delineation of the space between the distal edge of tooth 47 and the occlusal surface of tooth 38 (Figure 6). Filgueiras et al. (2023)²⁵ observed ante-mortem and post mortem correspondence of dental information of the lower third molars, in agreement with the present study. There was also a post mortem finding related to a dental procedure, information that contributed to the identification of the individual.

The coincidence points in the AM x PM comparison allowed the determination of a positive correlation between the examined skull and the panoramic radiograph presented by the second family, thus confirming the identity of the individual. However, it was not possible to determine the cause of death due to the state of charring.

As a result of the decapitation, two teeth were removed for genetic comparison to match the skull to one of the carbonized bodies.

It is important to emphasize that genetic testing helps in complex cases of human identification, as DNA tests provide highly reliable results. However, its high cost and the time required to perform it must be taken into account when compared to forensic dental examinations²⁶. In this case, it was necessary to match the skull to the decapitated body.

It should be noted that there may be limitations in the radiographic dental identification of carbonized bodies, considering the influence of the analysis of the radiographic technique, processing, sharpness, and the presence of distortions around the image; which influences the

effectiveness of the analysis of individualizing aspects and the reliability in establishing identity²⁷.

In the present study, the dental documentation with panoramic radiographs obtained with an appropriate technique allowed the existence of highly significant points of agreement for the expert examination, which allowed a positive identification without discrepancies between ante- and post-mortem data, confirming other studies²⁸⁻²⁹. In addition, the presence of impacted lower third molars, whose probable causes of non-eruption are lack of space and/or poor positioning of the tooth germ, means that their position in the jaw remains the same during the aging of the individual, as long as there is no type of intervention; and can be characterized as an important aid in human identification³⁰.

The confirmation of the victim's identity allowed the family to put an end to their moment of anxiety and doubt and to experience the stages of mourning. At the end of the investigations, the expert report was prepared, since errors in the description could lead to serious legal errors³¹.

CONCLUSION

Impacted lower third molars have proven to be of great value in the process of human identification, with dental documentation, particularly radiographs, being an important pictorial record to assist in the objective identification of an individual. The dentist must to maintain dental documentation as a form of assistance in the human identification process.

RESUMO

Os dentes são um dos últimos elementos a sofrerem danos, pois o esmalte dentário possui uma alta resistência aos fenômenos fisiológicos, como a decomposição, traumatismos e a carbonização. Portanto, a Odontologia Legal desempenha um papel fundamental no processo de identificação humana, que pode ser por comparação dos registros ante mortem (AM) e post-mortem (PM). Chega-se a identidade do indivíduo quando há uma correlação positiva entre eles. Baseado nisso, o objetivo do estudo foi apresentar um relato de caso onde os terceiros molares inferiores impactados auxiliaram o odontologista na identificação da vítima a partir da comparação de uma radiografia panorâmica ante mortem, com os registros dos restos mortais de um indivíduo decapitado e carbonizado durante uma rebelião em uma penitenciária agrícola, em Roraima (Brasil). Na análise foi possível comparar os restos mortais onde estavam presentes os elementos dentários, com a radiografia panorâmica trazida pela família. Pontos coincidentes tornaram possível a identificação positiva dessa vítima. Os terceiros molares inferiores impactados mostraram-se de grande valia no processo de identificação humana, sendo a documentação odontológica, em especial as imagens radiográficas, importantes elementos auxiliares para se chegar na identificação de um indivíduo.

PALAVRAS-CHAVE

Odontologia legal; Radiografia panorâmica; Terceiros molares.

REFERENCES

1. Bollinger AS, Brumit PC, Schrader BA, Senn DR. Grinline identification using digital imaging and Adobe Photoshop. *J Forensic Sci.* 2009; 54: 422-7. <https://doi.org/10.1111/j.1556-4029.2008.00971.x>
2. Silva RF, Pereira SDR, Mendes SDSC, Marinho DEA, Daruge Jr E. Radiografias odontológicas: fonte de informação para a identificação humana. *Odontologia Clínica-Científ.* 2006; 5:239-42.
3. Terada ASSD, Leite NLP, Silveira TCP, Secchieri JM, Guimarães MA, Silva RHA. Human identification in forensic dentistry from a photographic record of smile: a case report. *Rev Odontol da UNESP.* 2011; 40(4):199-202.
4. Vanrell, JP. *Odontologia legal e antropologia forense.* 1ª ed. 2002. Rio de Janeiro: Guanabara Koogan.

5. Oliveira RN, Daruge E, Galvão LCC, Tumang AJ. Contribuição da odontologia legal para identificação “post-mortem”. *Rev Bras Odontol.* 1998; 55(2):117-22.
6. Daruge E. Tratado de odontologia legal e deontologia. Grupo Gen-Livraria Santos Editora; 2017.
7. MacLean D, Kogon S, Stitt L. Validation of dental radiographs for human identification. *J Forensic Sci.* 1994; 39(5):1195–200.
8. Chandra Shekar B, Reddy C. Role of dentist in person identification. *Indian J Dent Res.* 2009; 20(3):356–60.
9. Bonfim LL, Melo NS. Documentação odontológica. *Rev. ABO Nac.* 2004; 12(3): 180- 2.
10. Pinchi V, Norelli G, Caputi F, Fassina G, Pradella F, Vincenti C. Dental identification by comparison of antemortem and postmortem dental radiographs: influence of operator qualifications and cognitive bias. *Forensic Sci Int.* 2012; 222(1–3):252–5. <https://doi.org/10.1016/j.forsciint.2012.06.015>
11. Iscan MY. Rise of forensic anthropology. *Yrbk Phys Anthropol.* 1988; 31: 203-30.
12. Wood RE. Forensic aspects of maxillofacial radiology. *Forensic Sci Int.* 2006; 159(1):47-55. <https://doi.org/10.1016/j.forsciint.2006.02.015>.
13. American Board of Forensic Odontology (ABFO) (2017). Inc Diplomates Reference Manual Section IV: Standards & Guidelines. Disponível em: <http://abfo.org/wpcontent/uploads/2012/08/ABFO-DRM-Section-4-Standards-Guidelines-Sept-2017-Newpage-numbers.pdf>.
14. Paranhos L, Caldas J, Iwashita A, Scanavini M, Paschini R. The importance of dental records in forensic human identification. *Rev da Fac Odontol – UPF.* 2009; 14(1): 4–7.
15. Terada ASSD, Leite NLP, Silveira TCP, Secchieri JM, Guimarães MA, Silva RHADa. Human identification in forensic dentistry from a photographic record of smile: a case report. *Rev Odontol da UNESP.* 2011; 40(4):199–202.
16. Holtkotter H, Sheets HD, Bush PJBM. Effect of systematic dental shape modifications in bitemarks. *Forensic Sci Int.* 2013; 2(28):61–9. <https://doi.org/10.1016/j.forsciint.2013.02.024>.
17. Borman H, Grondahl H. Accuracy in establishing identity by means of intraoral radiographs. *J Forensic Odontostomatol.* 1990; 8(2): 31–6.
18. Silva RF, Cruz BVM, Daruge Júnior E, Francesquini Júnior L. La importância de la documentación odontológica em la identificación humana. *Acta Odontol Venez.* 2005; 43(2):67-74.
19. Garbin CAS, Garbin AJI, Lelis RT. Verificação das atitudes de cirurgiões-dentistas quanto à documentação de seus pacientes. *Rev Assoc Paul Cir Dent.* 2006; 60(6):442- 5.
20. Conselho Federal de Odontologia. Resolução CFO 118, de 11 de maio de 2012. Revoga o Código de Ética Odontológica aprovado pela Resolução CFO-42/2003 e aprova outro. Disponível em: http://sistemas.cfo.org.br/visualizar/atos/RE_SOLU%C3%87%C3%83O/SEC/2012/118/.
21. Patidar A, Parwani R, Wanjari S. (2010). Effects of high temperature on different restorations in forensic identification: dental samples and mandible. *J Forensic Dent Sci.* 2010; 2: 37-43. <https://doi.org/10.4103/0974-2948.71056>.
22. Melo Costa S, Braga SL, Guimarães MHN, Bonan P. Questões éticas e legais no preenchimento das fichas clínicas odontológicas. *RGO.* 2009; 57(2):211-16.
23. Mascarenhas DS, Andrade VBA, Oliveira MJ, Cruz JPP, Damascena NP. Uso de radiografia panorâmica como fonte de informação para a identificação humana-relato de caso pericial. *Revista Brasileira de Odontologia Legal.* 2023; 10(2): 87-95. <https://doi.org/10.21117/rbol-v10n22023-498>.
24. Paixão AS, Argollo BP, Argollo PAN, Marques JAM. Utilização da rugoscopia palatina para identificação de corpo carbonizado–relato de caso pericial. *Revista Brasileira de Odontologia Legal.* 2017; 4(1): 107-13. <https://doi.org/10.21117/rbol.v4i1.54>
25. Figueiras GV, Stibich C, Santa Martha P, Pinto PHV, Silva RHA. (2023). Quando um remanescente de guta-percha é decisivo na identificação humana: relato de caso pericial. *Revista Brasileira de Odontologia Legal.* 2023; 10(1):98-107. <https://doi.org/10.21117/rbol-v10n12023-475>.
26. Silva RF, Pereira SDR, Daruge Júnior E, Barcelos RSS, Godinho NMO, Souto R. Genetics and molecular biology: a literature review of forensic dentistry applications. *Braz J Oral Sci.* 2007; 6: 1254–9.
27. Da Rocha PSD, De Abreu CLVD, Thomes CR, Alvarenga JMB, Ventorin MVP. Vantagens e limitações em uma identificação odontológica radiográfica–relato de caso pericial. *Revista Brasileira de Odontologia Legal.* 2021; 8(3):95-102. <https://doi.org/10.21117/rbol-v8n32021-383>.
28. Baldim M, De Almeida SM, Delwing F, Tinoco RLR. Identificação de vítima de afogamento por meio de documentação ortodôntica: relato de caso. *Revista*

- Brasileira de Odontologia Legal. 2019; 6(2):61-8.
<https://doi.org/10.21117/rbol.v6i2.242>.
29. Silva WF, Costa LB, Amaral MA. Importância da documentação ortodôntica para análise odontológica e rugoscópica forenses: relato de caso. Revista Brasileira de Odontologia Legal. 2021; 8(3): 103-14.
<https://doi.org/10.21117/rbol-v8n32021-394>.
30. Xavier CRG, Dias RE, Ferreira RJ, Duarte BG, Ferreira-Júnior O, Sant'Ana E, Gonçalves ES. Avaliação das posições dos terceiros molares impactados de acordo com as classificações de Winter e Pell & Gregory em radiografias panorâmicas. Revista de Cirurgia e Traumatologia Buco-maxilo-facial. 2010; 10(2):83-90.
31. Garbin CAS, Saliba TA, Garbin AJI, Saliba O, Dossi AP. A importância da descrição de lesões odontológicas nos laudos médicos-legais. RPG rev. pos-grad. 2008; 15(1):59-64.