

Features:

- Follows a standard format in each chapter: history of the topic, current literature and applications, key steps and techniques of virtual planning and navigation (with video), and pearls/pitfalls shared by a master surgeon with expertise in each particular area.
- Includes preoperative photographs and postoperative results, radiological and computerized imaging, and clinical photos throughout.
- Covers potential complications to be aware of in the postoperative period.
- Offers expert perspectives on computer-assisted planning from surgeons, physicists, engineers, and other industry leaders.
- An eBook version is included with purchase. The eBook allows you to access all of the text, figures and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud.

Περιεχόμενα:

- 1 The History of the CT Scan: How Computer-Assisted Tomography Changed Craniofacial Surgery, and Use of Virtual Surgical Planning in Patients with Severe Craniofacial Congenital Anomalies
- 2 Computer Aided Design and Computer Aided Manufacturing
- 3 DiY Stereolithography and 3D Printing
- 4 ABCs in Surgical Intraoperative Navigation/Post-Operative Verification
- 5 Virtual Surgical Planning in Orthognathic Surgery: A Practical Workflow
- 6 Virtual Surgical Planning in Head and Neck Reconstruction (A): Cranium
- 7 Virtual Surgical Planning in Head and Neck Reconstruction (B): Maxilla
- 8 Virtual Surgical Planning in Head and Neck Reconstruction (C): Mandible and Dental Restoration
- 9 Virtual Surgical Planning in Head and Neck Reconstruction (D): TMJ Replacement
- 10 Virtual Surgical Planning Congenital Differences & Anomalies: Treacher Collins
- 11 Virtual Surgical Planning Congenital Differences & Anomalies: Syndromic Craniosynostosis - Intracranial/Fronto-Facial Reconstruction (Facial Bipartition, Box Osteotomies)
- 12 Virtual Surgical Planning Congenital Differences & Anomalies: Syndromic Craniosynostosis: Syndromic/Multisuture Craniosynostosis Part II (Monobloc, Distraction)
- 13 Virtual Surgical Planning Congenital Differences & Anomalies: Syndromic Craniosynostosis - Subcranial (Le Fort 3 & Le Fort3/1)
- 14 Virtual Surgical Planning Congenital Differences & Anomalies: Nonsyndromic Craniosynostosis: A Practical Workflow
- 15 Virtual Surgical Planning Congenital Differences & Anomalies: Hemifacial Microsomia
- 16 Virtual Surgical Planning Congenital Differences & Anomalies: Craniopagus Twins
- 17 Virtual Surgical Planning Congenital Differences & Anomalies: Pierre Robin Sequence
- 18 Virtual Surgical Planning in Craniomaxillofacial Trauma: Orbital Fractures
- 19 Virtual Surgical Planning in Craniomaxillofacial Trauma: Mandibular Fractures
- 20 Virtual Surgical Planning in Craniomaxillofacial Trauma: ZMC Fractures & Secondary Reconstruction
- 21 Virtual Surgical Planning and Navigation in Cranio-Orbitals Tumor Resection
- 22 Virtual Surgical Planning and Navigation in Maxillo-Mandibular Tumor Resection
- 23 Virtual Surgical Planning in Transgender Affirmation Surgery
- 24 Virtual Reality & Augmented Reality in Craniofacial Surgery
- 25 Robots in Craniofacial Surgery
- 26 Bioengineering in Craniofacial Surgery
- 27 Computer-Assisted Soft Tissue Applications and Prosthetics