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RIANNY MARIA RODRIGUES ALVES

DESAFIO DIAGNÓSTICO DE XANTOMA INTRAÓSSEO DE MANDÍBULA

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2025

RIANNY MARIA RODRIGUES ALVES

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Trabalho de Conclusão de Curso do Curso de Graduação em Odontologia pela Universidade Federal do Ceará – *Campus* Sobral como requisito para obtenção do título de Cirurgiã-Dentista.

Orientador: Prof. Dr. Filipe Nobre Chaves

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Aprovada em: 17/02/2025

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A Deus.

À minha família, aos meus professores e aos meus amigos. E, especialmente, aos meus avós Antônio (In memoriam) e Luiza (In memoriam).

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“Pra ser grande, sê inteiro: nada
Teu exagera ou exclui.
Sê todo em cada coisa. Põe quanto és
No mínimo que fazes.
Assim em cada lago a lua toda
Brilha, porque alta vive".

(Fernando Pessoa)

RESUMO

Os xantomas intraósseos são lesões extremamente raras, frequentemente associados a distúrbios metabólicos ou sistêmicos, como a hiperlipidemia. Diante da ausência de doenças ou alterações sistêmicas, a lesão é denominada xantoma intraósseo primário. Os xantomas localizados em mandíbula são incomuns, geralmente observados em indivíduos entre a segunda e a terceira décadas de vida, com grande divergência na literatura acerca da predileção pelo sexo masculino e com maior acometimento da região posterior mandibular. Desse modo, este trabalho relata o caso de um paciente do sexo masculino de 37 anos, sem nenhuma doença sistêmica, que foi encaminhado ao ambulatório de Estomatologia da Universidade Federal do Ceará (UFC) - *Campus* Sobral, em virtude de uma área radiolúcida, localizada em ângulo de mandíbula direito, evidenciada em exames por imagens realizados para outros fins. Durante os exames físicos intraoral e extraoral não foram vistos assimetria ou outras alterações. Com base no quadro clínico e radiográfico, displasia óssea foi considerada a principal hipótese diagnóstica. No entanto, após a realização de biópsia incisional com broca trefina, obteve-se o diagnóstico anatomopatológico de xantoma intraósseo. Dessa forma, ressalta-se a raridade dos xantomas ósseos, sendo lesões assintomáticas, com a maioria dos casos detectados em exames imaginológicos. No entanto, as características radiográficas são inespecíficas, podendo ser confundidas com características de outras lesões. Assim, a confirmação diagnóstica depende de uma análise histopatológica minuciosa, associada a técnicas imuno-histoquímicas. Por fim, destaca-se a importância da biópsia incisional seguida da análise histopatológica, que permanece como padrão ouro para o diagnóstico de qualquer patologia oral.

Palavras-chave: Mandíbula; Intraósseo; Xantoma.

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1 INTRODUÇÃO

O termo Xantoma, deriva da palavra grega “Xantos”, cujo significado é amarelo, e foi cunhado pela primeira vez em 1869, pelo Dr. Smith, a fim de descrever nódulos amarelos presentes na pele, e às vezes até nos órgãos internos, na forma de tumores de tamanhos variados (Arruda *et al*., 2019; Mateo *et al*., 2003).

Xantomas são lesões benignas de tecidos moles, comumente observadas nas regiões de epiderme ou no tecido subcutâneo das bainhas dos tendões, geralmente associadas a algum tipo de trauma ou fricção (Morel; Kelsch; Nolan, 2015; Shivanadah *et al*., 2024). Em contrapartida, o xantoma intraósseo é uma lesão incomum, caracterizando-se como osteodestrutiva, podendo apresentar tanto expansão quanto ruptura da cortical óssea (Arruda *et al*., 2019).

Em 1988, Harsanyi e Larsson descreveram a primeira série bem documentada de casos de xantomas intraósseos. Todos os casos relatados eram indolores, apresentavam localização em mandíbula e predileção pelo sexo feminino. Radiograficamente, essas lesões mostraram características que variavam de simples e bem demarcadas a difusas e multiloculares. Enquanto, microscopicamente a lesão foi definida pela presença de células xantomatosas envolvidas em tecido fibroso de suporte (Harsanyi; Larsson, 1988). No entanto, somente 4 casos apresentaram dados histopatológicos com informações suficientes para confirmar o diagnóstico de xantoma (Arruda *et al*., 2019). Antes dessa série de caso, Mosby *et al*. (1983) relataram um caso de uma lesão cística, localizada em região posterior mandibular esquerda, que foi diagnosticada como xantoma ósseo em um homem afro-americano de 28 anos, que não apresentava nenhuma alteração sistêmica.

A etiopatogenia dos xantomas intraósseos ainda é incerta, estudos sugerem que essa lesão seja decorrente de um processo reativo ou degenerativo, ou que tenha origem neoplásica (Wilkinson *et al*., 2018). Quando presentes estão associados frequentemente à hiperlipidemia do tipo I e II ou a diabetes mellitus. Entretanto, nos casos em que a doença sistêmica ou metabólica são descartadas, o xantoma passa a ser denominado xantoma intraósseo primário (Georgiev *et al*., 2024; Yamada *et al*., 2016). Além disso, quando essa lesão afeta os ossos gnáticos, descartando a associação com doenças sistêmicas, passa a ser chamada de xantoma intraósseo primário da mandíbula.

Apesar de serem considerados lesões benignas, os xantomas intraósseos podem ser localmente agressivos, comprimindo estruturas anatômicas adjacentes à lesão ou ocasionando uma fratura patológica no tecido ósseo acometido (Whitehouse *et al*., 2017). Geralmente os xantomas intraósseos costumam se manifestar de forma assintomática, frequentemente

descobertos em exames imaginológicos, com predileção pela região posterior mandibular e pelo ramo ascendente (Wilkinson *et al*., 2020). A maioria das lesões são vistas entre a 2ª e a 3ª décadas de vida, porém acometendo uma ampla faixa etária de 11 a 72 anos de idade, com uma média de idade em torno dos 30 anos (Negrello *et al*., 2023; Rawal; Chandra; Hall, 2017). Também observa-se uma predileção pelo sexo feminino, em uma proporção de 2:1, embora haja divergências na literatura (Jones *et al*., 2022; Venkat *et al*., 2024; Yamada *et al*., 2016).

Com relação ao aspecto histopatológico, essas lesões são caracterizadas pela presença de macrófagos contendo lípideos em seu interior, sendo denominados também de células espumosas ou xantomatosas, associadas a um componente fibroso variável (Jones *et al*., 2022; Saha; Tocaciu; Subramanian, 2018). Tendo em vista, essa característica o xantoma intraósseo é considerado um processo histiócitico não - Langerhan, dada a sua imunomarcação positiva para o CD-68 (Kim; Kang; Kang, 2021).

A aparência radiográfica dos xantomas é bastante inespecífica e, por conseguinte, dificulta o correto diagnóstico tanto pelos cirurgiões-dentistas quanto radiologistas. A literatura tem destacado que essas lesões podem variar desde áreas pequenas radiolúcidas bem demarcadas com margens escleróticas até áreas difusas com aspecto radiolúcido mal definido (Georgiev *et al*., 2024). Ainda no que diz respeito ao aspecto interno da lesão, a literatura aponta que o xantoma pode apresentar característica interna mista com “favos de mel” (Saha; Tocaciu; Subramanian, 2018).

Visto a raridade da lesão, associada à falta de características radiográfica específicas (Kim; Kang; Kang, 2021), bem como a ausência de manifestações clínicas, na maioria do casos, o correto diagnóstico só pode ser confirmado através da análise histopatológica com imunomarcação positiva para o CD-68, que confirma a origem fibro-histiocítica dos macrofágos espumosos presentes na lesão e exclui o diagnóstico de histiocitoma fibrosa benigno e fibroma não ossificante, que são patologias que apresentam as mesmas características microscópicas, sendo diferenciadas por meio da imuno-histoquímica (Georgiev *et al*., 2024; Rawal; Chandra; Hall , 2017).

Dessa forma, com base nos poucos casos de xantomas intraósseos relatados na literatura somando-se ao fato desta patologia ser extremamente rara, o principal objetivo deste trabalho é relatar um caso de xantoma intraósseo em região mandibular, discutindo suas características clinicopatológicas, radiográficas e imuno-histoquímicas.

2 CAPÍTULO ÚNICO

Este trabalho é um artigo de relato de caso que está baseado nas normas que regulam o trabalho de conclusão de curso do Curso de Odontologia da Universidade Federal do Ceará - *Campus* Sobral do regimento interno do Curso de Odontologia da UFC - *Campus* Sobral, que regulamenta o formato de artigo em seu Capítulo III, artigo 8º, desde que seja um tema de relevância para Odontologia e siga as normas do periódico selecionado para publicação.

CAPÍTULO ÚNICO – **"Desafio diagnóstico de xantoma intraósseo de mandíbula".** Rianny Maria Rodrigues Alves, Filipe Nobre Chaves. Este artigo será submetido para publicação no periódico da revista "*Oral surgery, Oral medicine, Oral pathology and Oral radiology"*. (ISSN: 2212-4403), que possui classificação A2 do Qualis Referência na Plataforma Sucupira (CAPES) referente ao presente quadriênio.

Relato de caso

Desafio diagnóstico de Xantoma Intraósseo de mandíbula

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RESUMO

Os xantomas intraósseos são lesões extremamente raras, frequentemente assintomáticas e geralmente surgem associadas a distúrbios metabólicos, como a hiperlipidemia. Este trabalho relata um caso de um homem de 37 anos, normossistêmico, que apresentou uma área radiolúcida em mandíbula posterior esquerda, evidenciada em exames imaginológicos realizados para outros fins. A lesão localizava-se na região do segundo molar esquerdo, estendendo-se para o ângulo de mandíbula. Diante do quadro clínico, foi elencada, inicialmente, como principal hipótese diagnóstica, ameloblastoma. No entanto, o resultado histopatológico do espécime analisado foi inconclusivo. Após novos exames por imagens e nova avaliação clínica, foi elencado displasia óssea como nova hipótese de diagnóstico. Assim, uma nova biopsia incisional foi realizada, seguida das análises histopatológica e imuno-histoquímica, cujo resultado foi compatível com xantoma intraósseo. Por fim, destaca-se a raridade dos xantomas, que apresentam características radiográficas inespecíficas, semelhantes a outras patologias bucais, e a necessidade de um estudo imuno-histoquímico acurado para confirmar o correto diagnóstico.

Palavras-chave: Mandíbula; Intraósseo; Xantoma.

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INTRODUÇÃO

Xantomas são lesões benignas de tecidos moles, comumente observadas nas regiões de epiderme ou no tecido subcutâneo das bainhas dos tendões, geralmente associadas a algum tipo de trauma ou fricção[1,2]. Em contrapartida, o xantoma intraósseo é uma lesão incomum, caracterizando-se como osteodestrutiva, podendo apresentar tanto expansão quanto ruptura da cortical óssea[3].

Em 1988, Harsanyi e Larsson[4] descreveram a primeira série bem documentada de casos de xantomas intraósseos. Todos os casos relatados eram indolores, apresentavam localização em mandíbula e predileção pelo sexo feminino. Radiograficamente, essas lesões mostraram características que variavam de simples e bem demarcadas a difusas e multiloculares. Enquanto, microscopicamente a lesão foi definida pela presença de células xantomatosas envolvidas em tecido fibroso de suporte[4].

A etiopatogenia dos xantomas intraósseos ainda é incerta, estudos sugerem que essa lesão seja decorrente de um processo reativo ou degenerativo, ou que tenha origem neoplásica[1,5.] Quando presentes estão associados frequentemente à hiperlipidemia do tipo I e II ou a diabetes mellitus. Entretanto, nos casos em que a doença sistêmica ou metabólica é descartada, o xantoma passa a ser denominado xantoma intraósseo primário[6].

Apesar de serem considerados lesões benignas, os xantomas intraósseos podem ser localmente agressivos, comprimindo estruturas anatômicas adjacentes à lesão ou ocasionando uma fratura patológica no tecido ósseo acometido[8]. Geralmente os xantomas intraósseos costumam se manifestar de forma assintomática, frequentemente descobertos em exames imaginológicos de rotina, com predileção pela região posterior mandibular e pelo ramo ascendente[5]. A maioria das lesões são vistas entre a 2ª e a 3ª década de vida, porém acometendo uma ampla faixa etária, com uma média de idade em torno dos 30 anos[9,10]. Também observa-se uma predileção pelo sexo masculino, embora haja divergências na literatura [9,11].

Com relação ao aspecto histopatológico, essas lesões são caracterizadas pela presença de macrófagos contendo lípidios em seu interior, sendo denominados de células espumosas ou xantomatosas[11,12]. O xantoma é considerado um processo histiócitico não - langerhan, dada a sua imunomarcação positiva para o CD-68, confirmando a origem histiocítica dos macrófagos[13].

Em decorrência da raridade da lesão, associada à falta de características radiográficas específicas e à ausência de manifestações clínicas, o correto diagnóstico só é possível através da análise histopatológica. A imunomarcação positiva para o CD-68, confirma a origem fibro-

histiocítica dos macrofágos espumosos presentes na lesão, e exclui o diagnóstico de patologias com características semelhantes como histiocitoma fibrosa benigno e fibroma não ossificante[6,10,13].

Dessa forma, com base nos poucos casos de xantomas intraósseos relatados na literatura somando-se ao fato desta patologia ser extremamente rara, o principal objetivo deste trabalho é relatar um caso de xantoma intraósseo em região mandibular, discutindo suas características clinicopatológicas, radiográficas e imuno-histoquímicas.

RELATO DE CASO

Paciente do sexo masculino, 37 anos, foi encaminhado ao Ambulatório de Estomatologia da UFC - *Campus* Sobral a partir do setor privado devido à queixa de “dor do lado direito da mandíbula e com pús há cerca de 15 dias”. O paciente não apresentava comorbidades, negava hábitos deletérios e relatava boa saúde geral. A queixa inicial foi de dor persistente na região do segundo molar inferior direito, que dificultava a mastigação e provocava desconforto generalizado na mandíbula direita (FIGURA 1). O paciente não havia realizado tratamentos odontológicos recentes na área afetada. Durante o exame clínico inicial, observou-se que a dor era localizada na região posterior da mandíbula, na altura do rebordo alveolar inferior direito, próximo ao trígono retromolar e em associação com o segundo molar inferior direito. A mucosa gengival sobrejacente apresentava sinais de inflamação, com leve edema e sensibilidade à palpação. Não foram notados sinais externos de deformidade óssea ou aumento de volume significativo. Foi realizada uma radiografia panorâmica que revelou a presença de uma lesão radiolúcida, bem delimitada, multilocular e não corticalizada, localizada na região do trígono retromolar direito, associada segundo molar inferior direito. A análise radiográfica sugeriu comprometimento do osso alveolar posterior, sem evidências claras de expansão para estruturas vizinhas (FIGURA 2). Diante desses achados, foi solicitada uma tomografia computadorizada para avaliação mais detalhada das características e extensão da lesão. O exame confirmou a presença de uma lesão hipodensa, localizada na região posterior do ramo mandibular direito, com exposição da cortical vestibular. Não foi identificada invasão do canal mandibular, mas a proximidade da lesão com as estruturas anatômicas sugeriu a necessidade de um manejo cauteloso (FIGURA 3).

Com base nos achados clínicos e radiográficos, a hipótese diagnóstica inicial foi de ameloblastoma, com diagnóstico diferencial de ceratocisto odontogênico. Optou-se pela realização de uma biópsia incisional associada à marsupialização da lesão. Essa abordagem visava aliviar a pressão intracística e reduzir o volume da lesão, facilitando o diagnóstico e o manejo cirúrgico posterior. O material coletado foi enviado para análise histopatológica, que retornou um resultado inconclusivo. A morfologia da lesão indicava características compatíveis com a hipótese de diagnóstico de displasia óssea e com diagnóstico diferencial de fibroma ossificante periférico, e, por isso, foi necessário um novo procedimento de biópsia incisional para coleta de amostras adicionais. Uma nova abordagem cirúrgica foi feita, dessa vez utilizando a técnica com broca trefina, assegurando a obtenção de fragmentos ósseos adequados para exame microscópico (FIGURA 4).

No segundo exame histopatológico, os fragmentos obtidos revelaram tecido ósseo maduro trabecular contendo lacunas preenchidas por osteócitos, áreas de pavimentação osteoblástica e tecido medular fibroadiposo com infiltrado inflamatório mononuclear. Notou-se a presença de células volumosas com citoplasma multivacuolizado e material eosinofílicogranular no interior, características sugestivas de xantoma intraósseo (FIGURA 5). Para confirmação diagnóstica, foi realizada imuno-histoquímica com o marcador CD-68, que apresentou forte positividade citoplasmática nas células xantomatosas, confirmando o diagnóstico de xantoma intraósseo.

Com o diagnóstico confirmado, o paciente foi encaminhado ao Hospital Universitário Walter Cantídio para remoção cirúrgica completa da lesão. O procedimento planejado incluiu a exérese total da área acometida, com curetagem cuidadosa para minimizar o risco de recidivas. O paciente recebeu orientações detalhadas para acompanhamento pós-operatório e retorno periódico ao serviço para monitoramento clínico e radiográfico (FIGURA 6). O caso destaca a importância de uma abordagem multidisciplinar, envolvendo exames de imagem, procedimentos cirúrgicos e técnicas avançadas de diagnóstico laboratorial para o manejo de lesões ósseas raras e desafiadoras.

O paciente assinou um Termo de Consentimento Livre e Esclarecido (TCLE), autorizando o planejamento, o tratamento e a divulgação científica do caso.

DISCUSSÃO

O xantoma intraósseo dos maxilares é uma patologia extremamente incomum e frequentemente assintomática, com características radiográficas inespecíficas, tornando difícil uma abordagem epidemiológica dessa patologia. O uso de alguns termos incorretos, como "xantogranuloma" e "lipogranuloma" também dificulta o mapeamento de todos os casos presentes na literatura[9].

A maioria das lesões mandibulares acometem pacientes entre a segunda e a terceira década de vida, enquanto lesões maxilares tendem a ser vistas mais tardiamente, por volta da sexta e sétima décadas de vida. Essa lesão atinge uma ampla faixa etária, com variação dos 11 aos 72 anos, com idade média de acometimento de 29,1 anos para lesões em mandíbula e de 48,5 anos para lesões em maxila[3,11]. Os homens são afetados duas vezes mais do que as mulheres, mas há divergências na literatura, sendo raro o aparecimento em crianças[2,4,14].

No que concerne aos ossos maxilares, é notada uma predileção pela mandíbula em uma proporção de 9:1 em comparação com a maxila, com a região posterior mandibular mais afetada. Em contrapartida, é observado que apesar das lesões mandibulares serem na grande parte dos casos indolores, quando localizadas em maxila tendem a apresentar dor e um caráter expansivo[10]. Acredita-se que a expansão da lesão quando localizada em maxila esteja relacionada à característica esponjosa do tecido ósseo da região, assim o xantoma pode expandir-se ainda mais e adquirir dimensões maiores[3].

Os xantomas são lesões raras com grande variação radiográfica, representando um desafio diagnóstico para os cirurgiões-dentistas, sobretudo quando leva-se em consideração que cerca de 90% dos casos são detectados em exames imaginológicos[15]. Essas lesões podem variar desde áreas pequenas radiolúcidas bem demarcadas com margens escleróticas até áreas difusas com aspecto radiolúcido mal definido[5]. No estudo de Daley, Dunn e Darling[16], todos os 5 casos relatados consistiram em lesões monostóticas no início do diagnóstico, apresentando radiolucências inespecíficas. O seu aspecto interno pode variar desde áreas totalmente radiolúcidas a uma aparência mista com padrão semelhante a "favos de mel", sendo incomum reabsorções ou deslocamento radiculares[12]. A descrição das margens das lesões também varia consideravelmente, desde bordas escleróticas a margens mal definidas[5].

Na tomografia computadorizada, geralmente é observado perda do padrão trabecular normal da cavidade medular, com casos em que a lesão pode apresentar densidade maior que a medula óssea normal[6]. Contudo, as características imaginológicas não são suficientes para

confirmar o diagnóstico de xantoma, embora sejam úteis para o diagnóstico diferencial de cistos, tumores odontogênicos ou mesmo de uma lesão periapical[15].

Histopatologicamente, os xantomas apresentam células espumosas com citoplasma abundante e rico em lipídeos e núcleos hipercromáticos, denominadas de xantomatosas[16]. Comumente, também observa-se tecido conjuntivo fibroso de quantidade variada e tecido ósseo trabecular, associados a um leve infiltrado inflamatório[3]. Granulomas de colesterol, hemorragia e deposição de pigmentos por hemossiderina também podem ser vistos, embora sejam mais incomuns[10]. Essas características são vistas em uma ampla diversidade de lesões, como lesões periapicais, histiocitoma fibroso benigno, fibroma ósseo não ossificante e displasia fibrosa, que são consideradas diagnósticos diferenciais do xantoma. Outros autores ainda incluem no diagnóstico histopatológico diferencial melanoma maligno, carcinoma de células claras metastático ou odontogênico, tuberculose e sarcoma epitelióide, essas hipóteses são descartadas com estudo imuno-histoquímico[17].

O fibroma não ossificante e a histiocitose fibrosa benigna são apontadas como principais diagnósticos histopatológicos diferenciais de xantomas. Ambas as lesões são indistinguíveis histologicamente, com o seu diagnóstico sendo feito com base na aparência clínica e nas características radiográficas[1,6]. Outros estudos discutiram se o xantoma central dos ossos maxilares não seria uma variante do fibroma não ossificante ou da histiocitose fibrosa benigna. Entretanto, Daley, Dunn e Darling[16] elaboraram uma série de critérios que sustentam o xantoma como uma entidade patológica isolada.

O diagnóstico diferencial para pacientes que apresentam lesões líticas é amplo e depende de fatores, como a idade do paciente e a presença de doenças sistêmicas[7]. Outro estudo ainda aponta que o principal diagnóstico diferencial para o xantoma dos ossos gnáticos deve ser o tumor odontogênico de células granulares. Os autores relataram um caso inicialmente diagnosticado como tumor odontogênico de células granulares, com imunomarcação negativa para o S-100 e positiva para o CD-68. Entretanto, após recorrência foi realizada uma nova biópsia e análise histoquímica, com a imunomarcação mantendo-se positiva para o CD-68 e negativa para o S-100, com adição da imunomarcação para o fator XIIIa+ que também foi positiva. Desse modo, a lesão foi considerada mais compatível com xantoma, ressaltando a necessidade de um exame imuno-histoquímico preciso[8].

O xantoma intraósseo é uma lesão histiocítica, caracterizada microscopicamente pela presença de macrófagos. As lesões histiocíticas dividem-se em lesões histiocíticas relacionadas às células de Langerhans e processos histiocíticos não-Langerhans. O xantoma é um processo histiocítico não-Langerhans, porém essa diferenciação só é feita através da imuno-

histoquímica[6]. O CD-68, um anticorpo anti-lisossomal, figura como o principal imunomarcador que confirma a origem das células espumosas, enquanto o S-100 auxilia na exclusão de células adiposas e de origem neural. Marcadores, como CD1 e o fator XIIIa+ descartam a histiocitose de células de Langerhans, e confirmam a linhagem fibro-histiocítica dos macrófagos espumosos[1]. Recentemente, um estudo relatou, pela primeira vez, a presença de glóbulos hialinos ("tanatossomas") em um caso de xantoma, estruturas eosinofílicas relacionadas à apoptose, sugestivo de um processo degenerativo[5].

É válido salientar que após o diagnóstico histopatológico e imuno-histoquímico de xantoma, é fundamental uma investigação sistêmica completa, consistindo em um exame clínico detalhado e hematológico completo, uma vez que essa lesão pode surgir secundariamente a doenças metabólicas ou sistêmicas. Somando-se a isso, quando a lesão está relacionada à hiperlipidemia, é necessário a adoção de controle dietético, com eventual uso de medicamentos caso a dieta não seja efetiva. A literatura ainda enfatiza que a lesão pode desaparecer após o tratamento da hiperlipidemia[1].

Em virtude da raridade dessa lesão, sua etiopatogenia não foi completamente elucidada. Estudos sugerem uma etiologia reativa, degenerativa ou neoplásica, além da possível transformação de células mesenquimais indiferenciadas em células xantomatosas por fatores lipotróficos em pacientes com doenças imunes[9]. Alguns estudos também acreditam que essa lesão possa surgir de condições patológicas pré-existentes, como cisto ósseo aneurismático, cavidade óssea traumática, displasia fibrosa ou tumores de células gigantes[15]. A hipótese de uma neoplasia benigna é baseada na ocorrência espontânea, a ausência de traumas, de infecções ou de doenças sistêmicas. No caso relatado, acredita-se que o trauma desempenhou papel etiológico, tendo em vista o histórico de trauma local, bem como a ausência de anormalidades sistêmicas do paciente. Já a hipótese de uma origem reativa é sustentada pela presença de infiltrado inflamatório, de hemorragia e granulomas de colesterol[16]. No entanto, a teoria mais aceita relaciona a lesão ao extravasamento de lipídios dos vasos sanguíneos após um trauma ou uma hemorragia, com fagocitose dessa gordura por macrófagos, que se transformam em células xantomatosas que serão depositadas no tecido ósseo[3]. Além do mais, a presença de fissuras de colesterol pode induzir uma reação inflamatória e fibrose[7].

Devido ao número limitado de casos documentados e à incerteza quanto à etiopatogenia dos xantomas, não há consenso quanto ao tratamento ideal. Não há evidências de regressão espontânea; pelo contrário, eles tendem a progredir lentamente e a infiltrarem-se no tecido ósseo circundante[12]. A curetagem cirúrgica é amplamente recomendada, e seu prognóstico é favorável mesmo com excisão parcial[6]. A excisão radical e a quimioterapia são outras formas de

tratamento citadas, mas desaconselhadas, pois a radioterapia pode ter um efeito terapêutico reduzido devido à possível ausência de caráter neoplásico da lesão. O acompanhamento a longo prazo dos casos documentados têm mostrado baixa taxa de recidivas e confirmam a curetagem cirúrgica como principal forma de tratamento [2,4,17].

Na literatura apenas dois casos de recorrência foram relatados, e com a localização de uma das lesões na região anterior da maxila. Acredita-se que a persistência de um processo etiológico não identificado possa ter levado a um extravasamento adicional de macrófagos espumosos, ocasionando a recidiva do xantoma, ou que recorrência das lesões tenha sido ocasionada por uma excisão de maneira incorreta durante a primeira abordagem cirúrgica ou ainda porque as lesões não estavam bem encapsuladas como uma massa sólida, impedindo sua completa remoção somente por curetagem[8,13].

Desse modo, é notório que a raridade dos casos de xantoma e a escassez de relatos na literatura contribuem significativamente para o desafio diagnóstico dessa lesão, sobretudo quando é considerado que boa parte dos profissionais pode nunca ter visto casos assim em sua prática clínica. Somando-se a isso, a falta de características imaginológicas específicas, que podem lembrar desde uma displasia óssea ou mesmo uma metástase, e a associação de alguns casos à hiperlipidemia, reiteram a dificuldade diagnóstica e contribuem para subdiagnósticos.

Os xantomas têm mostrado um bom prognóstico quando tratados com excisão completa e curetagem cirúrgica, porém um acompanhamento a longo prazo dos casos é imprescindível, devido à falta de consenso sobre a melhor forma de tratamento e a incerteza quanto à etiopatogênese da lesão. Por fim, o aspecto clínico e imaginológico norteiam as hipóteses de diagnóstico, porém a biópsia seguida de análise histopatológica continua como padrão ouro para qualquer patologia oral, com a imuno-histoquímica sendo uma ferramenta indispensável para casos de xantoma.

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FIGURAS

Figura 1 - Aspecto intraoral da lesão.

Figura 2 - Radiografia panorâmica inicial. Observa-se lesão radiolúcida mal definida em ângulo de mandíbula.

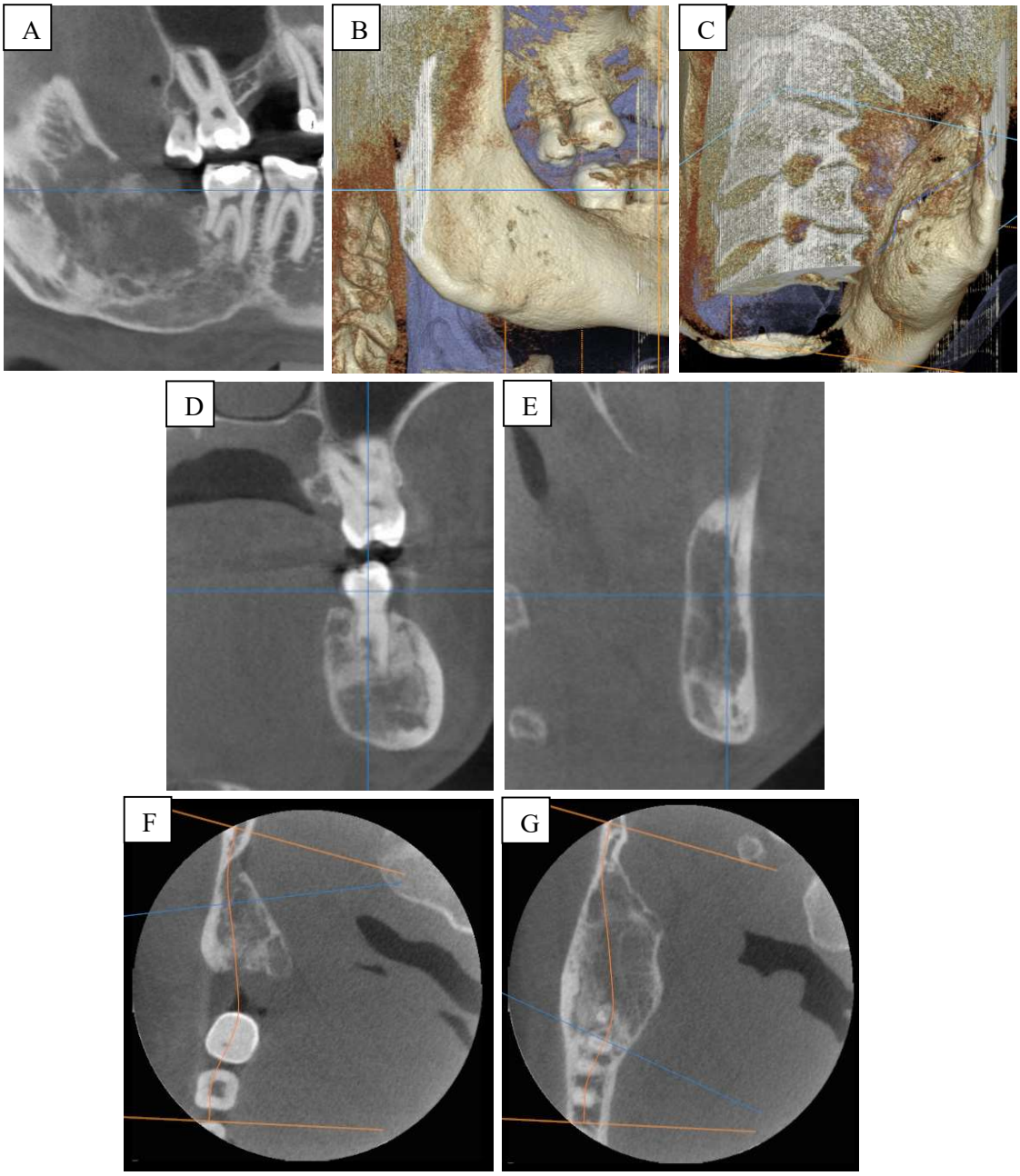

Figura 3 - Aspectos imaginológicos da lesão. (A) corte parassagital apresentando lesão hipodensa em região de trígono mandibular direito. (B) e (C) reconstrução óssea 3D evidenciando leve perda do padrão trabecular ósseo normal de mandíbula e expansão óssea por lingual. (D) e (E) cortes coronais mostram expansão da cortical óssea. (F) e (G) cortes axiais também evidenciam expansão da cortical óssea, sem haver ruptura.

Figura 4 – Procedimento cirúrgico: biópsia incisional com broca trefina.

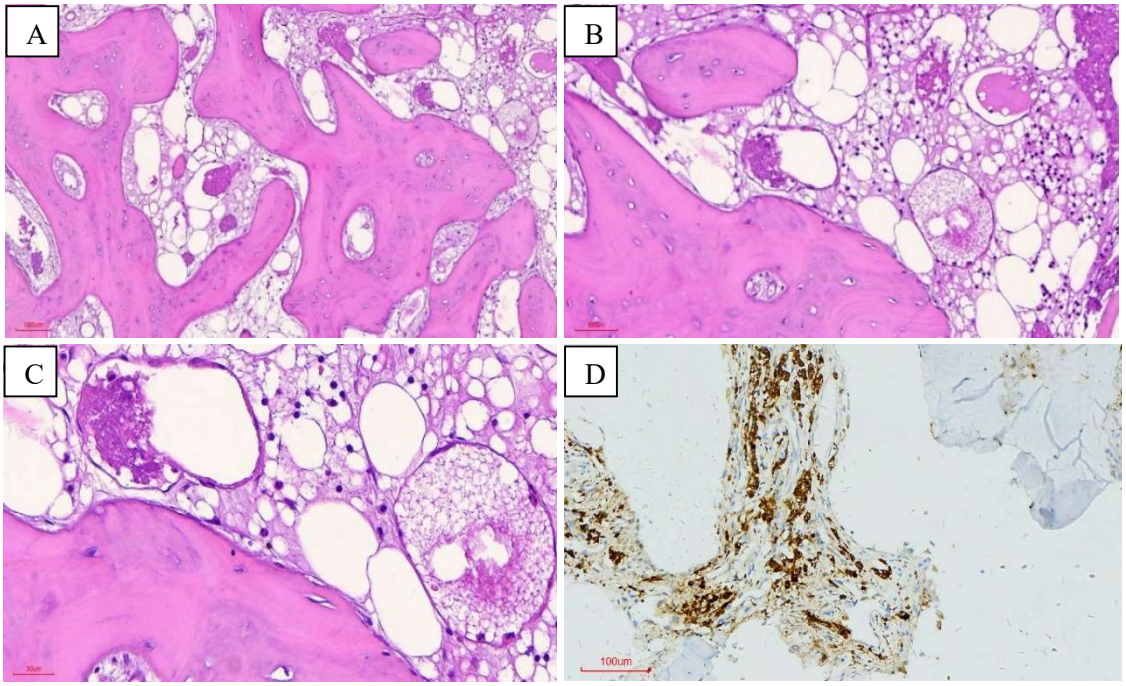

Figura 5 - Fotomicografias da lesão. (A), (B) e (C) coloração em hematoxilina e eosina, evidenciando células espumosas com citoplasma volumoso com material eosinofílicogranular em seu interior, entremeadas por tecido ósseo maduro e células adiposas. (D) reação imuno-histoquímica positiva para o CD-68.

Figura 6 - Acompanhamento radiográfico da lesão. Radiografia panorâmica realizada 1 ano e 4 meses após a radiografia panorâmica inicial.

3 CONCLUSÃO GERAL

Dessa forma, ressalta-se a raridade dos xantomas intraósseos, que são lesões frequentemente assintomáticas e descobertas comumente por exames de imagem, com predileção pela região posterior mandibular e que apresentam um prognóstico favorável, com casos limitados de recorrência, quando tratados com enucleação e curetagem cirúrgica.

Portanto, é válido frisar a importância dos exames imaginológicos como fator auxiliar para o diagnóstico de patologias orais, embora estas apresentem dificuldades diagnósticas em decorrência do aspecto radiográfico semelhante observado em muitas lesões, como pode ser visto nos casos de xantoma. Assim, salienta-se também que o correto diagnóstico de xantoma intraósseo só é confirmado por meio de uma acurada análise histopatológica e imuno-histoquímica, tornando-se essenciais mais estudos para uma melhor compreensão dessa lesão.

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ANEXO

SUBMISSÃO AO COMITÊ DE ÉTICA E PESQUISA

MINISTÉRIO DA SAÚDE - Conselho Nacional de Saúde - Comissão Nacional de Ética em Pesquisa – CONEP

FOLHA DE ROSTO PARA PESQUISA ENVOLVENDO SERES HUMANOS

1. Projeto de Pesquisa: DESAFIO DIAGNÓSTICO DE XANTOMA INTRAÓSSEO DE MANDÍBULA			
2. Número de Participantes da Pesquisa: 1			
3. Área Temática:			
4. Área do Conhecimento: Grande Área 4. Ciências da Saúde			
PESQUISADOR			
5. Nome: WYLLY WESLEY COSTA DE MOURA			
6. CPF: 064.160.503-07	7. Endereço (Rua, n.º): Rua Doze de Agosto Centro TIANGUA CEARA 62320000		
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INSTITUIÇÃO PROPONENTE			
12. Nome: Universidade Estadual Vale do Acaraú - UVA	13. CNPJ: 07.821.622/0001-20		14. Unidade/Órgão:
15. Telefone: (88) 3677-4255	16. Outro Telefone:		

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Responsável: _____ CPF: _____

Cargo/Função: _____

Data: _____ / _____ / _____

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PATROCINADOR PRINCIPAL

17. Nome:	18. Telefone:	19. Outro Telefone:
6540 UNIVERSIDADE FEDERAL DO CEARÁ	(85) 3366-8344	

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Nome: MÁRIO ÁUREO GOMES MOREIRA CPF: 434.980.943-00

Cargo/Função: DIRETOR DE CAMPUS Email: mario@sobral.ufc.br

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APÊNDICE

NORMAS DE PUBLICAÇÃO NO PERIÓDICO INTERNACIONAL ORAL SURGERY, ORAL MEDICINE, ORAL PATHOLOGY, ORAL RADIOLOGY

ORAL SURGERY ORAL MEDICINE
ORAL PATHOLOGY ORAL RADIOLOGY

Guide for Authors

Section Scope Statements

The *Oral and Maxillofacial Surgery Section* aims to publish an extensive range of original articles that advances patient care through enhanced understanding of diagnosis, surgical and adjunctive treatment of diseases, and injuries and defects involving both the functional and esthetic aspects of the hard and soft tissues of the oral and maxillofacial regions. The section also seeks research regarding both the basic science of and management of persons with oral and maxillofacial conditions. Articles presenting ethical, original, well-documented, and reproducible research are given preference.

The *Oral Medicine Section* aims to publish a broad range of original articles that help clinicians understand more thoroughly the pathobiology, etiology, diagnosis, prevention, and management of oral conditions related to underlying medical conditions, including diseases of the head, neck, and oral mucosal structures, orofacial pain conditions, salivary gland disorders, and taste disorders. The section also seeks research regarding the dental management of persons with medical problems and/or complicated medical conditions. The published findings must contribute substantively to the body of oral medicine literature and should lead to improved clinical decision-making and enhanced care of medically-related disorders or conditions affecting the oral and maxillofacial region. Articles presenting original, well-documented, and reproducible research are preferred.

The *Oral and Maxillofacial Pathology Section* encourages the submission of original articles of high scientific quality that investigate the pathogenesis, diagnosis, and management of diseases affecting the oral and maxillofacial region. Submitted manuscripts may summarize findings from clinical, translational, or basic research in the broad field of oral and maxillofacial pathology but must contribute substantively to the body of knowledge in this field and should be of obvious clinical and/or diagnostic significance to the practicing oral and maxillofacial pathologist. Areas of focus may include the investigation of disease pathogenesis, the diagnosis of disease using microscopic, clinical, radiographic, biochemical, molecular, or other methods as well as the natural history and management of patients with various conditions of the head,

neck, and oral mucosal structures. Diagnostic accuracy studies should conform to the principles of the STARD document http://www.stard-statement.org. Articles presenting novel and reproducible research that introduce new knowledge and observations are especially encouraged. This section also welcomes the submission of topical review papers on relevant subjects.

The *Oral and Maxillofacial Radiology Section* publishes original contributions to the advancement of oral and maxillofacial radiology and related imaging sciences. The section considers original clinical and experimental research papers, reports of technological developments, extensive systematic reviews of the literature, and invited papers on subjects that will appeal to researchers and clinicians involved in diagnostic imaging of hard and soft tissues of the head and neck. Topics of interest include the efficacy of imaging systems using ionizing and non-ionizing radiation in the diagnosis of head and neck disease; molecular imaging; artificial intelligence and computer-assisted diagnosis; craniofacial analysis; image-guided surgical navigation; image processing; radiation physics and dosimetry; and radiation biology, safety, and protection. The section also seeks extensive case series representing various expressions of particular conditions, descriptions of innovative imaging technique applications to these series, and description of novel imaging features. Published manuscripts should assist clinicians in developing evidence-based practice and provide improved clinical decision-making regarding the performance of specific techniques and interpretation of resulting images. Diagnostic accuracy studies should conform to the principles of the STARD document http://www.stard-statement.org).

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1. Original Research Article. Reports of original research (preclinical, clinical, or translational) that are well-documented, novel, and significant. Original research manuscripts will be organized into six parts: (1) Abstract; (2) Introduction; (3) Materials and Methods; (4) Results; (5) Discussion; (6) References.

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[dataset] 5. Oguro, M, Imahiro, S, Saito, S, Nakashizuka, T. Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1; 2015. http://dx.doi.org/10.17632/xwj98nb39r.1.

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