

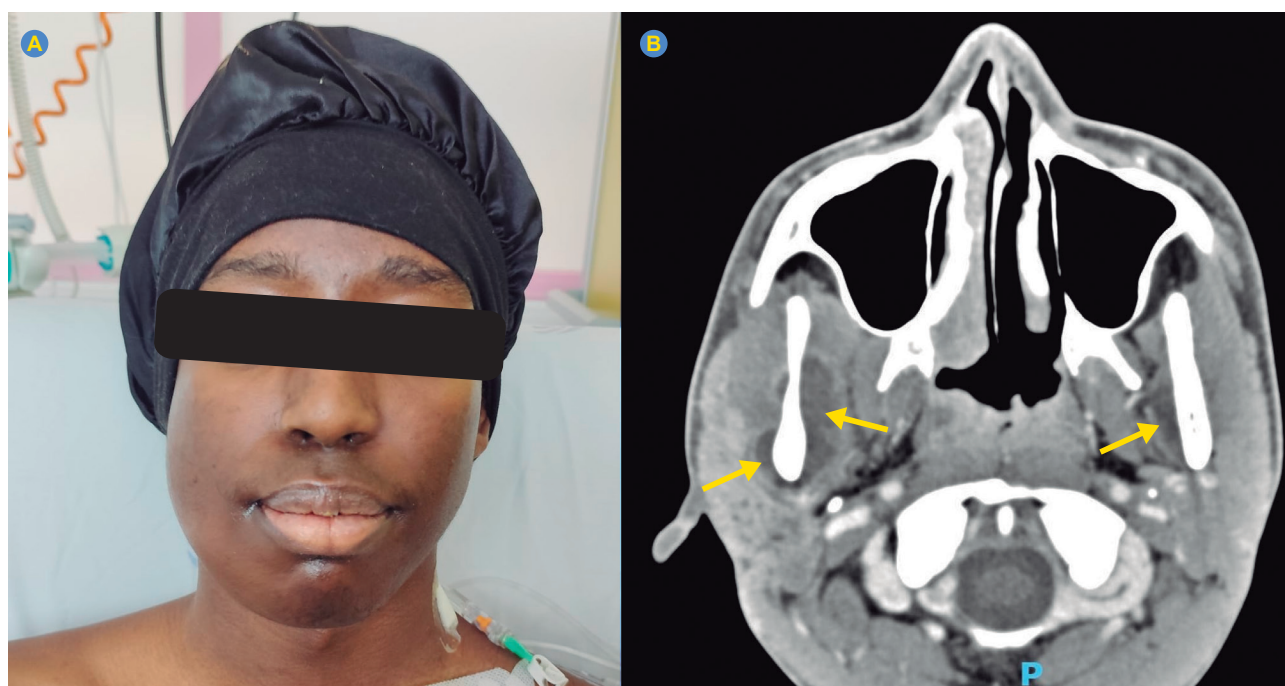
## Bone Infarction of the Jaw with Regional Hematoma Collections: A Rare Complication in Sickle Cell Disease

## Enfarte Ósseo da Mandíbula com Coleções Hemáticas Regionais: Uma Complicação Rara da Drepanocitose

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**Figure 1** – Right mandibular edema in a young patient with sickle cell disease (A). Computed tomography of the face: subperiosteal collections in the ramus and body of the right mandible and in the left mandibular ramus with peripheral enhancement after contrast administration (arrows); edema and soft tissue densification in the right portion of the lower face with thickening of the right masseter muscle; no destruction or erosion of the mandible (B).

A 19-year-old male patient with sickle cell disease was hospitalized for left limb vaso-occlusive crisis pain management. During hospitalization, he developed fever, swelling, and pain in the lower right-hemiface (Fig. 1A), along with leukocytosis, neutrophilia, elevated C-reactive protein and a slight increase in hemolysis parameters without worsening of anemia. Despite four days of anti-inflammatory and amoxicillin/clavulanic acid treatment, there was no improvement. A facial computed tomography scan revealed bilateral

mandibular bone infarcts with perimandibular hematoma collections (Fig. 1B). These were surgically drained (with subperiosteal dissection of the mandibular ramus), with symptom relief. The microbiological examination was negative.

Bone infarction in sickle cell disease results from microvascular occlusion, with mandibular involvement being rare due to limited medullary space.<sup>1</sup> Blood extravasation from necrotic vessels can cause adjacent hematoma collections.<sup>2,3</sup>

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This rare complication of an increasingly prevalent disease in Portugal<sup>4</sup> may mimic dental abscesses, vaso-occlusive crisis, or mandibular osteomyelitis, highlighting the need for greater awareness.

#### AUTHOR CONTRIBUTIONS

LCBR, SG: Study design, writing of the manuscript.  
CE: Critical review of the manuscript.  
All authors approved the final version to be published.

#### PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in October 2024.

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#### DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

#### PATIENT CONSENT

Obtained.

#### COMPETING INTERESTS

The authors have declared that no competing interests exist.

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