Preface

Computer-Guided Oral and Maxillofacial Surgery: Opportunities to Transform Patient Care

Oral and maxillofacial surgeons have a long history of incorporating technology into their wide range of skills to care for patients with complex problems. Computerized tools, navigation technology, and patient-specific devices augment and harmonize surgical procedures to an individual's profile and need. The dynamic technological environment has refined presurgical planning and increased the precision and accuracy of surgical interventions. It has led to renewed enthusiasm and modification of established surgical procedures and improvement in patient satisfaction and outcomes.

This issue of the Atlas of the Oral and Maxillofacial Surgery Clinics of North America is devoted to the use of computer-assisted design/computer-assisted manufacturing and intraoperative navigation in oral and maxillofacial surgery. The articles emphasize the use of patient-specific data for preoperative planning, surgical simulation and manufacturing of intraoperative tools for the management of dentofacial deformities, temporomandibular disorders, facial trauma, pathology, and reconstruction. The authors share their clinical experience and the current challenges and limitations of these technological tools on patient care. The articles also highlight the increased accessibility of digital technologies and their influence in the development of point-of-care manufacturing programs and less-invasive maxillofacial procedures. Technological tools have allowed the profession to push the boundaries of surgery. As stewards of these resources, we are challenged to look at the opportunities they provide to improve patient care and continuously evaluate their value and safety in health care delivery.

This issue of the Atlas of the Oral and Maxillofacial Surgery Clinics of North America would not have been possible without the effort of all the contributing authors. Their surgical innovations and commitment to educating the future generation of surgeons have been instrumental in the advancement of the field of oral and maxillofacial surgery. I would like to express my sincere gratitude to my mentors, colleagues, and residents at the Mayo Clinic, who provide me the daily motivation to be a better clinician and educator. I want to thank my family for their love and unconditional support throughout my professional journey and all the patients for their trust and the privilege to participate in their care.

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