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Color atlas of cone beam volumetric imaging for dental applications (2009)

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The introduction of technological advances not only broadens clinical horizons but can also frequently bring additional responsibilities for the clinician. This new hardback textbook covers these aspects relating to the current application of cone beam volumetric imaging (CBVI) extremely well and is set out in the convenient illustrative style of a colour atlas.

The author has drawn on a wealth of material from 3000 CBVI cases with the stated aim to educate dental professionals on how to use CBVI technology to better visualize the diseases and disorders affecting patients, and to refresh the reader's memory of anatomy in the progressive shift from the format of two-dimensional greyscale to three-dimensional and colour views. The result is a book of 14 chapters containing over 400 radiographic plates, many being in colour, laid out over 300 pages.

The first two chapters set the scene with a brief and concise overview of the theory behind the application of CBVI as well as the legal responsibilities for prescribing these images and having the whole depth of the resultant data volume properly reported. Chapter 3 concentrates on the visualization of anatomic structures in the three planes of section showing slices and slabs of varying thickness that are well labelled to guide the reader. Chapter 4 follows on this theme looking at the anatomy of airway analysis. The subsequent chapters then continue in similar format, each having a short introduction outlining where CBVI would have additional benefits to conventional techniques. The subjects considered included are dental findings, impacted teeth, implant site

assessment, and odontogenic lesions. Thereafter, chapter 9 looks at orthodontic assessment but is not intended to present traditional case work-ups rather instances where CBVI would better help the clinician see the primary problems such as a palatal impaction or facial asymmetry. Likewise, chapter 10 explores these benefits in relation to orthognathic surgery and trauma imaging and perhaps could have included an example of a cleft palate with an alveolar bone graft. Chapter 11 covers paranasal sinus evaluation and then an extensive chapter 12 looks at evaluation of the temporomandibular joint with some stunning portrayals. Chapter 13 reviews the importance of systemic findings regarding medial arterial calcinosis in relation to diabetic patients and again reinforces the responsibility for the entire data volume to be reviewed by an experienced radiologist if CBVI is to be fully utilized. The final chapter then continues with this theme showing three examples of osteoarthritic findings in cervical vertebrae.

Overall, this is a very fine book that has been well produced making it straightforward to interpret the radiographic plates. It succeeds in illustrating the benefits of CBVI in their widest context and as a valuable reference work would undoubtedly rekindle the clinician's interest in modern day radiographic interpretation. The only typographical observation i could find related to Figure 5-1b and possibly the mislabelling of an apical radiolucency as on |3 rather than |2.

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