

Clinical Case Report

Paradental cyst mimicking a dentigerous cyst in the mandibular third molar region: a case report



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ABSTRACT

Paradental cysts are inflammatory lesions that typically occur associated with the mandibular third molar, posing a challenge in the differential diagnosis with other odontogenic cysts. This paper describes the diagnostic and therapeutic management of a paradental cyst that was initially considered a dentigerous cyst based on its pericoronal location and radiological appearance as a well-defined unilocular radiolucency associated with an impacted tooth.

A 64-year-old male patient presented with pain in the right mandibular region. Panoramic radiography and cone-beam computed tomography revealed a well-defined unilocular lesion associated with an impacted mandibular third molar, extending towards the mandibular second molar. Surgical treatment included complete enucleation of the lesion and extraction of both teeth.

Histopathological analysis showed a non-keratinized stratified epithelial lining with chronic inflammatory cell infiltrate; together with the clinical and radiological findings, this allowed the definitive diagnosis of a paradental cyst. The postoperative course was uneventful, and a follow-up radiograph obtained at nine months showed early signs of ossification of the residual cavity. (Rev Port Estomatol Med Dent Cir Maxilofac. 2026;67(3):184-193)

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Introduction

According to the 2022 WHO classification, paradental cysts (together with buccal bifurcation cysts) are included in the group of collateral inflammatory cysts.¹ They occur more frequently in association with the mandibular third molar and typically in the third decade of life, due to the higher likelihood of impaction of these teeth.

Most studies published in the literature report a prevalence of paradental cysts of between 3% and 5% of all odontogenic cysts.^{2,3} The most recent studies rank them as the fourth most frequent odontogenic cysts, after radicular cysts, dentigerous cysts and keratocysts.^{4,5}

Although relatively infrequent, these lesions are being increasingly recognised due to advances in imaging techniques and histopathological analysis.⁶

In several cases reported in the literature, inflammation appears to play a crucial role in the pathogenesis, favouring cyst formation from odontogenic epithelial remnants, such as the rests of Malassez or the reduced enamel epithelium.⁷ Three possible epithelial origins have been proposed: rests of Malassez, reduced enamel epithelium and crevicular epithelium—reinforcing the theory of the inflammatory origin of the cyst.⁸

Furthermore, a significant relationship has been observed between the age at presentation and the type of tooth involved—almost always partially erupted vital molars—suggesting eruption as a triggering factor.⁹

Clinically, the cyst may progress asymptotically or, as it enlarges, may cause vestibular swelling. When infection occurs, symptoms such as pain, discomfort and trismus may appear. Intraoral examination typically reveals no compromise to the vitality of the affected teeth.¹⁰

Radiologically, paradental cysts present as unilocular radiolucent lesions associated with bone resorption. Histopathologically, they resemble radicular cysts, showing reduced epithelium in continuity with the cystic epithelium and chronic inflammation of the connective tissue.¹¹ Histopathological analysis is therefore essential to establish the diagnosis, as the clinical and radiological features may mimic other cystic entities.¹²

Treatment varies depending on the affected tooth. In cases involving third molars, enucleation and extraction are generally performed, whereas in other molars, preservation may be attempted. A normal eruption of the lower right first molar in a 6-year-old girl following enucleation of an associated paradental cyst has been reported.¹³ It is worth emphasising the benign nature of this cyst and the absence of reported malignant transformation.¹⁴

The predominantly mandibular location poses a differential diagnostic challenge with dentigerous cysts, as the clinical and radiological features are similar. Dentigerous cysts are, after radicular cysts, the most frequent odontogenic cysts, with a reported prevalence of 15–25%.¹⁰ Therefore, the aim of this study is to present a clinical case of a paradental cyst and to describe its diagnostic and therapeutic management.

Case report

A 64-year-old Caucasian male presented to our clinic with a 3-day history of pain in the right posterior mandibular region that had not responded to analgesic treatment. The patient's medical history was non-contributory, with no relevant systemic diseases, ongoing pharmacological treatment, or known allergies. He was a former smoker. The patient reported two episodes of localized pain and inflammation (suggestive of pericoronitis) in the retromolar region that resolved with NSAIDs and local oral hygiene measures, without pain during mastication or symptoms suggestive of pulpal pathology, over the preceding 3–4 years.

Clinical examination revealed tenderness to percussion of tooth 47, no mobility, and a positive response to pulp vitality testing. The gingival tissues surrounding tooth 47 and the retromolar area showed no evidence of swelling, suppuration, erythema, or sinus tract formation. Periodontal probing around tooth 47 revealed no deep periodontal pockets, and no pathological periodontal communication with the lesion was detected. Careful examination of the distal aspect of tooth 47 and the retromolar region revealed no mucosal alterations. These clinical findings, together with the positive pulp vitality of tooth 47 and the radiological relationship between the lesion and the crown of tooth 48, were considered relevant in establishing the differential diagnosis.

On the same day, a panoramic radiograph was obtained, revealing the following relevant findings: dental caries in tooth 45; an impacted mandibular third molar (tooth 38) in horizontal position (Winter classification), class III, position A (Pell and Gregory); and an impacted mandibular third molar (tooth 48) in horizontal position (Winter classification), class III, position C (Pell and Gregory), with its roots in close proximity to the inferior alveolar nerve and associated with a pericoronal radiolucency extending to the apical region of tooth 47 (Figure 1).

Based on these findings, the patient was informed of the need to undergo further diagnostic assessment with cone-beam computed tomography (CBCT), which was performed 48 hours after the initial visit. The CBCT acquisition parameters were as follows: voxel size 0.07 mm, section thickness 0.07 mm, FOV 5 × 5 cm and the planes shown were axial,



Figure 1. Initial panoramic radiograph demonstrating a well-circumscribed unilocular pericoronal radiolucency associated with the impacted mandibular third molar (tooth 48). The radiolucent area extends towards the roots of the adjacent second molar.

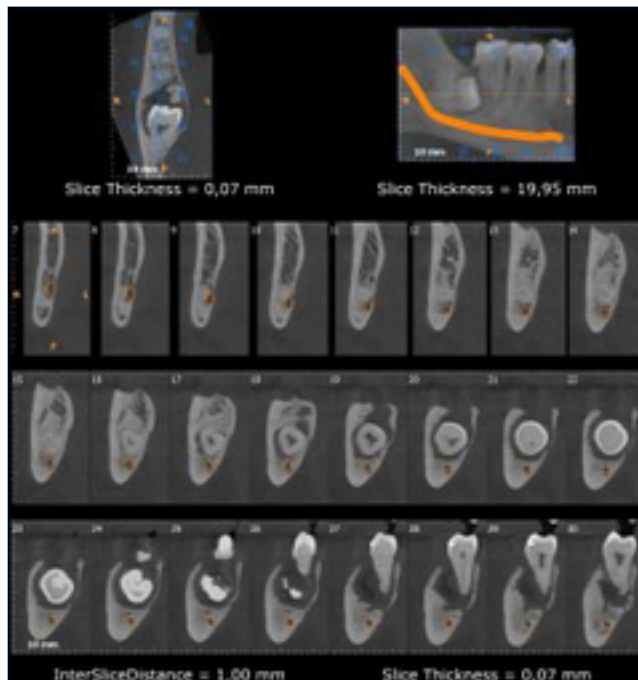


Figure 2. Cone-Beam Computed Tomography orthoradial slices (interslice distance: 1 mm; slice thickness: 0.07 mm). The panoramic reconstruction panel (top right) displays a slab slice thickness of 19.95 mm. The lesion exhibits a close anatomical relationship with the inferior alveolar nerve canal and causes marked thinning of the lingual cortical plate.

sagittal, orthoradial and panoramic reconstructions. The CBCT images revealed a well-defined radiolucent lesion with regular contours, located in the coronal region and extending towards the lingual cortex and the roots of the second molar. The lesion was located in close proximity to the inferior alveolar nerve, and thinning of the lingual cortical plate was observed, with a risk of perforation or fracture. (Figures 2 and 3).

Based on the clinical and radiological findings, a dentigerous cyst was initially considered as the most likely diagnosis due to its association with the crown of an impacted tooth. The differential diagnoses included a radicular cyst—considered less likely due to the vitality of tooth 47—and a paradental cyst, given the lesion's location and inflammatory component. The patient was informed that histopathological examination would be required to establish a definitive diagnosis. Additionally, the possible need for extraction of tooth 47 during surgery was discussed, due to the extension of the lesion affecting its roots, the potential loss of bone support, and the risk of recurrence.

One week later, after obtaining informed consent, the patient underwent surgical treatment under conscious sedation with propofol (1.5 mg/kg body weight), supplemented with local infiltration of 4% articaine with 1:100,000 epinephrine (Ultracain®). The surgical procedure involved a scalloped linear incision with anterior and posterior vertical releasing incisions, followed by mucoperiosteal flap elevation. Tooth 47 was extracted, followed by ostectomy to facilitate removal of tooth

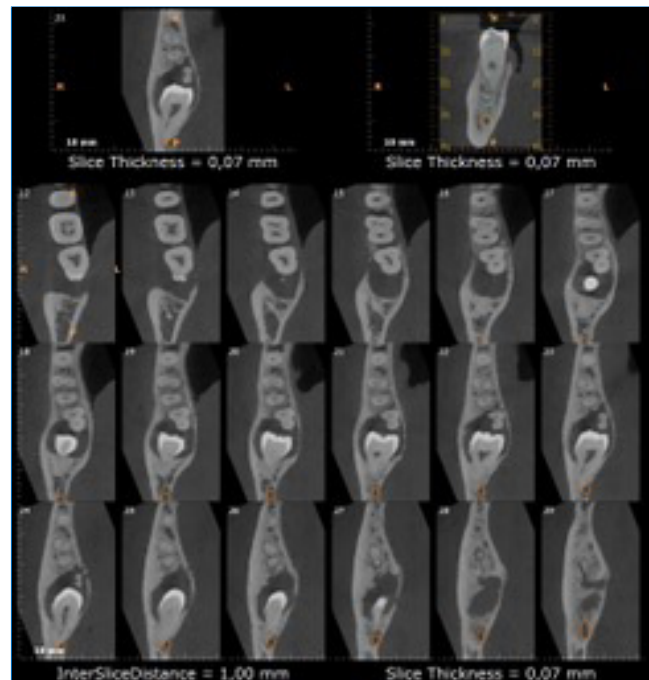


Figure 3. Cone-beam computed tomography axial slices (interslice distance: 1 mm; slice thickness: 0.07 mm). The image shows the radiolucent lesion extending towards tooth 47 and producing external root resorption.



Figure 4. Intraoral photograph showing the initial clinical situation. The overlying mucosa appeared clinically normal, with no evidence of swelling, erythema, suppuration, or other visible inflammatory changes in the retromolar area.

48, and complete enucleation of the radiolucent lesion. The procedure was completed with surgical site inspection, repositioning of the flap, and closure using 4-0 monofilament nylon sutures (Figures 4-9). The surgical specimen was fixed in 10% neutral buffered formalin and sent for histopathological analysis.

After one hour in the recovery room, the patient was discharged. Postoperative medication included amoxicillin 750 mg orally every 8 hours for 10 days, prednisone 30 mg orally

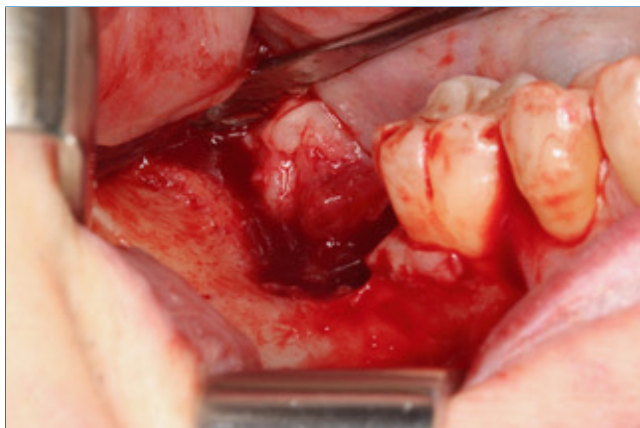


Figure 5. Intraoral photograph showing the surgical field after extraction of tooth 47. The impacted mandibular third molar cannot be visualized because of its degree of impaction; therefore, osteotomy is required.

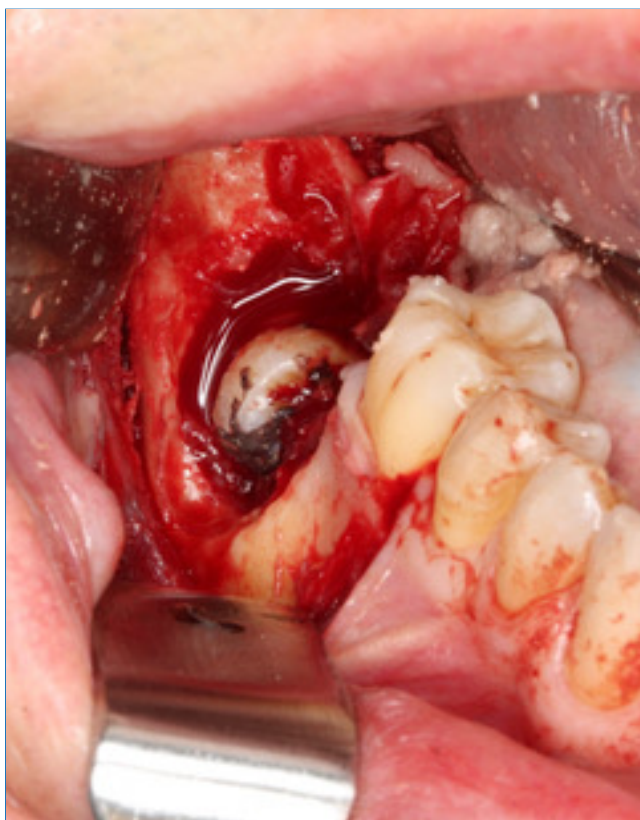


Figure 6. Intraoral photograph showing the osteotomy performed to expose and gain access to the impacted third molar.

once daily for 3 days, and metamizole magnesium 575 mg orally every 8 hours as needed for pain.

Amoxicillin was selected as the antibiotic therapy due to its broad-spectrum activity and its well-established scientific evidence in the management of oral infections. Additionally, anti-inflammatory treatment with corticosteroids was pre-

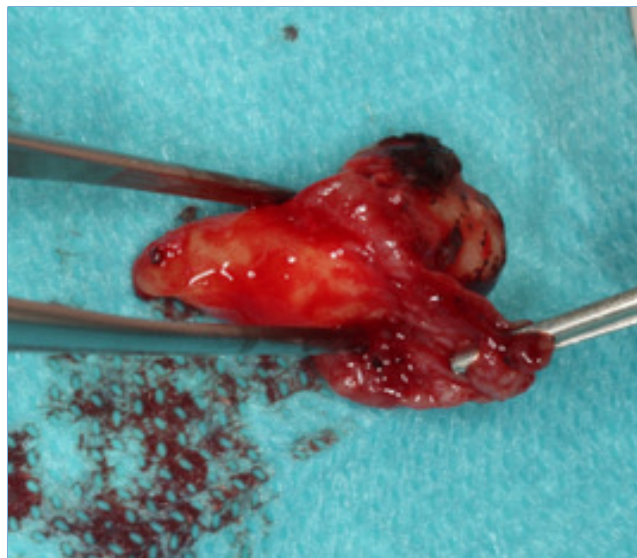


Figure 7. Intraoral photograph showing the extracted mandibular third molar and the associated soft tissue lesion submitted for histopathological examination. The dark deposits observed on the crown correspond to blood remnants and superficial calculus deposits.

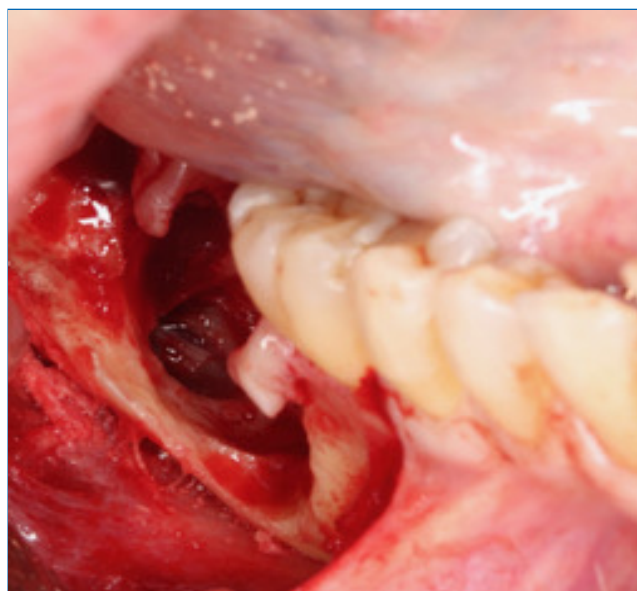


Figure 8. Intraoral photograph showing the residual bone cavity, where the inferior alveolar nerve can be observed.

scribed in light of the extensive osteotomy performed and the duration of the surgical procedure. Finally, a rescue analgesic was indicated to manage postoperative pain according to the patient's analgesic requirements.

The patient was reviewed at 24, 48, and 96 hours postoperatively, showing an uneventful postoperative recovery. Sutures were removed after 14 days, coinciding with the histopathological report, which revealed the following microscopic findings: a membranous lesion composed of a fibro-

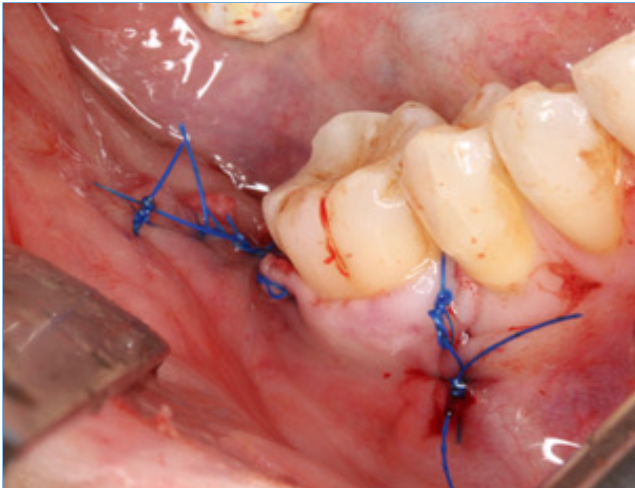


Figure 9. Intraoral photograph showing primary closure with 4-0 monofilament nylon sutures.

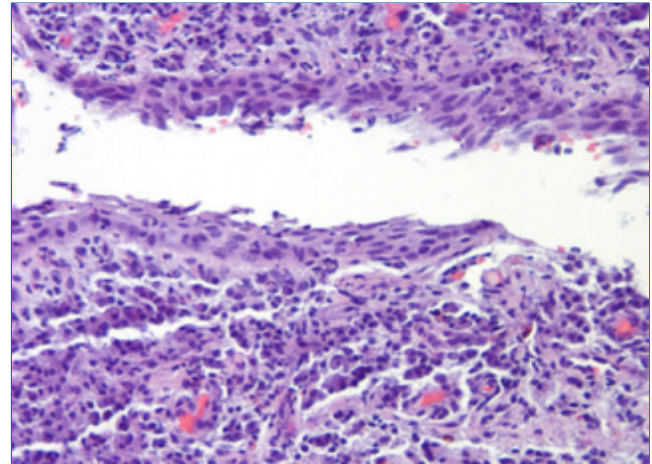


Figure 11. Histopathological image (hematoxylin and eosin (H&E) staining; original magnification $\times 20$) showing a discontinuous non-keratinized stratified epithelial lining with areas of hyperplastic growth and inflammatory exocytosis.

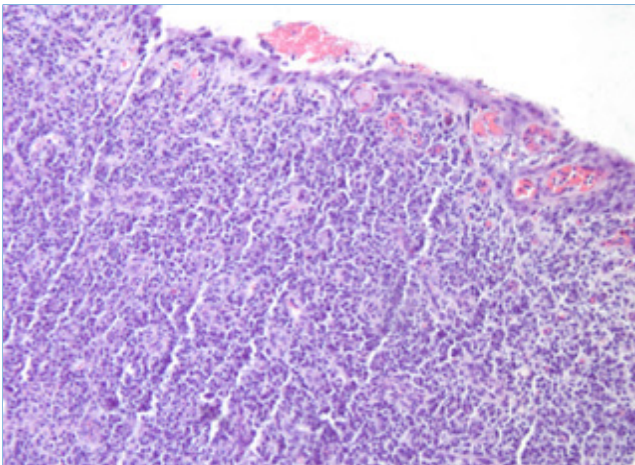


Figure 10. Histopathological image (hematoxylin and eosin (H&E) staining; original magnification $\times 20$) showing chronic lymphoplasmacytic inflammatory infiltrate, together with mixed areas containing polymorphonuclear leukocytes and focal calcifications.



Figure 12. Follow-up panoramic radiograph obtained 4 months after surgery.



Figure 13. Follow-up panoramic radiograph obtained 9 months after surgery, showing signs of early ossification of the residual cavity.

cellular connective tissue wall of variable density, with numerous foci of chronic lymphoplasmacytic inflammatory infiltrate, along with mixed areas containing polymorphonuclear leukocytes and focal calcifications. In some fragments, a discontinuous non-keratinised stratified epithelial lining was observed, with areas of hyperplastic growth and inflammatory exocytosis (H&E staining; original magnification $\times 20$) (Figures 10 and 11).

The final diagnosis of paradental cyst was established through clinical, radiological and histological correlation.

In particular, the vitality of the adjacent tooth (47) was a key factor in excluding a radicular cyst, as such lesions are typically associated with non-vital teeth. In this case, pulp vitality tests were positive, making a radicular origin unlikely.

Furthermore, the anatomical location of the lesion—on the distal and coronal aspect of an impacted mandibular third

molar—together with its radiological appearance as a well-defined unilocular radiolucency, is highly characteristic of a paradental cyst.

Additionally, the presence of inflammatory symptoms and its association with an impacted third molar support the di-

Table 1. Timeline of the patient's clinical course. Summary of the patient's clinical course, including symptom onset, diagnostic imaging, surgical management, histopathological confirmation, and postoperative follow-up.

Time point	Clinical event
Day 0	Initial consultation due to pain in the right posterior mandible; Clinical examination and panoramic radiograph
Day 2	CBCT examination
Week 1	Surgical treatment (extraction of teeth 47 and 48 and cyst enucleation)
24, 48, and 96 hours post-op	Early postoperative monitoring
2 weeks post-op	Suture removal; Histopathological diagnosis of paradental cyst
4 months post-op	First radiographic follow-up
9 months post-op	Second radiographic follow-up showing early ossification

agnosis of a paradental cyst, which is commonly linked to pericoronitis and inflammatory processes affecting vital teeth.

The patient was monitored clinically on a monthly basis. A first radiological follow-up was performed at 4 months and a second at 9 months, in which signs of early ossification of the residual cavity can be observed (Figures 12 and 13).

The timeline and clinical management of this case are summarized in Table 1.

Discussion and Conclusions

Paradental cysts and their variants, particularly the buccal bifurcation cyst, constitute a group of inflammatory odontogenic lesions of low prevalence but significant clinical relevance due to their relationship with vital teeth, frequent association with inflammatory processes such as pericoronitis, and potential confusion with other more common cysts, such as radicular or dentigerous cysts.¹⁵ Comparative analysis of different studies highlights the diversity of clinical and epidemiological manifestations of these lesions, as well as the diagnostic challenges and therapeutic strategies proposed over time (Table 2).^{2-5,11-14,16-29}

Paradental cysts can occasionally appear in children, associated with the first lower molar, which is also the typical age and location for buccal bifurcation cysts.^{19,30-32} These cases usually present with mild vestibular swelling, sometimes painful, and gingival inflammation.

In rare cases, unusual locations have been reported, such as bilateral presentation in first molars, association with fused teeth and the presence of a retromolar canal, confusion with hyaline halo granuloma, and even occurrence in the anterior region of the maxilla, occasionally discovered during CT studies for implant placement.^{2-5,22,25}

However, paradental cysts most frequently occur in association with the lower third molar in young patients with a history of recurrent pericoronitis.^{2,29} The case presented in this paper, which occurred in a patient in the seventh decade of life, contrasts with this trend, posing a diagnostic challenge.

A recurring theme in the literature is the difficulty in radiographically differentiating paradental cysts from other inflammatory cysts.³³ On panoramic or occlusal radiographs, they are usually observed as well-defined, unilocular radiolucent lesions adjacent to partially erupted vital teeth. In the case of buccal bifurcation cysts, the radiolucency is U-shaped around the roots of the first molars, with preservation of the periodontal space.³¹

The use of cone-beam computed tomography (CBCT) has proven essential in complex cases. CBCT has even enabled visualisation of the fusion of a third molar with another molar and the relationship of the cyst to adjacent structures.²⁵ It is a radiological test that provides high-contrast, three-dimensional images that facilitate surgical planning and reduce the risk of misdiagnosis.³⁴

Overall, the reviewed articles demonstrate heterogeneous results regarding location, age of presentation, and clinical manifestations, but with common features: commonly associated with partially erupted vital teeth, history of recurrent inflammation, radiographic findings of unilocular radiolucency, and non-keratinised inflammatory epithelial lining.

The differential diagnosis should include radicular, dentigerous, lateral periodontal cysts, and hyperplastic dental follicles.²⁵ In a retrospective study of 113 cases, initially classified as dental follicles on radiological examination, the histological study confirmed a paradental cyst diagnosis in 47.7% of cases ($p < 0.0001$).³⁵

Clinical-histological concordance in mandibular cysts is moderate, reinforcing the necessity of histology for definitive diagnosis.²⁶ A paradental cyst associated with the second mandibular molar has been reported to closely resemble a radicular cyst.¹⁶ This finding underscores the importance of clinical, radiographic, and histological correlation.^{22,30}

Most cases present an inflammatory connective tissue capsule lined by non-keratinised stratified squamous epithelium with a hyperplastic pattern, similar to buccal bifurcation cysts.^{22,30} In some cases, a hyaline halo granuloma has also been observed.²

The present case is noteworthy because, although an inflamed dentigerous cyst was initially considered the most likely diagnosis due to its pericoronal relationship with the impacted third molar, the final diagnosis of a paradental cyst was established through the integration of clinical, radiological, and histopathological findings. Clinically, the patient had a history of recurrent episodes of pericoronitis, a condition closely associated with the development of paradental cysts. Radiologically, the lesion was predominantly located on the distal and lateral aspects of the impacted mandibular third molar and extended towards the adjacent second molar, rather than symmetrically surrounding the crown, as is typically observed in dentigerous cysts. Histopathological examination revealed a non-keratinised stratified squamous epithelial lining associated with a prominent chronic inflammatory infiltrate. Although these findings were not specific, they were

Table 2. Comparative analysis of selected published studies and clinical reports on paradental cysts (2003-2024).

Author / Year	Number of cases	Age(s) (years)	Gender	Main location	Clinical signs and symptoms	Radiological findings	Histology/ Immunohistochemistry	Recommended treatment
Silva, 2003 ¹⁶	1	14	M	Mandibular 1M	Occasional pain, periodontal pocket	RL, rhizolysis	NK squamous Ep., chronic inflammatory infiltrate	Enucleation + extraction
Kanno, 2006 ¹¹	2	21; 23	M	Mandibular 3M	Recurrent pericoronitis, mucosal trauma	Unilocular RL associated with third molars	Hyperplastic stratified Ep. with inflammatory infiltrate	Enucleation + extraction of 3M
Pelka, 2010 ¹⁷	1	7	M	Mandibular 1M	Periodontal pocket, pain	RL adjacent to distal root	—	Antibiotic and local antiseptics
Mufeed, 2009 ¹⁸	1	21	F	Mandibular 3M	Pain	Unilocular interradicular RL	Hyperplastic stratified Ep. with inflammatory infiltrate	Enucleation + extraction
Borgonovo, 2010 ¹⁹	2	6; 7	M	Mandibular 1M	Vestibular swelling, erupting tooth	Periradicular RL	NK squamous Ep., chronic inflammatory infiltrate	Enucleation
Chrcanovic, 2011 ¹³	1	6	F	Mandibular 1M	Vestibular swelling	Unilocular RL lateral to the 1M	Hyperplastic squamous Ep., inflammatory infiltrate	Enucleation
Lizio, 2011 ²⁰	5 (1 bilateral)	7; 8 (2 cases); 10 (2 cases)	F (3 cases); M (2 cases)	Mandibular 1M	Vestibular swelling, periodontal pocket	Unilocular vestibular RL associated with the first molar	Hyperplastic stratified Ep. with inflammatory infiltrate	Marsupialization
Prakash, 2012 ²¹	1	28	F	Mandibular 3M and supernumerary	Pain, pericoronitis	Unilocular RL associated with supernumerary tooth	Reduced enamel Ep. with inflammatory infiltrate	Enucleation + extraction of 3M and supernumerary
Borgonovo, 2012 ²²	1	8	M	Mandibular 1M	Inflammation, pain	Periradicular RL	NK squamous Ep., inflammation	Enucleation
Borgonovo, 2013 ²³	1	14	F	Mandibular 2M	Asymptomatic	Distal RL associated with the second molar	Hyperplastic stratified squamous Ep., inflammatory infiltrate	Enucleation
Maruyama, 2015 ²⁴	10	17-65 (mean: 36.8)	M (6 cases); F (4 cases)	3M (8 cases) 2M (2 cases)	Pain, inflammation, or asymptomatic	RL adjacent to the molars	Positive expression of K13, K14, K17, and K19	Enucleation + extraction if 3M
Ozcan, 2016 ²⁵	1	27	M	Mandibular 3M	Pain	Unilocular RL	Inflammatory epithelial lining (Malassez epithelial rests)	Enucleation + extraction of 3M
Silva, 2017 ²⁶	239	—	—	Mandibular molars in 234 cases	—	Unilocular RL	Hyperplastic NK squamous epithelium with inflammatory infiltrate	Enucleation (1M/2M); extraction if 3M
Derindağ, 2019 ²⁷	1	10	M	Mandibular 1M	Inflammation, pain	Unilocular RL in the furcation area	—	Enucleation
Kammer, 2020 ⁴	55	—	—	Mandibular	—	Unilocular RL	—	—
Heggendorf, 2021 ²⁸	1	14	F	Mandibular 2M	Inflammation, pain	RL associated with the second molar	NK Ep. with inflammatory infiltrate	Enucleation + extraction + bone regeneration
Rodrigues, 2022 ¹	1	26	M	Anterior maxilla	Tooth mobility, pain, exudate, periodontal pocket	Apical RL in 21	Reduced enamel Ep. with inflammation	Enucleation
Vasanthi, 2023 ²	1	23	M	Mandibular	Asymptomatic	Distal RL associated with tooth 38	NK squamous Ep.	Enucleation + extraction of 3M
Begum, 2024 ¹⁴	1	45	M	Mandibular 3M	Pericoronitis, pain	Unilocular RL	NK squamous Ep.; inflammatory infiltrate	Enucleation + extraction
Dhole, 2023 ²⁹	1	57	M	Mandibular 3M	Pain, swelling	Unilocular coronal RL associated with 3M	NK Ep. with inflammation	Enucleation + extraction of 3M
Du, 2024 ⁵	30	0-6 years (3 cases); 7-17 years (8 cases); 18-40 years (11 cases); 41-65 years (8 cases)	—	Posterior mandibular	Variable (pain, inflammation, periodontal pocket)	Unilocular RL	Inflammatory epithelial lining	Marsupialization; enucleation (if 1M/2M); extraction (if 3M)

1M, first molar; 2M, second molar; 3M, third molar; Ep., epithelium; F, female; RL, radiolucency; M, male; NK, non-keratinized .

consistent with an inflammatory odontogenic cyst. Therefore, while the distinction between a paradental cyst and an inflamed dentigerous cyst may be challenging on histopathological grounds alone, the clinicoradiological features and the history of recurrent pericoronitis were decisive in establishing the final diagnosis.

Some authors have provided histological and immunohistochemical evidence suggesting that the pathogenesis of a paradental cyst can be considered an inclusion cyst originating in the periodontal sac, particularly in mandibular third molars of young adults, rather than from epithelial remnants as previously thought. In their study, immunohistochemistry showed positivity for cytokeratins K13, K14, K17, and K19, supporting differentiation from other inflammatory cysts.²⁴

The evaluation of cytokeratins as biomarkers to distinguish histologically similar lesions is reinforced in the literature.³⁶

The expression of the proliferative marker Ki-67 in odontogenic cysts and tumours is gaining importance in recent studies regarding its usefulness for the diagnosis and differentiation of lesions, and consequently for guiding their therapeutic management. The level of Ki-67 expression may help distinguish between benign and malignant lesions.³⁷ Inflammatory cysts generally show low proliferation, supporting a conservative approach, although Ki-67 should always be interpreted alongside clinical and histological findings as it is not a definitive diagnostic factor on its own.³⁷

Although conservative approaches such as periodontal irrigation or marsupialisation have been reported, there is consensus that surgical enucleation remains the treatment of choice for paradental cysts.^{29,38}

In the present case, the use of conscious sedation was justified by the complexity of the surgical procedure, which involved the extraction of two mandibular molars, ostectomy, and complete enucleation of a radiolucent lesion in close proximity to the inferior alveolar nerve. Conscious sedation improves patient comfort, reduces anxiety, and facilitates surgical control, particularly in prolonged or technically demanding procedures.

Regarding the extraction of tooth 47, although paradental cysts are typically associated with vital teeth and preservation is often recommended, removal was considered necessary due to the extension of the lesion to the roots of the second molar, the potential compromise of periodontal support, and the risk of incomplete enucleation or recurrence if the tooth had been retained. This decision is consistent with previous reports suggesting that extraction may be indicated when adjacent teeth are structurally or periodontally compromised by the lesion.

Preservation of the associated tooth is recommended when the cyst is related to first and second molars, particularly in paediatric patients.^{30,31,38} Following conservative enucleation, the molar typically retains vitality and complete bone regeneration is achieved. These cysts are self-limiting and should be distinguished from dentigerous cysts to avoid unnecessary extractions.²²

In contrast, cysts associated with third molars generally require extraction of the tooth alongside enucleation of the cyst.³⁸

Outcomes and prognosis after treatment are usually favourable, and recurrence is low when surgery is performed

correctly; recurrence mainly occurs if enucleation is incomplete.³⁸ Radiographic follow-up should be prolonged to rule out persistent lesions.

Rarely documented complications include: large residual bone defects requiring subsequent bone grafts of different biomaterials, periodontal pockets in teeth associated with or adjacent to the lesion, sometimes necessitating retreatment via scaling and root planing, and damage to adjacent nerve structures. Regarding this latter complication, in cases where neurosensory impairment persists for more than 6–12 months after surgery and pharmacological treatment has failed, low-level laser therapy has been introduced as an effective non-invasive therapeutic modality, with promising results for neurosensory recovery.^{9,28,39,40}

As paradental cysts often arise from recurrent pericoronitis, regular follow-up using panoramic radiographs and CBCT scans of unerupted teeth is recommended.⁴¹

This study underscores the importance of differential diagnosis among odontogenic cysts, emphasising the value of histological examination as an essential tool for confirming the nature of the lesion. Surgical enucleation is an effective and safe treatment. In the present case, radiographic follow-up at 4 and 9 months demonstrated early ossification of the residual cavity, suggesting a favourable healing outcome, although longer-term follow-up is still required.

For future research, it would be desirable to conduct multicentre studies with larger case series and standardised diagnostic protocols that integrate advanced imaging techniques (such as CBCT) and immunohistochemical markers, allowing correlation of clinical, radiological, and histological findings. Furthermore, investigating the expression of proliferative biomarkers such as Ki-67, or epithelial differentiation markers, could help clarify the pathogenesis and potential variants of paradental cysts, thereby optimising their clinical management and prognosis.

Conflict of interest

The authors have no conflicts of interest to declare.

Ethical disclosures

Protection of human and animal subjects. The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

María Andrés-Veiga: Data curation; Investigation; Writing – review & editing; **Carlos Cobo-Vázquez:** Formal analysis; Investigation; Validation; Writing – review & editing; **Fernando Fernández-Cáliz:** Methodology; Supervision; Validation; Writing – review & editing; **Dolores Hurtado-Celotti:** Conceptualization; Data curation; Investigation; Writing – original draft; **Natalia Martínez-Rodríguez:** Formal analysis; Investigation; Visualization; Writing – review & editing; **Cristina Meniz-García:** Conceptualization; Project administration; Supervision; Writing – review & editing.

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Quisto paradentário a simular quisto dentígero na região do terceiro molar inferior: caso clínico

R E S U M O

Os quistos paradentários são lesões de origem inflamatória que geralmente ocorrem associadas ao terceiro molar mandibular, representando um desafio no diagnóstico diferencial com outros quistos odontogênicos. Este trabalho descreve a abordagem diagnóstica e terapêutica de um quisto paradentário que foi inicialmente considerado um possível quisto dentígero devido à sua localização pericoronária e aparência radiológica como uma radiolucidez unilocular bem delimitada associada a um dente impactado.

Um paciente do sexo masculino, com 64 anos de idade, apresentava dor na região mandibular direita. A radiografia panorâmica e a tomografia computadorizada de feixe cônico revelaram uma lesão unilocular bem definida associada a um terceiro molar mandibular impactado, estendendo-se em direção ao segundo molar mandibular. O tratamento cirúrgico incluiu a enucleação completa da lesão e a extração de ambos os dentes.

A análise histopatológica mostrou um revestimento epitelial estratificado não queratinizado com infiltrado inflamatório crônico. Isto, juntamente com os achados clínicos e radiológicos, permitiu estabelecer o diagnóstico definitivo de quisto paradentário. O pós-operatório decorreu sem intercorrências, e a radiografia de controle realizada aos nove meses mostrou sinais iniciais de ossificação da cavidade residual. (*Rev Port Estomatol Med Dent Cir Maxillofac*. 2026;67(3):145-154)

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Palavras-chave:

Tomografia computadorizada de feixe cônico
 Diagnóstico diferencial
 Dente serotino
 Cistos odontogênicos
 Procedimentos cirúrgicos orais