Anterior Skull Base Traumas and Their Management

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We read with interest the article written by Piccirilli et al (J Neurol Surg B 2012;73:265–272) regarding their retrospective study about the management of anterior cranial fossa traumas. Even if frontal skull base fractures represent one of the most dangerous consequences after brain injury, there are no guidelines or evidence-based data about the best surgical or conservative management.

The authors attempted to introduce an attractive classification of anterior skull base fractures into three types. However, this classification presents some problems. In fact, as shown in Fig. 4 of the above mentioned article, a common issue with these injuries is the involvement of the orbit. If the orbital roof, the orbital lateral wall, or the medial wall is involved, management should be tailored with involvement of different disciplines (e.g., ophthalmology, ear/nose/throat [ENT], or maxillofacial surgery), as well as with different kinds of approaches. Our proposal is to include in the classification a subtype with or without orbital involvement.

Regarding the treatment options of the different types of fractures, we agree with the authors that the surgical man-

agement of Type A fractures should be considered optional. However, we disagree with the authors regarding the proposed treatment options in type B and C fractures. In fact, in our experience, the presence of a fissure of the internal wall of the frontal sinus or a basal fracture near the lamina cribrosa always represents a surgical indication, even in the absence of evident rhinoliquorrhea. Actually, the intradural subfrontal inspection of these cases reveals in most cases tiny dural gaps, often near the crista galli, which must be repaired and/or covered. These small leaks are generally neglected or undetected in the actual magnetic resonance imaging (MRI) and computed tomography (CT) scans. We have observed that lack of awareness of this condition may have serious consequences, like chronic meningitis, delayed intracranial abscesses, or empyemas, which can develop after decades. These experiences lead us to give a surgical indication for all the cases described in the discussed article as type B and C and to always perform an intradural subfrontal inspection, ultimately covering or repairing any dural tear. The choice to perform it through a unilateral or a bilateral approach depends on the extent of the damage.

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