Craniofacial Trauma
Facial fractures, particularly those resulting from severe injuries with multiple fractures in the cranio-maxillofacial region, are the most common form of neurocranial injuries. Depending on the complexity and level of the fracture, the frontobasal involvement of all craniofacial injuries varies between 30 and 70%. Early recognition of specific craniofacial and skull base injury patterns can lead to identification of associated injuries.

In addition to the challenging reconstruction of severe craniofacial injuries, specific diagnostic, pathogenetic, and therapeutic problems arise as a consequence of the accompanying frontobasal fractures.

A considerable optimization in the treatment of these profound craniofacial and skull base traumatic injuries can be achieved by a routine team approach of maxillofacial, neurosurgical, and anesthesiological specialists with the appropriate diagnostic and therapeutic resources at their disposal and should lead to decreased morbidity and mortality of craniofacial and skull base injuries. The interdisciplinary treatment of patients with severe craniofacial injuries is state of the art and focused on trauma centers equipped with adequate infrastructure.

The purpose of this monograph is to analyze and introduce an established therapy concept for craniofacial fractures with anterior subcranial involvement, with reference to the surgical approach and the postoperative results. Of particular interest are etiological, epidemiological, and pathomechanical characteristics in neuro-craniofacial injuries.

The monograph is based on the analysis of a documented collective of 268 severe craniofacial injuries in the context of 18,456 maxillofacial injuries treated with assured data regarding quantity and quality in relation to the extent and pattern of injury, epidemiology, and reconstructive procedures in the varying fracture compartments, including perioperative management.

Furthermore, surgical indication, time of intervention, and the maxillofacial-neurosurgical treatment modalities for the subcranial, craniofrontal, craniofacial, and frontobasal regions are looked at in detail, as well as the principles of reconstructing the cranio- and maxillofacial skeleton.
The editors hope that this manual will be an indispensable reference for residents in maxillofacial surgical training and attending cranio-maxillofacial surgeons and for neurosurgeons in the highly specialized field of craniofacial traumatology.

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