

Short communication

Guerin sign in midfacial fractures

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Abstract

We report a patient with multiple fractures of the midface and Guerin sign bilaterally after maxillofacial trauma. To the best of our knowledge, this is the first time that this rare presentation of Guerin sign has been published.

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Introduction

Dental practitioners and maxillofacial surgeons often treat patients with maxillofacial trauma and it is essential for both to look for clinical signs to diagnose fractures of the midface.^{1,2} In 1866, Guerin described the involvement of the maxilla, the pyramidal part of the palatine bone, and the pterygoid process of the sphenoid bone in these fractures. There was an association with ecchymosis around the greater palatine foramen because of disjunction or fracture of the pterygoid plate.^{3,4}

Case report

A 23-year-old man presented to the maxillofacial surgical outpatient department with a history of trauma to his midface. Intraoral examination showed a malocclusion with a typical Guerin sign bilaterally (Fig. 1). Three-dimensional

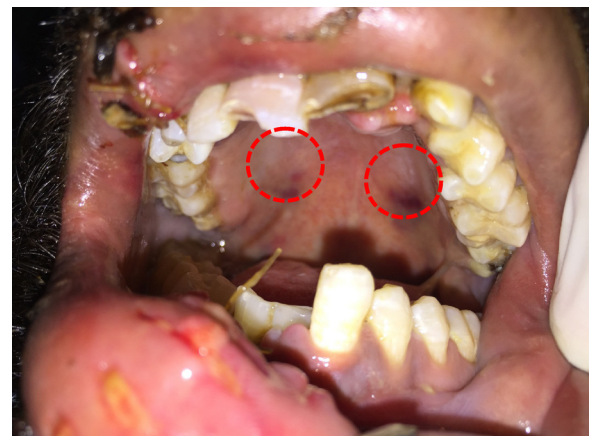


Fig. 1. A reminder of a Guerin sign (ecchymosis present bilaterally over the greater palatine foramen).

cone-beam computed tomography confirmed a Le Fort type III fracture on the right side that crossed the midline, and a Le Fort type II fracture on the left (Fig. 2). This is a valuable reminder to clinicians that a Guerin sign with no other clinical findings can help to diagnose midfacial fractures.

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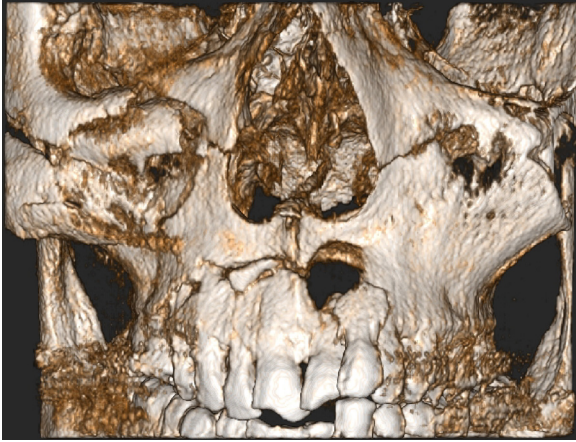


Fig. 2. Three-dimensional cone beam computed tomogram (frontal view).

Conflict of interest

We have no conflicts of interest.

Ethics statement/confirmation of patient's permission

Appropriate ethical clearance was obtained. We obtained the patient's consent to be included in this paper.

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