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Односторонний изолированный перелом крыловидного отростка клиновидной кости: клинический случай

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АННОТАЦИЯ

Переломы крыловидного отростка часто сочетаются с переломами по типу Ле-Фор и могут наблюдаться при других переломах лицевых костей, таких как переломы стенок лобных пазух и носо-глазнично-решётчатые переломы. Изолированные переломы крыловидного отростка встречаются крайне редко.

В отличие от переломов по типу Ле-Фор, которые необходимо лечить хирургическим путём с фиксацией нестабильных отломков для восстановления формы и функции и стабилизацией крыловидного отростка, изолированные переломы пластинок крыловидного отростка не требуют хирургического лечения.

В статье описывается редкий случай изолированного одностороннего перелома крыловидного отростка у 71-летней пациентки с черепно-мозговой травмой и гематомой у основания правой глазницы, полученными в результате потери сознания.

Компьютерная томография показала односторонний перелом пластинки крыловидного отростка справа с признаками эмфиземы в жевательно-челюстном пространстве с ипсилатеральной стороны. Кроме того, у пациентки выявлен перелом медиальной стенки верхнечелюстной пазухи справа с признаками гемосинуса. Переломы основания черепа или повреждения твёрдой мозговой оболочки не обнаружены. Пациентка получала консервативное лечение.

Ключевые слова: переломы крыловидного отростка клиновидной кости; переломы по типу Ле-Фор; компьютерная томография.

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Unilateral isolated fracture of the pterygoid plate: a case report

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ABSTRACT

Pterygoid plate fractures are often associated with Le Fort fractures and accompanied by other facial fractures such as frontal sinus and naso-orbital-ethmoid fractures; isolated pterygoid plate fractures are extremely rare.

Le Fort fractures must be surgically treated with fixation of unstable fracture segments to re-establish bone form and function, and the pterygoid process must be surgically stabilized; however, surgical treatment is unnecessary in isolated pterygoid plate fractures.

Here, we report a rare case of isolated unilateral fracture of the pterygoid process in a 71-year-old female patient who had a syncopal episode with secondary head injury and a hematoma at the base of the right orbit.

A computed tomography scan showed unilateral right pterygoid plate fracture with signs of emphysema in the ipsilateral masticatory space. The patient also had a fracture of the medial wall of the right maxillary sinus with hemosine, but no fractures of the skull base or theca. She was treated conservatively.

Keywords: pterygoid plate fractures; Le Fort Fractures; computed tomography.

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单侧孤立性翼突板骨折：临床病例

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简评

翼突骨折通常与勒福(Le Fort)分型骨折相关，并且可能与其他面部骨折一起发生，例如额窦壁骨折和眼眶筛骨骨折。孤立的翼突骨折极为罕见。

与勒福(Le Fort)分型骨折不同，必须通过手术固定不稳定的碎片以恢复翼突的形态和功能并稳定翼突，孤立的翼板骨折不需要手术治疗。

本文描述了一名71岁女性患者的蝶骨翼突单侧孤立性骨折的罕见病例，该患者颅脑外伤，右眼窝底部血肿，由意识丧失引起。

计算机断层扫描显示右侧翼突板单侧骨折，同侧咀嚼上颌间隙有肺气肿迹象。此外，该患者还发现了右侧上颌窦侧壁骨折，有血窦征象。未检测到颅底骨折或硬脑膜损伤。患者接受了保守治疗。

关键词：蝶骨翼突骨折； Le Fort型骨折； CT扫描。

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绪论

翼突板骨折通常伴有Le Fort面中部骨折（根据损伤平面分Le Fort I、II、III）。孤立性翼突板骨折极为罕见。

在此，我们介绍了1例成年女性右侧孤立性翼突板骨折病例。

病例描述

一例71岁女性患者因晕厥发作所致跌倒引起头部损伤而至急诊科就诊全身体格检查结果无异常。未见面瘫。既往病史和手术史未起到促发作用，无意识丧失。

患者右侧面部明显肿胀，右眼眶底部血肿。右脸颊和颧部皮肤出现一定程度的感觉异常。

患者被转诊至放射科，通过64层扫

描仪进行非对比增强的高分辨率计算机断层扫描(CT)，显示右侧翼突板骨折伴同侧咀嚼肌间隙气肿体征(图1)。CT检查还发现右侧上颌窦内侧壁骨折伴血窦(图2)。颅底或颅骨膜骨折不明显，脑神经组织密度也无任何变化。无需手术治疗。

讨论

面部骨折的主要原因包括机动车事故、攻击、跌倒、运动损伤、枪伤等[1]。

了解面部骨骼的肌肉骨骼系统对于诊断面部骨折具有重要意义。实践中，在支撑面部功能单位的骨厚度相对增加区域的面部支撑物之间，可发现上颌后支撑物，即翼上颌交界处的骨柱[2]，该部位有几种类型的骨折，包括1901年首次描述[3]的Le Fort骨折。根据骨折方向，

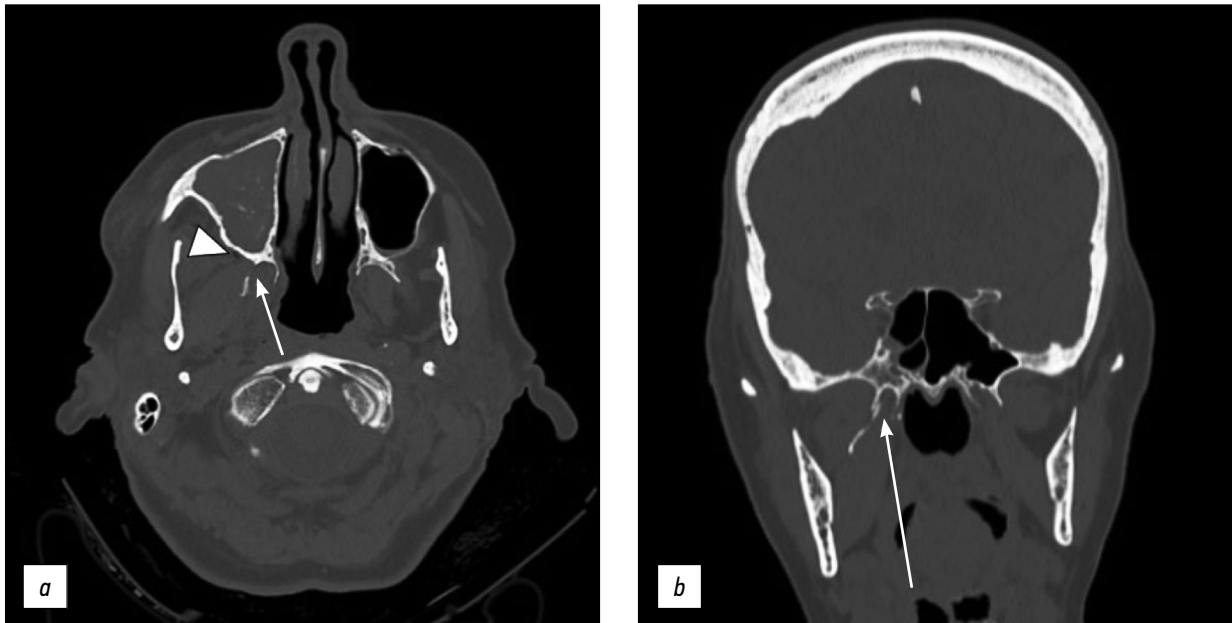


图1: 骨窗轴向(a)和冠状(b)CT扫描显示右侧翼突板骨折(箭头), 伴同侧咀嚼肌间隙内有气肿气泡(箭头)。



图2: 骨窗轴向(a)和冠状(b)CT扫描: 显示右侧上颌窦内侧壁骨折(箭头)。软窗(c)显示右上颌窦内有血窦(箭头)。

即水平，锥形或横向而将这些骨折分为3个不同类型。

Le Fort I型骨折累及鼻腔前外侧缘。这种类型的骨折可能由自上而下对上牙施加的作用力导致。在Le Fort II型骨折中，骨折线延伸至眼眶下缘，由施加在上颌骨下部或中部的作用力导致。Le Fort III型骨折累及颧弓，由鼻梁和上颌骨上部撞击引起[4]。

所有类型的Le Fort骨折都会累及翼突板，并可能导致翼上颌分离[5]。Le Fort骨折常伴有其他面部骨折，如额窦骨折及眼眶筛骨骨折[6]。

孤立性翼突板骨折极为罕见。R. K. Garg等人[7]的研究发现，大约三分之二的翼突板骨折患者伴有Le Fort骨折。因此，翼突板骨折并不一定意味着存在Le Fort骨折。翼突板骨折通常是颅底和颅盖骨折的延伸或很可能由移位性下颌骨骨折引起的撞击导致[7]。2014年，A. Q. Truong等人[8]描述了翼突外侧板骨折和下颌骨骨折之间的相关性。R. K. Garg等人[7]的一项回顾性研究显示，209名翼突板骨折患者中有78名患者（略高于三分之一）未出现Le Fort骨折，而在这些患者中发现了其他骨折，如蝶颧支撑部、颧骨和颧上颌骨复合体骨折，和移位性下颌骨骨折。其他研究也报告了类似的结果[9]。

2017年，M. Surya[6]描述了一例异物穿透导致孤立性翼突板骨折的病例。有几种机制可以通过直接创伤力（穿透性创伤）或间接创伤力（翼状肌牵拉）损伤翼突板，并沿面部结构内的薄弱区域传导。在蝶颧支撑部骨折中，失去颧骨、颧骨和蝶骨之间的连接使骨折线延伸至翼突板[8]。翼突板是翼内肌和翼外肌的起始部位[10]，因此，翼突板的任何创伤都可能引起咀嚼、下颌运动和言语时不适。

Le Fort骨折必须在患者生命体征稳定后通过手术治疗。Le Fort骨折需将不稳定的骨折段固定在稳定的结构上[11]。治疗目标是外形和功能恢复。

在Le Fort骨折中，翼突也必须通过手术固定[12]。由于翼突板的位置特性，其结构在一般条件下不易进入。翼外肌附着于翼突板的后侧

面。由于这些解剖学特征，翼突板骨折后的愈合可能遇到几个问题。由于翼外肌的作用，翼突板骨折碎片可发生逐渐移位或移动。此外，有必要考虑翼突附近存在的血管，特别是前部的腭降动脉和后部的翼静脉丛。如果翼突板骨折处理不当，由于大出血风险较高，必须对包裹在骨骼周围的血管进行适当分离和处理；因此，需确保截骨方向正确，并进行适当的翼突板分离[12]。

因此，我们的病例是孤立性翼突板骨折的罕见示例，不伴有Le Fort骨折或下颌骨骨折。我们的患者仅出现同侧上颌窦内侧壁骨折。

薄层高分辨率CT成像是诊断面部骨折和做出治疗决策的黄金标准。轴位和重建CT影像还可显示骨碎片移位和邻近软组织改变的程度[13]。

孤立性翼突板骨折无需手术治疗。对于孤立性翼突板骨折的患者，建议在骨折愈合前给予软食，以避免颌骨疼痛[14]。

结论

大约三分之一的翼突板骨折与Le Fort骨折无关，而是单独存在或伴有其他面部骨骼骨折。放射科医生对上述其他类型骨折的了解对于面部创伤患者做出鉴别诊断具有重要意义。CT成像对于骨折诊断、描述骨折移位中的碎片位置和引导外科医生选择治疗方法等方面至关重要。

ADDITIONAL INFORMATION

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