Health Leadership and Quality of Life. 2025; 4:847
doi: 10.56294/hl2025847

CASE REPORT

Surgical Management of Orofacial Communication Following Tooth Extraction in an Area Affected by Odontoma: A Clinical Case Report

Manejo quirúrgico de la comunicación orofacial tras la extracción dental en una zona afectada por un odontoma: un caso clínico

Thainah Bruna Santos Zambrano[1], Natalia Cristina Aparecida Silva[2], Marcos Heidy Guskuma[3]

[1]Department of Dentistry. San Gregorio University of Portoviejo. Ecuador.
[2]Department of Dentistry. State University of Londrina. Brazil.
[3]Department of Dentistry. Positivo University, Londrina. Brazil.

Cite as: Santos Zambrano TB, Aparecida Silva NC, Heidy Guskuma M. Surgical Management of Orofacial Communication Following Tooth Extraction in an Area Affected by Odontoma: A Clinical Case Report. Health Leadership and Quality of Life. 2025; 4:847. https://doi.org/10.56294/hl2025847

Submitted: 01-07-2025 **Revised:** 09-09-2025 **Accepted:** 12-11-2025 **Published:** 13-11-2025

Editor: PhD. Neela Satheesh

Corresponding author: Thainah Bruna Santos Zambrano

ABSTRACT

Introduction: Odontomas are the most frequent benign odontogenic tumors and can lead to local anatomical changes that increase the risk of surgical complications. One such complication, often seen after procedures in the posterior maxillary region, is the development orofacial communication.
Case Report: a 62-year-old male patient developed orofacial communication following a tooth extraction in an area previously affected by an odontoma. A computed tomography scan revealed a large lesion and disruption of the floor of the right maxillary sinus. Surgical intervention was performed to close the orofacial communication and excise the lesion, which was histopathologically confirmed as an odontoma.
Conclusion: large odontomas located in regions prone to orofacial communication pose challenges to surgical management. In this case, the chosen surgical approach was effective in both removing the lesion and achieving successful closure of the communication, with stable results observed over a 24-month follow-up period.

Keywords: Odontoma; Orofacial Communication; Postoperative Complications; Computed Tomography; Oral Surgery.

RESUMEN

Introducción: los odontomas son los tumores odontogénicos benignos más frecuentes y pueden provocar cambios anatómicos locales que aumentan el riesgo de complicaciones quirúrgicas. Una de estas complicaciones, que se observa con frecuencia tras intervenciones en la región maxilar posterior, es la aparición de una comunicación orofacial.
Informe del caso: un paciente varón de 62 años desarrolló una comunicación oroantral tras una extracción dental en una zona previamente afectada por un odontoma. Una tomografía computarizada reveló una lesión grande y una rotura del suelo del seno maxilar derecho. Se realizó una intervención quirúrgica para cerrar la comunicación oroantral y extirpar la lesión, que se confirmó histopatológicamente como un odontoma.
Conclusión: los odontomas grandes situados en regiones propensas a la comunicación oroantral plantean dificultades para el tratamiento quirúrgico. En este caso, el enfoque quirúrgico elegido fue eficaz tanto para extirpar la lesión como para cerrar con éxito la comunicación, con resultados estables observados durante un periodo de seguimiento de 24 meses.

Palabras clave: Odontoma; Comunicación Orofacial; Complicaciones Postoperatorias; Tomografía Computarizada; Cirugía Oral.

INTRODUCTION

According to the World Health Organization (WHO), among all classified and documented odontogenic tumors, odontomas are the most prevalent in the oral cavity, accounting for approximately 67 % of all cases. These lesions are entirely benign in nature, as they result from the proliferation of both epithelial and mesenchymal odontogenic cells. Odontomas are considered hamartomas rather than true neoplasms; they are developmental anomalies characterized by limited and slow growth, as well as structural disorganization. Despite this, they show full differentiation of dental tissues, including enamel, dentin, cementum, and pulp.[1,2,3,4]

Its etiology remains not fully understood, although several authors suggest that its development may be linked to factors such as infections, genetic mutations, trauma, hereditary conditions, and systemic diseases. Most odontomas are asymptomatic and painless; however, they may be detected in cases of delayed eruption of permanent teeth, displacement of adjacent teeth, or the presence of localized infections with or without swelling. In most instances, they are identified incidentally through routine or targeted radiographic imaging.[5,6,7,8]

In the early stages, histological examination reveals varying proportions of forming mesenchymal tissue and odontogenic epithelium. Most odontomas are intraosseous lesions; however, in rare instances, they may affect the gingival soft tissues, in which case they are referred to as peripheral odontomas. A rarer variant, known as dilated odontoma, is considered a dental anomaly. It results from an invagination of the enamel surface into the developing tooth and is regarded as the most severe form of the dens invaginatus anomaly. This variant is radiographically distinct, often presenting as a doughnut-shaped structure with a central soft tissue core surrounded by disorganized hard dental tissues.[3,9,10] According to the World Health Organization (WHO), the most common classifications of odontomas are compound and complex types.[7,8,11]

In terms of prevalence, compound odontomas are more common than complex ones. [3] Compound odontomas are typically found in the anterior maxillary region and are characterized by the presence of multiple tooth-like structures. These structures result from a normal or partial division of the dental papilla. On radiographic examination, they appear as multiple radiopaque denticles surrounded by a radiolucent zone, which histologically corresponds to a loose fibrous stroma. Due to their distinctive radiographic features, histopathological analysis is often unnecessary. In contrast, complex odontomas are more frequently located in the mandibular region. Radiographically, they present as an irregular, radiopaque mass composed of disorganized dental tissues, including dentin and clusters of enamel matrix, typically surrounded by a radiolucent halo. Because they lack clearly defined features, differential diagnosis is essential. Lesions that may mimic complex odontomas include osteomas, dentigerous cysts, and keratocysts.[4,12,13,14]

Odontomas are most commonly identified during the first two decades of life, with a peak incidence in adolescence. Their diameter typically does not exceed the size of a normal tooth. However, when an odontoma grows beyond 6 cm, it may lead to expansion and distortion of the jawbones, potentially resulting in significant anatomical changes, bone resorption, and displacement of adjacent structures. [3,4,10]

The treatment for both compound and complex odontomas is conservative, aiming at the complete surgical removal of the lesión.[13,14] The approach may vary depending on the location, size, and proximity to adjacent anatomical structures. Many authors describe the surgical technique for odontoma removal as relatively straightforward, often resembling the procedure used for extracting impacted teeth. Because the lesion is typically encapsulated in a fibrous connective tissue, total enucleation can be achieved without compromising surrounding structures.[6,8,15]

Although odontomas are benign, their removal is essential to prevent complications such as tooth impaction or secondary infections, with the overall goal of preserving and promoting the patient's oral health. The prognosis is generally favorable, and recurrence is considered rare.[12,16]

However, despite several authors reporting that the surgical procedure is generally straightforward and associated with favorable outcomes, complications may still arise. In a study by Memarpour, the author described the challenges encountered during the removal of a giant mandibular odontoma, highlighting the potential risk of bone fracture. The present article reports a case in which the size and location of the odontoma, being in close proximity to the maxillary sinus, led to surgical difficulties during tooth extraction and subsequently resulted in an oroantral communication.

Humans have two maxillary sinuses, one on each side of the face, located within the maxillary bone. These structures are classified as pneumatic cavities, meaning they contain air-filled spaces. Their primary functions include protecting intracranial and infraorbital structures, absorbing impact in cases of facial trauma, reducing the overall weight of the skull, warming, filtering, and humidifying inhaled air, and contributing to voice resonance.[17]

One pathology associated with the maxillary sinuses is buccosinusal communication (BSC), also known as oroantral communication. This condition involves a direct connection between the oral cavity and the maxillary sinus, most commonly caused by extractions of posterior maxillary teeth, particularly when the roots of molars are in close proximity to the sinus floor. Other potential causes include residual dental infections, trauma, removal of cysts or tumors, dental implant procedures, osteomyelitis, orthognathic surgery, and radiotherapy.[18,19]

Buccosinusal communication (BSC) can be diagnosed through clinical maneuvers such as the Valsalva test, as well as imaging examinations including radiographs and computed tomography scans.[20] If left untreated, BSC may lead to various complications, such as alteration of the maxillary sinus bacterial flora resulting in acute sinusitis, difficulty swallowing liquids and food, frontal headaches, halitosis, taste disturbances, nasal discharge, and/or nasal obstruction, depending on the affected sinus.[21,22]

The treatment plan is established based on the location, extent, and cause of the communication. Surgical techniques commonly employed include pedicled buccal fat pad flaps (Bichat's fat pad), palatal rotational flaps, vestibular sliding flaps, bone grafts, and the application of platelet-rich fibrin (PRF).[18,22] Additionally, pharmacological management with antibiotics, anti-inflammatory drugs, analgesics, and nasal decongestants if necessary is essential. Prompt and appropriate treatment is crucial to restore patient comfort and oral health.[21,23]

Therefore, the aim of this study is to present a case report of oroantral communication following tooth extraction in a region affected by a compound odontoma, discussing the predisposing factors and the therapeutic approach adopted.

CASE REPORT

Patient G.R.S., a 62-year-old male with leucoderma, sought dental care at a private clinic complaining of severe sinusitis persisting for 8 months. According to his report, he had undergone a tooth extraction procedure in the same area 3 years prior, after which he noticed the development of an oroantral communication. He underwent three unsuccessful surgical attempts to close the communication before presenting to our clinic. Regarding his medical and local health history, the patient is a smoker, has diabetes, poor oral hygiene, and a past history of bacterial endocarditis. Clinical examination using a probe revealed an oroantral communication without discharge, and the soft tissues showed signs of previous surgical manipulation. Panoramic radiograph (figura 1) and computed tomography imaging (figure 2) demonstrated a large, hyperdense lesion with characteristics consistent with a compound odontoma occupying the alveolar ridge and invading the right maxillary sinus. Residual root fragments and the area of oroantral communication were also clearly identified.

Figure 1. Initial panoramic radiograph obtained during the clinical evaluation phase of the case

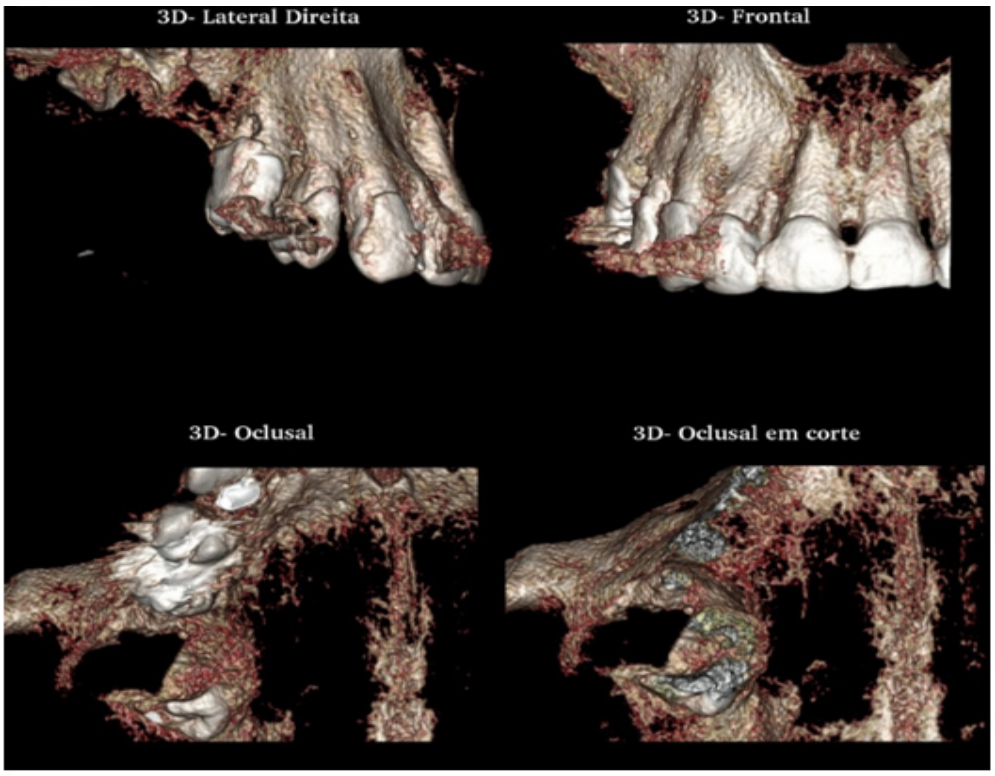

Figure 2. Computed tomography showing an extensive hyperdense lesion with features compatible with a compound odontoma, occupying the alveolar ridge and invading the right maxillary sinus. Root remnants and an oroantral communication are also observed

The treatment consisted of a surgical procedure performed under general anesthesia, supplemented with local anesthetic infiltration. The primary objective was the complete removal of the lesion and residual root fragments, accompanied by a sinusotomy through the lesion access site. Closure of the mucosa was achieved by primary intention using a vestibular sliding flap.

Incisions were made along the alveolar crest and a mesial vestibular releasing incision was performed, combined with extensive tissue detachment to allow adequate access for lesion and root fragment removal. Mattress sutures were placed at the base of the flap, followed by interrupted and continuous superficial sutures using 4-0 and 5-0 nylon sutures (figure 3).

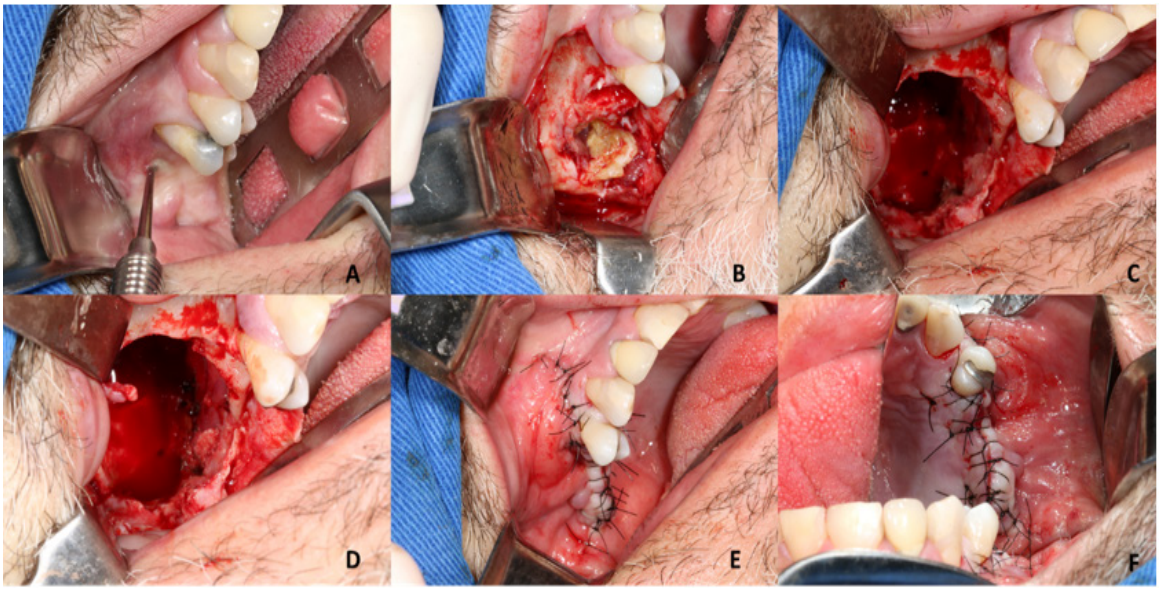

Figure 3. Intraoperative Clinical Aspects. (A) Initial intraoral view showing intact buccal mucosa, discrete ridge elevation, and evidence of a lesion in the posterior superior region. (B) Beginning of surgical access with bone exposure and identification of the lesion area. (C-D) Bone cavity after lesion removal, showing the extent of the defect and the remaining bone tissue. (E-F) Surgical closure of the incision with sutures, demonstrating soft tissue readaptation and good flap positioning

The postoperative computed tomography scan at 18 months revealed the alveolar bone defect caused by the surgical intervention, absence of alveolar bone at the floor of the maxillary sinus, and no signs of secretion or granulation tissue within the sinus cavity. Clinical follow-up over 24 months demonstrated complete mucosal closure, with no evidence of oroantral communication and absence of symptoms (figure 4).

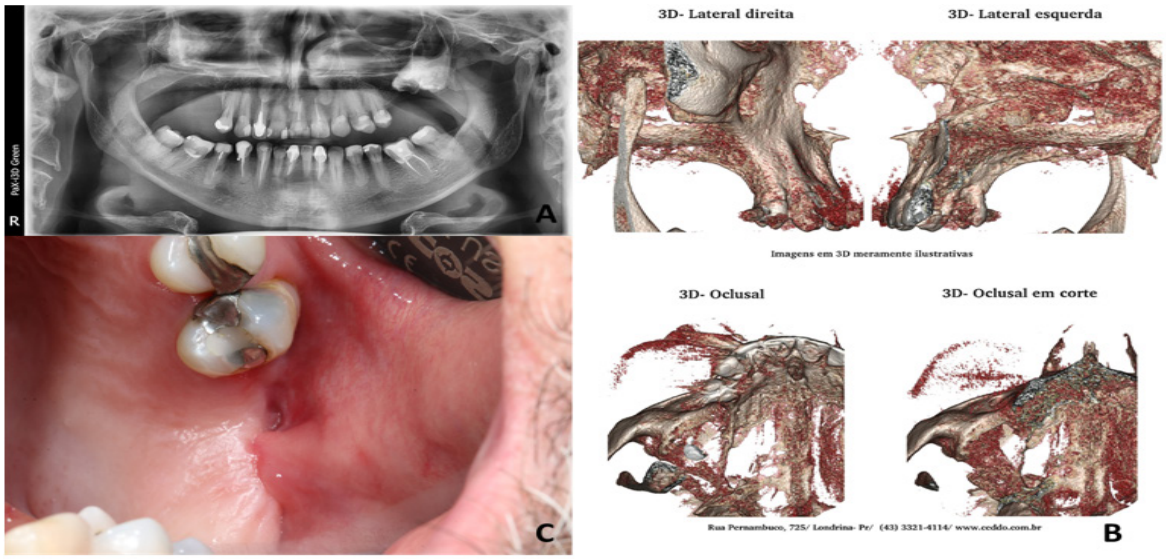

Figure 4. Postoperative Aspects -Tomographic (A-B) and Clinical (C)

DISCUSSION

According to the World Health Organization (WHO), odontomas are classified as hamartomas developmental anomalies considered odontogenic tumors due to their origin from tissues that form dental structures.[7,24] Their etiology is not yet fully understood; however, several authors highlight potential causes such as genetics, trauma, infections, systemic diseases, and heredity.[5,6,25] These tumors generally exhibit controlled and limited cellular proliferation, are usually asymptomatic, predominantly occur during the second decade of life, and show no gender predilection.[8,10]

Early diagnosis of odontomas is crucial to prevent complications, as their asymptomatic growth can lead to significant health issues for the patient, as highlighted in this case. [26] Panoramic radiographs and computed tomography (CT) scans play an essential role in lesion detection and enable an accurate and definitive diagnosis, while also assessing the integrity of adjacent structures.[27,28,29] CT imaging stands out as the only technique capable of producing axial, coronal, and sagittal slices, allowing three-dimensional visualization of the lesion, clear differentiation of soft tissue densities without superimposition, detailed evaluation of neighboring structures, and the option for computerized storage and analysis.[30]

In the present case, computed tomography images of the compound odontoma exhibited typical features described by various authors: a well-organized, hyperdense calcified arrangement with the presence of rudimentary radiopaque dental structures (denticles) surrounded by a radiolucent zone.[3,31,32,33]

The treatment of compound odontomas involves surgical removal,[34,35] which should be performed promptly and effectively to avoid various complications such as infection risks, bone destruction, anatomical alterations, and cortical bone expansion.[33,36] These factors can predispose patients to intraoperative and postoperative complications, as observed in this clinical case. Additionally, a preoperative complication was noted due to the tumor's close proximity to the maxillary sinus, resulting in an oroantral communication, evidenced by a fenestration in the floor of the maxillary sinus in the posterior maxilla region (teeth 18–16) of a male patient in his sixth decade of life. This finding challenges some of the characteristics described in the literature,[37,38] particularly regarding the surgical procedure's ease and the generally favorable prognosis.

The preexisting anatomical changes caused by the presence of the odontoma created a high-risk scenario due to the oroantral communication, resulting in significant bone resorption in the region affected by the lesion and an intra-sinusal periodontal reaction. This was associated with the proximity to vital structures and the loss of the natural bony barrier, contradicting the findings of Mallya and Lam, who suggested that odontomas maintain the cortical boundary. Consequently, this case established an environment conducive to complications such as acute sinusitis, headaches, swallowing difficulties, nasal obstruction and discharge, taste alterations, halitosis, and nocturnal coughing caused by exudate drainage into the pharynx.[39,40,41,42]

Thus, the factors contributing to the development of oroantral communication in this case were multiple and interconnected: the considerable size of the odontoma extensively affected the posterior maxillary region,

while the preexisting local edentulism of teeth 18, 17, and 16 contributed to regional bone atrophy. This bone resorption occurs continuously and progressively, primarily due to prolonged edentulism, and the resulting loss of bone mass and volume is irreversible.[43] Additionally, the lack of proper surgical planning using tomography and the surgeon's limited experience are also considered significant factors in the occurrence of oroantral communication. In this case, the surgical management of the odontoma in close proximity to the maxillary sinus required special considerations.[4,16]

The management of the oroantral communication posed a significant challenge for the surgeon, requiring careful and detailed planning that took into account the local conditions through preoperative imaging exams, thereby optimizing outcomes for a better prognosis. Batista et al. emphasize that any sinus infection must be eliminated prior to performing surgical closure techniques. However, in this case, the infection was only fully resolved following the surgical sinusotomy procedure.

Various surgical approaches for closing oroantral communications include primary closure, pedicled buccal fat pad flap (Bichat's fat pad), palatal rotational flap, vestibular sliding flap, bone grafts, and the use of platelet-rich fibrin (PRF).[18,23,44,45,46] In the present case, the technical failures observed in previous closure attempts were attributable to the surgeon's failure to recognize and remove the extensive odontoma.

Postoperative control tomography demonstrated successful removal of the odontomatous lesion, with persistent anatomical alterations of the sinus floor and evidence of bone remodeling in the region. A significant complication observed was discontinuity of the medial wall of the right maxillary sinus, causing communication with the nasal cavity and widespread bone loss. Therefore, cone beam computed tomography proved essential not only for preoperative diagnosis but also for postoperative monitoring.[47,48,49,50] This imaging modality allowed precise assessment of the odontoma's extent and location, identification of its relationship with critical anatomical structures, detection of the preexisting fenestration in the sinus floor, appropriate surgical planning, and evaluation of postoperative progress. Such a comprehensive diagnostic approach was crucial for effective case management.

This case illustrates the complexity involved in the surgical management of odontomas in critical locations and underscores the importance of thorough preoperative evaluation, proper surgical planning, and careful postoperative follow-up to optimize outcomes and minimize complications associated with this type of procedure.

CONCLUSION

This case highlights the importance of careful planning for routine tooth extractions, beginning with radiographic examination and, when abnormalities are detected, the necessity of advanced imaging such as computed tomography. This approach enables more accurate procedural planning, improving predictability and minimizing the risk of complications.

We can also conclude that the presence of large odontomas in areas of oroantral communication complicates surgical treatment, as removal of the odontoma is necessary and results in increased bone loss. Nevertheless, in the present case, the surgical technique employed was successful both in removing the lesion and in closing the oroantral communication after 24 months of follow-up.

REFERENCES

1. Lustosa BS, Nascimento JS, Sobra LGGC. Compound odontoma in the anterior region of the mandible. Research, Society and Development. 2023;12(7):e9512742586. https://rsdjournal.org/index.php/rsd/article/view/42586

2. Junior EAG, Mazur N, Vidor ND, Zenatti R, Silva MP, Griza GL. Odontoma Composto em região anterior de mandíbula asociado a canino retido: relato de caso. Brazilian Journal of Health Review. 2023;6(3):8896-8907. https://ojs.brazilianjournals.com.br/ojs/index.php/BJHR/article/view/59518/43063

3. Neville BW, Damm DD, Allen CM, Bouquot JE. Patologia oral & maxilofacial. 3ª ed. Rio de Janeiro-BR: Guanabara Koogan; 2009.

4. Pires WR, Junior JM, Martins LP, Stabile GA. Odontoma complexo de grande proporção em ramo mandibular: relato de caso. Rev. Odontol UNESP. 2013;42(2):138-143. https://www.scielo.br/j/rounesp/a/L36gq3GFzVnYWQD4zmc7vwx/?format=pdf&lang=pt

5. Queiroz IV, Starling CR, Silva DT, Rebello IMC, Albuquerque DP, Lago CAP. Odontoma Complexo Atípico: Relato de Caso. Rev. Cir. Traumatol. Buco-Maxilo-Fac. 2011;11(3):43-48. https://www.revistacirurgiabmf.com/2001/2011/v11.n3/7.pdf

6. Junior MAB, Melo TM, Silva AB, SILVA GOS, Filho JGD, Silva KS. Odontoma Composto: Relato de Caso. Brazilian Journal of Health Review. 2025;8(1):01-10. https://ojs.brazilianjournals.com.br/ojs/index.php/BJHR/article/view/76514/53213

7. Apablaza JA, Muñoz G, Arriagada C, Bucchi C, Masuko TS, Fuentes R. Odonyoma Recurrence. The Importance of Radiographic Controls: Case Report with a 7-Year Follow-Up. MDPI Open Access Journals – Medicina. 2024;60(8). https://doi.org/10.3390/medicina60081248

8. Memarpour M, Amiri MA, Mokhtari N, Sharifinejad A, Hosseini SM. Giant odontoma: A systematic scoping review and case report. International Journal of Surgery Case Reports. 2025;126. https://doi.org/10.1016/j.ijscr.2024.110771

9. Forte M, Barile G, D'Amanti A, Ingravallo G, Corsalini M, Manfuso A, Favia G, Capodiferro S. Diode Laser Surgery of Peripheral Developing Odontoma in a Pediatric Patient: A Case Report with Narrative Review of the Literature. MDPI Open Access Journals – Surgeries. 2024;5(2):391-401. https://doi.org/10.3390/surgeries5020032

10. Mallya SM, Lam EWN. White & Pharoah Radiologia Oral: Princípios e Interpretação. 8ª ed. Rio de Janeiro-BR: Editora Guanabara Koogan; 2020.

11. Wajdiyah U, Zahbia ZN, Dachlan N, Marwaty Y, Nadia E, Utami TD, Syahrir S. Continual management for delayed teeth eruption following excision of na intraosseous compound odontoma: a case report. Journal of Clinical Pediatric Dentistry. 2025;49(2):217-223. https://www.jocpd.com/articles/10.22514/jocpd.2025.042

12. Ribeiro FF, Araújo LRN, Cabral KC, Nogueira MT, Viana YMS, Leite ALA, Silva KKL, Silva FFT, Silva MN, Hage CA. Diagnóstico e tratamento de odontoma composto. Revista CPAQV – Centro de Pesquisas Avançadas em Qualidade de Vida. 2024;16(2):2-1. https://revista.cpaqv.org/index.php/CPAQV/article/view/1713/1206

13. Muczkowska N, Czochrowska E, Maslowska K, Wojtowicz A, Popowski W. Combined Surgical and Orthodontic Treatment of Complex Odontoma in Growing Patients: Presentation of Two Cases. MDPI Open Access Journals - Dentistry Journal. 2025;13(2). https://doi.org/10.3390/dj13020082

14. Nunes BQB, Brito DG, Santos EV, Dias FG, Melo JL, Guedes MAL, Almeida PB, Rocha TLC, Lopes MS, Silva YS. Diagnóstico diferencial de lesões odontogênicas. Revista Eletrônica Acervo Saúde. 2025;25:1-9. https://doi.org/10.25248/reas.e19068.2025

15. Hayasida BA, Castro CCLP, Machado DBA, Silva MPS, Sampaio TRC, Gomes ACA. Odontoma composto extenso em paciente pediátrico: relato de caso. Revista Cirirurgia Traumatologia Buco-Maxilo-Facial. 2022;22(3):22-26. https://www.revistacirurgiabmf.com/2022/03/Artigos/04ACOdontomacompostoextensoempaciente.pdf

16. Marcucci G, Junior OC. Fundamentos de Odontologia Estomatologia. 3ª ed. Rio de Janeiro-BR: Editora Guanabara Koogan; 2020.

17. Batista PS, Junior AFDR, Wichnieski C. Contribuição para o estudo do seio maxilar. Revista Portuguesa de Estomatologia, Medicina Dentária e Cirurgia Maxilofacial. 2011;52(4):235-239. https://doi.org/10.1016/j.rpemd.2011.04.003

18. Costa MR, Lins NAE, Andrade TID, Castanha DM, Moura CCN, Vasconcelos RGD. Comparação dos Métodos Cirúrgicos de Tratamento para Fechamento da Comunicação Buco Sinusal: Uma Revisão de Literatura. Brazilian Journal of Surgery and Clinical Research – BJSCR. 2018;24(2):154-158. https://www.researchgate.net/profile/Mauricio-Costa-2/publication/341458992_

19. Rodrigues JS, Pereira ABG, Vieira FR, Medeiros IA, Rodrigues JS, Balbino LA, Avelino LCS, Balbino MA, Silva RMS, Reis DN. Manejo da Comunicação Bucosinusal na Prática Clínica Odontológica – Revisão de Literatura. Revista FT. 2023;27(179). https://revistaft.com.br/manejo-da-comunicacao-bucosinusal-na-pratica-clinica-odontologica-revisao-de-literatura/

20. Sales DG, Lima CEP, Leal AFG, Pedrosa RF, Tirintan FC, Granja CC, Machado ALB, Lócio JPM. Fechamento de fístula bucosinusal através do retalho palatino rotacional: relato de caso. Soberana Journal of Scientific Research. 2025;1(1):53-62. https://revista.faculdadesoberana.com.br/index.php/sjsr/article/view/22/9

21. Rosa MMF, Lima CFSK. COMUNICAÇÃO BUCO-SINUSAL – UMA REVISÃO BIBLIOGRÁFICA. Revista Científica Unilago. 2022;1(1). https://revistas.unilago.edu.br/index.php/revista-cientifica/article/view/763

22. Ferreira DP, Campelo LDC. Complicações da comunicação buco-sinusal em cirurgias bucais: fatores de riscos, complicações e intervenções. Revista Fluminense de Odontologia. 2025;2(67):01-12. https://periodicos.uff.br/ijosd/article/view/61890

23. Silva JMM, Pereira RS, Silva LS, Rocha WG, Santos WB, Soares WMV, Almeida CSM, Ramos CEC, Cavalcanti LRO, Cavalcanti TC. Tratamento cirúrgico da comunicação buco-sinusal ocorrida durante a exodontia para reabilitação com prótese dentária: relato de caso. Revista Eletrônica Acervo Saúde. 2020;39(39):e2127. https://acervomais.com.br/index.php/saude/article/view/2127

24. Mazur M, Di Giorgio G, Ndokaj A, Jedlinski M, Corridore D, Marasca B, Salucci A, Polimeni A, Ottolenghi L, Bossù M, Guerra F. Characteristics, Diagnosis and Treatment of Compound Odontoma Associated with Impacted Teeth. MDPI Open Access Journals – Children. 2022;9(10):1509. https://doi.org/10.3390/children9101509

25. Alves ADS, Alves JC, Dias MWG, Viana PAA, Vieira EPA, Rocha MO, Andrade RA. REMOÇÃO DE ODONTOMA COMPOSTO: RELATO DE CASO CLÍNICO. Scientia Generalis. 2022;3(1):393–401. http://scientiageneralis.com.br/index.php/SG/article/view/419

26. Silva TVS, Sena PEB, Paiva RG. Odontoma complexo em maxila: relato de caso. Odontol. Clín. – Ciente. 2021;21(1):85-89. https://pesquisa.bvsalud.org/portal/resource/es./biblio-1368451

27. Brambila TFG, Fabris ALS. Comunicação buco sinusal: do manejo cirúrgico a abordagem cirúrgica. Revista Ibero – Americana de Humanidades, Ciência e Educação – REASE. 2022;8(9):1355–1365. https://doi.org/10.51891/rease.v8i9.7188

28. Ortiz CS, Roman JP, Osorio LT, Caballero AD. Odontoma Compuesto y su Diagnóstico Diferencial: Reporte de um Caso. Acta Bioclinica. 2024;14(28):175–188. https://doi.org/10.53766/AcBio/2024.14.28.11

29. Silva MG, Papa EG. Imaging diagnosis of compoud – Complex odontoma and impacted dental elements: a case report. International Journal of Science Dentistry. 2024;3(65):65-75. https://docs.bvsalud.org/biblioref/2024/08/1567853/60380-texto-do-artigo-218335-1-11-20240205.pdf

30. Tommasi MHM. Diagnóstico em Patologia Bucal. 4ª ed. Rio de Janeiro-BR: Elsevier; 2013.

31. Gonçalves ACA, Cruz JLS, Oliveira DKSC, Lima GMS, Oliveira LGSL, Salomão TVSS, Lago GF, Carvalho SM, Dalbom VC, Seixas DR. Odontoma Composto: Uma Revisão de Literatura. Brazilian Journal Of Implantology and Health Sciences. 2024;(6)2:1069–1084. https://bjihs.emnuvens.com.br/bjihs/article/view/1465

32. Silva RS, Santos IRF, Rocha EH, Ferreira G, Vieira ICS. Odontoma composto e sua remoção cirúrgica: Relato de caso. Revista Sociedade Científica. 2023;6(1):1080-1091. https://revista.scientificsociety.net/wp-content/uploads/2023/09/Art00142-2023.pdf

33. Silveira MS, Lima HEB, Pinto FC, Sampieri MBS, Chaves FN, Oliveira DHIP, Viana PP, Prado RC, Bastos PL, Neves BM. Aspectos clínicos e imaginológicos de odontoma composto em região anterior de mandíbula impactando canino permanente: Relato de Caso. Revista CPAQV – Centro de Pesquisas Avançadas em Qualidade De Vida. 2025;17(1):6. https://doi.org/10.36692/V17N1-36

34. Pes LVB, Junior JMM, Mateus AR, Horta HF, Lopes AO, Antoniali C. Odontoma composto e retenção dentária em paciente pediátrico: Relato de caso clínico realizado no município de Balsas-MA. Pesquisa, Sociedade e Desenvolvimento. 2023;12(12):01-09. https://rsdjournal.org/index.php/rsd/article/view/43797

35. Olivares DAP, Simonato LE, Tomo S. ODONTOMA COMPOSTO: UMA REVISÃO DE LITERATURA. Revista Ibero-Americana de Humanidades, Ciências e Educação. 2022;8(5):1179–1199. https://periodicorease.pro.br/rease/article/view/5523

36. Passarelli DHRC. Atlas de estomatologia: casos clínicos. 1ª ed. Rio de Janeiro-BR:Elseviver; 2017.

37. Magalhães ARF, Reis ARN, Oliveira NB, Pinheiro TN, Deip LFA, Deip TSA. Odontoma composto erupcionado em área estética de maxila: relato de caso. Brazilian Journal of Health Review. 2025;8(3):01-17. https://doi.org/10.34119/bjhrv8n3-031

38. Medeiros LMV, Lima LHF, Tunel FMS, Jesus LSR, Moreira GM, Sverzut AT. Odontoma composto em maxila: relato de caso. Revista de Cirurgia e Traumatologia Buco-Maxilo-Facial. 2023;23(1):18-21. https://periodicos.upe.br/index.php/rctbmf/article/view/8

39. Sinhorini TCS, Duarte GLC, Momesso NR, Munerato MS, Cardoso CL. Fechamento de comunicação buco-sinusal utilizando o corpo adiposo bucal: relato de caso clínico. SALUSVITA. 2020;39(1):77-90. https://secure.unisagrado.edu.br/static/biblioteca/salusvita/salusvita_v39_n1_2020/salusvita_v39_n1_2020_art_06.pdf

40. Calvet MVB, Castro BRA, Agostinho CNLF, Bastos EG. Fechamento de comunicação buco-antral com bola adiposa de bichat: revisão de literatura e relato de caso. Rev. Ciênc. Saúde. 2014;16(2):106-111. https://periodicoseletronicos.ufma.br/index.php/rcisaude/article/view/4065/2148

41. Araújo FN, Dutra IRR, Marinho JA, Peixoto ACPC, Teixeira LVM, Lima EL, Freitas CVS. Aspectos clínicos e cirúrgicos do manejo terapêutico da comunicação buco-sinusal: Revisão de literatura. Research, Society and Developmente. 2024;13(2):01-06. https://rsdjournal.org/index.php/rsd/article/view/45139/36040

42. Silveira VM, Netto BA, Côsso MG, Fonseca LC. A utilização da tomografia computadorizada na avaliação da comunicação bucosinusal. Arquivo Brasileiro de Odontologia. 2008;4(1):24-27. https://www.researchgate.net/profile/Virginia-Silveira-3/publication/277838921_A_UTILIZACAO_DA_TOMOGRAFIA_COMPUTADORIZADA_NA_AVALIACAO_DA_COMUNICACAO_BUCOSINUSAL/links/5bf2ee6aa6fdcc3a8de233c1/A-UTILIZACAO-DA-TOMOGRAFIA-COMPUTADORIZADA-NA-AVALIACAO-DA-COMUNICACAO-BUCOSINUSAL.pdf

43. Marson, G, Sá BDL, Farias GB. Reabilitação de maxila edêntula e atrófica sem enxerto ósseo: aplicabilidade da técnica all-on-4. Brazilian Journal of implantology and health sciences. 2023;5(5):1197-1207. https://bjihs.emnuvens.com.br/bjihs/article/view/704

44. Batista AG, Silva DR, Lima LV, Alves MM, Oliveira VM, Fernandes YF, Jr. Figueiredo PJ. Fechamento tardio de comunicação buco-sinusal utilizando L-PRF: Relato de caso. Brazilian Journal of Surgery and Clinical Research – BJSCR. 2022;39(1):25-30. https://mastereditora.com.br/periodico/20220716_104220.pdf

45. Peixoto FAZ, Cardoso JM, Furquim F, Camati PR, Peixoto HEM, Mariano JR. Fechamento imediato de comunicação buco-sinusal com fibrina rica em plaquetas: relato de caso clínico. Revista Odontológica do Hospital de Aeronáutica de Canoas. 2020;1(2):01-05. https://revistaeletronica.fab.mil.br/index.php/rohaco/article/view/163/142

46. Scartezini GR, Oliveira CFP. Fechamento de comunicação buco-sinusal extensa com bola de bichat: relato de caso. Revista Odontológica do Brasil Central. 2016;25(74):143-147. https://www.robrac.org.br/seer/index.php/ROBRAC/article/view/1051

47. Carvalho MM, Santana MRO, Silva RL, Oliveira LF, Oliveira MEFS, Simonato LE. Odontoma Composto Erupcionado em Mandíbula: Diagnóstico e Tratamento. ARCHIVES OF HEALTH INVESTIGATION. 2023;12(2):200-204. https://archhealthinvestigation.emnuvens.com.br/ARCHI/article/view/5923

48. Nascimento YL, Neto FJB, Silva MT, Santana PCS, Feliz VB. TOMOGRAFIA CONE-BEAN NO DIAGNÓSTICO DE ODONTOMA NA MANDÍBULA: RELATO DE CASO. Gep News. 2021;1(1):162–170. https://www.seer.ufal.br/index.php/gepnews/article/view/12208

49. Paiano GA, Chiarelli M, Dunker C. Tomografia computadorizada como método auxiliar no diagnóstico e tratamento de lesões intraósseas: como clínico de odontoma composto. Revista Odonto Ciência. 2006;21(53):292-296. https://revistaseletronicas.pucrs.br/fo/article/view/1111

50. Zanettini LMS, et al. Odontoma composto associado a incisivo central superior impactado: relato de caso. Revista da Faculdade de Odontologia – UPF. 2019;24(1):38-43. https://seer.upf.br/index.php/rfo/article/view/8649

FINANCING

San Gregorio University of Portoviejo, Ecuador. Department of Dentistry.

CONFLICTS OF INTEREST

None.

AUTHOR CONTRIBUTION

Conceptualization: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Data curation: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Formal analysis: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Fund acquisition: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Investigation: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Methodology: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Pr*oject management:* Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Resources: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Software: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Supervision: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Validation: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma

Visualization: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Writing – original draft: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.

Writing – review and editing: Thainah Bruna Santos Zambrano, Natalia Cristina Aparecida Silva, Marcos Heidy Guskuma.