



Edition: 1st Edition 2016  
 pages: 560  
 Images: 1277  
 Cover: Hardcover, 21,5 x 28,5 cm  
 ISBN: 978-88-7492-018-1  
 Stock No.: BI027  
 Published: March 2016

\$25.00

Price  
 Subject to changes!

**Quintessence Publishing Company, Inc.**

411 North Raddant Road  
 Batavia  
 Illinois IL 60510  
 United States of America

+1 (0)630 / 736-3600

+1 (0)630 / 736-3633

contact@quintbook.com

<https://www.quintessence-publishing.com/usa/en>

## Book information

**Authors:** Giovanna Perrotti / Tiziano Testori / Massimiliano Politi

**Title:** 3D Imaging and Dentistry

**Subtitle:** From Multiplanar Cephalometry to Guided Navigation in Implantology

**Short text:**

For those who are finding the transition from 2D radiography to 3D CBCT confusing, this text explains the use of volumetric imaging in clinical practice and details the indications for its use in every field of dentistry. Ample direction is given on proper image processing and how to read CBCT scans, including a comprehensive anatomical atlas. In addition, the authors explain how to compile volumetric 3D reconstructions and use them in computer simulation to explain surgical phases. The authors focus on topics of greatest clinical interest, including cephalometric diagnostics and a novel approach to esthetic analysis, analysis of the anatomical airway for sleep apnea, a comprehensive review of the maxillary sinus and the clinical surgeries related to it, and treatment planning for guided implant surgery.

**Contents**

**Chapter 01. Basic Principles for the Use of CBCT in Dentistry**

- Principles of Digital Radiology
- Computed Tomography
- Image Postprocessing

**Chapter 02. Changes in Basal Bones from Infancy to Senescence**

- Growth and Development of Facial Bones in 3D Images
- Theories on Control of Craniofacial Growth
- Bone Resorption and Atrophy of the Basal Bone
- Implant Therapy and Craniofacial Growth

**Chapter 03. Systematic CBCT Analysis of the Maxilla and Mandible**

- Radiologic and Clinical Anatomy of the Maxilla
- Radiologic and Clinical Anatomy of the Mandible
- Clinical Examples

**Chapter 04. Evolution of Cephalometry**

- Concepts of Cephalometry
- Dysgnathic Presentations in 3D

**Chapter 05. Atlas of Cephalometric Landmarks**

- Introduction to Cephalometry
- Atlas of Skeletal Landmarks
- Atlas of Soft Tissue Landmarks

**Chapter 06. 3D Analysis of Soft Tissues**

- Esthetic Analysis of Soft Tissues Using 3D Cephalometry
- Diagnostic 3D Analysis of Soft Tissues with Multiplanar Cephalometric Analysis: Clinical Cases

**Chapter 07. 3D Analysis of the Temporomandibular Joint**

- Anatomy and Pathology of the TMJ
- Radiologic Examinations of the TMJ

**Chapter 08. 3D Analysis of Airway Spaces**

- Obstructive Sleep Apnea

- Risk Factors for Obstruction of the Airways and Development of OSA

#### **Chapter 09. 3D Analysis of Impacted Teeth**

- Impaction of the Permanent Maxillary Canine
- 3D Imaging and Diagnosis of Impacted Mandibular Third Molars

#### **Chapter 10. CBCT in Periodontology**

#### **Chapter 11. CBCT in Endodontics**

- Imaging in Endodontics
- Cone Beam Computed Tomography in Endodontics

#### **Chapter 12. Computer-Assisted Guided Surgery: Indications and Limitations**

- Analysis of Guided-Surgery Systems

#### **Chapter 13 CBCT: Medicolegal Issues**

**Co-Authors:** Francesca Bianchi • Massimo del Fabbro • Giulia Ferrara • Silvia Ferrario • Luca Fumagalli • Fabio Galli • Francesco Grecchi • Giuliana Lorè • Mario Mantovani • Joanna Katarzyna Nowakowska • Andrea Parenti • Lorenzo Pignataro • Grazia Pozzi • Marco Scarpelli • Silvio Tascheri • Alberto Zerbi

**Categories:** [Interdisciplinary, Implantology, Radiology and Photography, General Dentistry](#)