

# Unconventional Approach to the Pediatric Airway After Maxillofacial Trauma

## Abordagem Não Convencional da Via Aérea Pediátrica Após Trauma Maxilo-Facial

Ana Alves<sup>1\*</sup> , Joana Queijo<sup>1</sup> , Lúcia Gonçalves<sup>2</sup> 

### Afiliação

<sup>1</sup> Interna de Anestesiologia do Serviço de Anestesiologia do Centro Hospitalar de Leiria, Leiria, Portugal.

<sup>2</sup> Assistente Graduada de Anestesiologia do Serviço de Anestesiologia do Centro Hospitalar de Leiria, Leiria, Portugal.

### Keywords

Airway Management; Anesthesia; Child; Maxillofacial Injuries

### Palavras-chave

Anestesia; Child; Manuseio das Vias Aéreas; Traumatismos Maxilofaciais

Facial trauma is associated with severe obstructive complications of the airway. A 12-year-old was admitted to the emergency room after falling from a height of 12 meters, with spontaneous breathing, GCS 13. Visualization of the airway by videolaryngoscopy was not successful due to the hemorrhage and instability of the fractures (Figs 1 and 2). An unsuccessful attempt at cricothyrotomy followed, because the patient did not tolerate the positioning. After this, a percutaneous tracheostomy under inhalation sedation was performed successfully. Still, during the procedure, the patient went into ventricular fibrillation, which was promptly reverted by one cycle of advanced life support. In cases like this, it is important to know the various ways of approaching the airway, which is an ongoing challenge for any anesthesiologist.

### Ethical Disclosures

**Conflicts of Interest:** The authors have no conflicts of interest to declare.

**Financing Support:** This work has not received any contribution, grant or scholarship.

**Confidentiality of Data:** The authors declare that they have followed the protocols of their work center on the publication of data from patients.

**Patient Consent:** Consent for publication was obtained.

**Provenance and Peer Review:** Not commissioned; externally peer reviewed.

### Responsabilidades Éticas

**Conflitos de Interesse:** Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

**Fontes de Financiamento:** Não existiram fontes externas de financiamento para a realização deste artigo.

**Confidencialidade dos Dados:** Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

**Consentimento:** Consentimento do doente para publicação obtido.

**Proveniência e Revisão por Pares:** Não comissionado; revisão externa por pares.

### ORCID

Ana Alves  <https://orcid.org/000-0002-1607-3533>

Joana Queijo  <https://orcid.org/0000-0002-7322-1686>

Lúcia Gonçalves  <https://orcid.org/0000-0002-6573-1555>

Received: 26<sup>th</sup> of July, 2021 | Submissão: 26 de julho, 2021

Accepted: 03<sup>rd</sup> of September 2021 | Aceitação: 03 de setembro, 2021

Published: 30<sup>th</sup> of September 2021 | Publicação: 30 de setembro, 2021

© Author(s) (or their employer(s)) and SPA Journal 2021. Re-use permitted under CC BY-NC. No commercial re-use.

© Autor (es) (ou seu (s) empregador (es)) Revista SPA 2021. Reutilização permitida de acordo com CC BY-NC. Nenhuma reutilização comercial.

## REFERENCES

1. Órfão J, Aguiar J, Carrilho A, Ferreira A, Leão A, Mourato C, et al. Consensos na Gestão Clínica da Via Aérea em Anestesiologia. Rev Soc Port Anestesiol. 2016; 25: 19-20.
2. Khan H, Farina G, Windle M, Meyers A. Cricothyrotomy. Medscape [internet homepage]. 2019 Oct [accessed 5 mar 2021] Available at: <https://emedicine.medscape.com/article/1830008-overview>
3. Black A, Flynn P, Popat M, Smith H, Thomas M, Wilkinson K. Difficult Airway Society, Association of Paediatric Anaesthetists. DAS Paediatric difficult airway guidelines [internet homepage]. 2015 [accessed 5 mar 2021] Available at: <https://das.uk.com/guidelines/paediatric-difficult-airway-guidelines>

Autor Correspondente/Corresponding Author\*:

Ana Rita Vergílio Alves

Morada: Centro Hospitalar de Leiria, EPE, Rua das Olhalvas, 2410-197 Leiria, Portugal.

E-mail: [rita.vergilio.alves@gmail.com](mailto:rita.vergilio.alves@gmail.com)

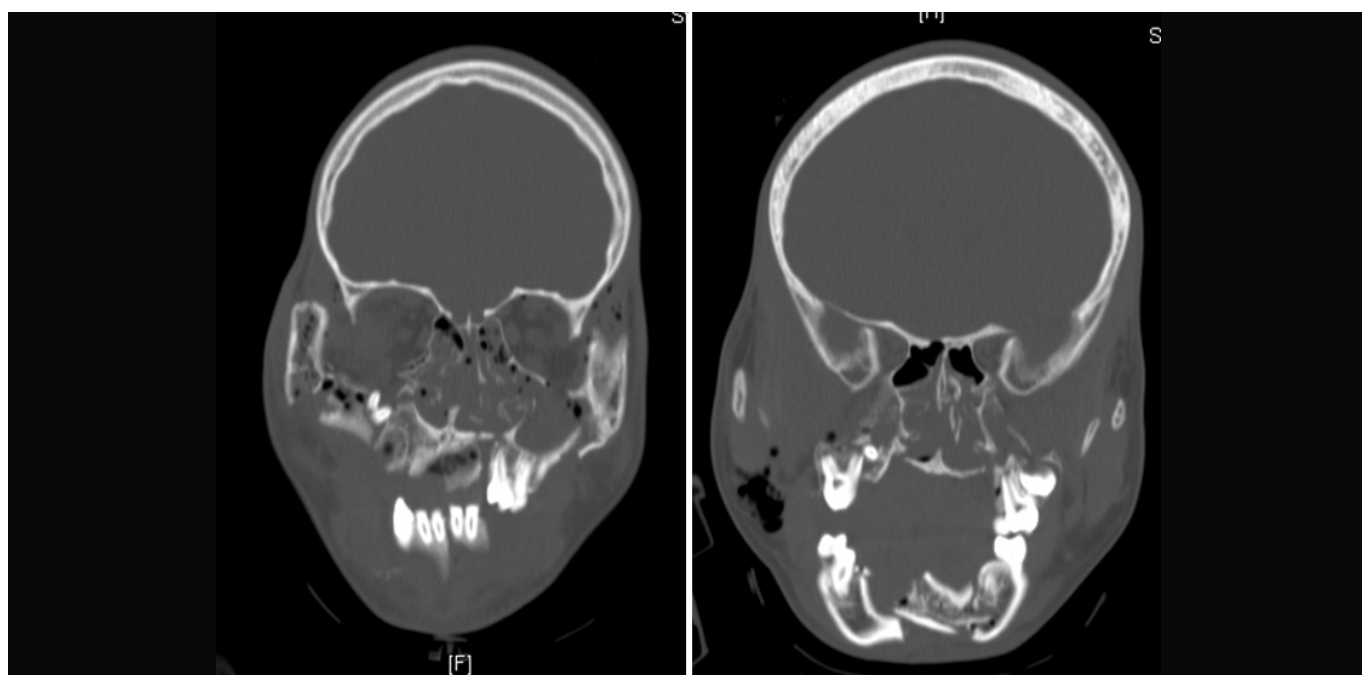


Figure 1. CT images skull performed

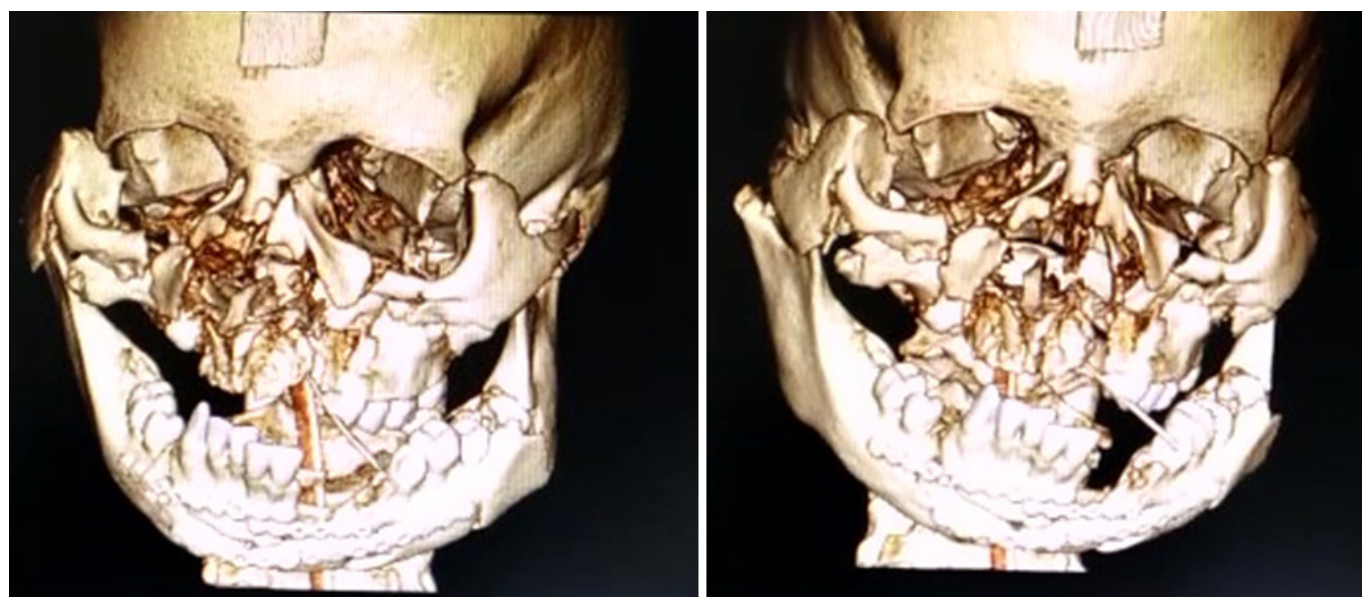


Figure 2. 3D reconstruction images of facial trauma