

development is the basis for the management of resulting malocclusions. Moreover, the contents provide a biologically-based perspective for the long-term assessment of treatment results.

Extensive reformatting and excellent publishing have facilitated reading and made appliance details easier to understand and subsequently use. The re-editing and two additional chapters have slightly expanded the book. The new chapters deal with modern advances in diagnostic and treatment concepts that, anecdotally supported by case reports, provide an insight to the

possible future directions of patient management. The book is worth having for the provocative and controversial nature of the contents of the additional chapters but this notwithstanding, the book maintains the emphasis of providing practical advice and instruction that is a direct benefit to practitioners, teachers and students of orthodontics. It comes recommended as a worthy addition to any personal or public library.

Craig W. Dreyer

Craniofacial Morphogenesis

Marie-Josèphe Deshayes (1999)

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This CD-ROM, on the subject of craniofacial morphogenesis, has been written by Marie-Josèphe Deshayes and produced by Telecrane Innovation. It is compatible with both PC and Macintosh formats and runs using the Mac-based Quicktime application. Minimal requirements recommended are a Pentium 133 MHz or PowerMac PC processor. Unfortunately, it does not run in Mac OS-X, which may be a problem for users of the latest specification Macintosh machines. The copy provided was installed easily and, following the insertion of a validation code, it ran without any problems.

The CD itself covers the subject of craniofacial morphogenesis and this is presented in a book-type format with an accompanying audio commentary. The main menu is separated into a number of sub-sections, which includes a table of contents, main theme and sections offering greater detail of certain concepts covered within the main theme, namely statistical data and craniology. Finally, there is a section demonstrating some examples of treated clinical cases and a bibliography. Panels below each section within the menu inform the user of the percentage of information consulted and these can be saved or deleted as required.

The presentation itself consists of text and an accompanying commentary which can be controlled using scroll bars. In addition, there are a series of diagrammatic aids to assist with the text. Navigation through different sections is controlled by a menu at the bottom of the screen. Some of the diagrams are useful and relate directly to the text, but some present no useful information whatsoever and appear to be included for artistic impression alone. This is a shame because many of the introduced concepts are difficult to grasp and the

opportunity to explain these more efficiently with relevant diagrams has been slightly lost. I also felt that the voice-over went a little too quickly, making it difficult to follow in conjunction with both text and diagrams. Overall, the package is reasonably easy to use and in particular, the craniology section runs very effectively, with the operator being able to rotate a dry skull in three dimensions to allow visualisation of certain cephalometric points and then switch to obtain both a written definition and their location on a lateral skull radiograph.

The central theme of this presentation is the concept of cranial biomechanics during morphogenesis of the skull and in particular, flexion in the basicranium and the resulting effects upon maxillary and mandibular relationships. An extensive and highly complex CRANEXPLO cephalometric analysis is described in order to quantify these relationships and a variety of statistics and examples are provided for differing cranial profiles and malocclusions. The author proposes the early orthopaedic correction of any identifiable craniofacial disharmony in order to re-orientate deviant growth trajectories and suggests that this is instigated before six years of age. A number of treatment cases are shown to demonstrate the benefits of early orthopaedic intervention in correcting deviant craniofacial growth, but in reality they provide only sketchy detail.

The principle criticism is that the title of this CD-ROM is a little misleading because it does not actually provide a general overview of current concepts in craniofacial morphogenesis, either pre- or post-natal. Many fundamental principles of craniofacial growth are either not covered or dealt with only fleetingly. It very

much deals with the author's own personal philosophy and I would not recommend it for anything other than providing some insight into an alternative viewpoint. Certainly, as far as mainstream university-taught orthodontics in the United Kingdom is concerned, the contents of this CD very much represent minority opinion, particularly with regard to orthopaedic intervention in pre-school children.

In conclusion, whilst this presentation provides a useful insight into one philosophy with regard to craniofacial growth mechanisms, anyone who expects an overview on generally accepted principles within this complex subject area will be disappointed.

Martyn Cobourne