

ALTERNATIVE APPROACH FOR TREATING A LEFORT III FRACTURE IN A PATIENT WITH ACUTE LYMPHOID LEUKEMIA

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INTRODUCTION

Le Fort III fractures, also known as craniofacial dysjunction, are a type of facial fractures that run through the canine, pterygoid, nasofrontal pillars and upper lateral orbital walls. The facial skeleton is separated from the skull base, with the fracture line extending medially to the ethmoid, vomer and sphenoid base, and laterally through the nasofrontal suture, medial orbital wall, orbital floor, zygomatic-frontal junction and zygomatic arch. Treatment consists on osteosynthesis with open reduction and internal fixation (ORIF). Coronal approach is commonly used as the gold standart for the exposure of the fractures in the upper portion of the face, and maxillary vestibular access for maxillary buttress. In cases of systemic comorbidities, such as acute lymphoid leucemia (ALL), it is routinely opted to reduce surgical approaches, avoiding greater intraoperative bleeding and postoperative infection.

CASE REPORT

Male 22-year-old patient, admitted to the hospital emergency, victim of “multiple kicks in the face”. Physical examination showed bilateral periorbital hematoma, maxila mobility, malocclusion and rhinorrhea. CT scans showed fracture of the pterygoid plates, canines buttress, frontozygomatic suture, zygomatic arch, right infraorbital ridge and frontonasal suture. The patient had acute T LLA undergoing chemotherapy, with leucopenia. Opinion requested to neurosurgery showed negative Kernig and Brudzinski signs, allowing for surgical treatment. Linch approach was planned for frontonasal reduction, bilateral supraciliary for frontozygomatics, subciliary for infraorbital rim, maxillary vestibular approach for canine and zygomatic maxillary buttresses. Due to the need of MMB for restablishing the occlusion, it was performed a submandibular intubation, once nasal intubation was not an option. These approaches was chosen due to lesse periosteal detachment and smaller incisions, which guaranteed less risk of bleeding and infection. The patient presented an excellent evolution, with improved occlusion and facial asymetry.

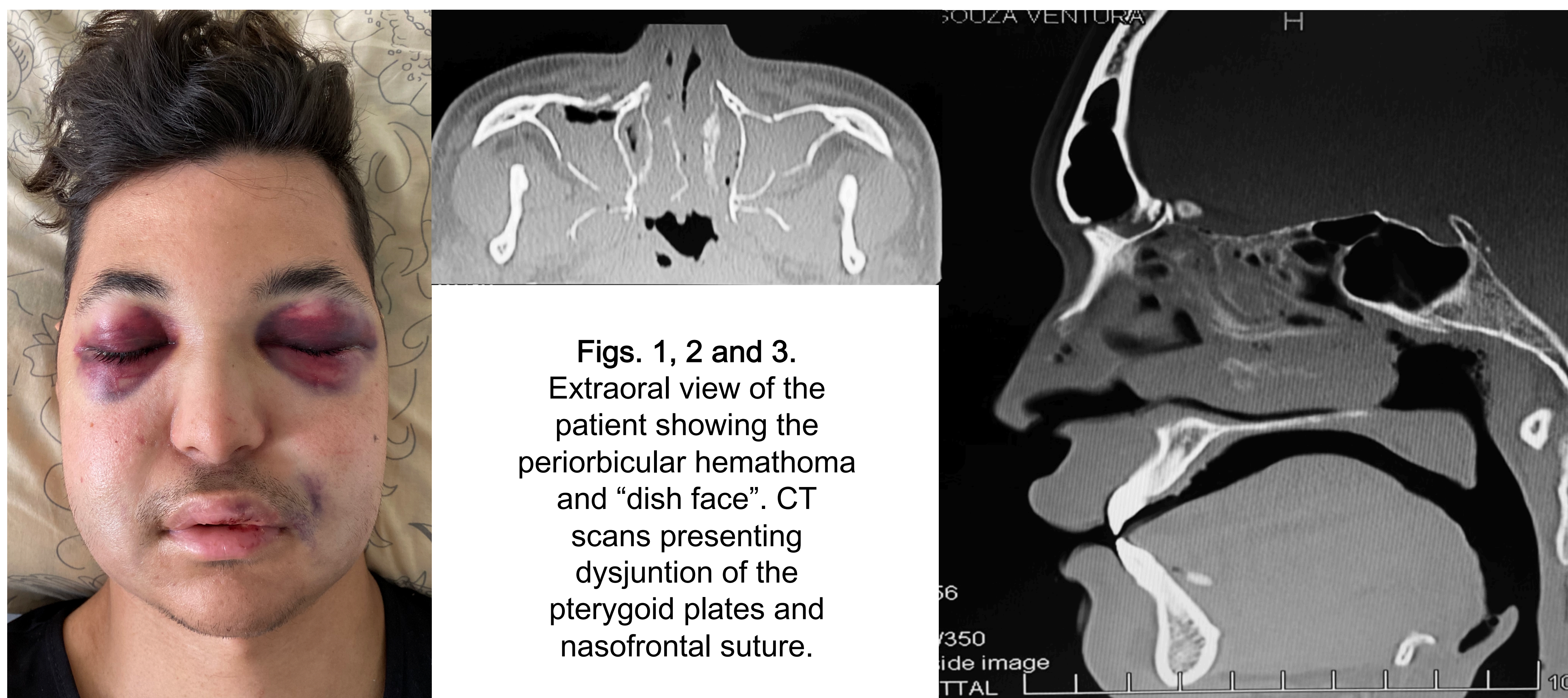
CONCLUSION

In some specific cases, one should choose to reduce surgical exposure through reduced access, obtaining the same clinical result, but generating less risk for immunocompromised patients.

Authors declare there is no conflicts of interest.

REFERENCES

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Figs. 1, 2 and 3.
Extraoral view of the patient showing the periorbicular hemathoma and “dish face”. CT scans presenting dysjunction of the pterygoid plates and nasofrontal suture.



Figs. 4 and 5: Intraoral view showing the malocclusion caused by the LeFort III fracture and the fractures in the anterior wall of maxila.



Figs. 6, 7, 8, 9, 10, 11 and 12 . Titanium plates used to reduce the facial fractures in the canine and pterygomaxilar buttres, nasofrontal and frontozygomatic sutures. Postoperative Intraoral view showing the malocclusion resolution. Postoperative extraoral view showing the scars produced by the minimally surgical approaches.