Preface

Up-to-Date on Orbital Trauma and Reconstruction

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Editors

The orbit is a complex area with crucial anatomic structures packed into a small space. In orbital fractures not only the bone is involved but also the periorbit with vulnerable soft tissues. Orbital reconstruction is a delicate procedure with the protruding orbital soft tissues limiting the surgical overview. Technological developments like preoperative planning, navigation, additive manufacturing techniques, and intraoperative imaging have increased the predictability of the bony reconstruction in the recent years and are thought to have a favorable effect on the clinical outcome. So, anatomic knowledge and proper indications, combined with a good implemented clinical protocol can help to improve the quality of life for our patients. Above all, orbital fracture management has become a multidisciplinary matter.

This *Atlas of the Oral and Maxillofacial Surgery Clinics of North America* focuses on orbital fracture management for both primary and secondary trauma care. This issue begins with the anatomy of the orbit (Cornelius, Probst, Metzger, and Gooris), ocular injury and emergencies around the globe (Hötte and De Keizer), and the main controversies in orbital reconstructions regarding indications, timing, and biomaterials (Dubois, Dillon, Jansen, and Becking). In order to understand diplopia, the importance of orthoptic evaluation (Braaksma and Jellema) is underlined and how this can be implemented in an evidence-based clinical protocol (Gooris, Jansen, Bergsma, and Dubois). The primary fracture care (Holmes) and best implant for the right are further discussed. The fundamentals of 3D virtual planning

(Schreurs, Klop, and Maal) are explained and how this could be used for intraoperative feedback (Schreurs, Wilde, Schramm, and Gellrich). The complexity of secondary reconstructions is illustrated in solitary orbital fractures (Essig, Wagner, and Blumer) and in combination with NOE, ZMC, or panfacial fractures (Bell). The final article gives a scientific overview of which advanced technology could be used to improve the predictability of the reconstruction (Schreurs, Becking, Jansen, and Dubois).

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