Craniofacial Sutures: Development, Disease, and Treatment

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A series of books entitled “Frontiers of Oral Biology” (preceded by the eight “Frontiers in Oral Physiology” volumes) was instituted in 1998 with its first volume, The Scientific Basis of Eating (the ninth in the combined series), followed by two books on salivary secretion. The broadening of topics in this series has now resulted in the twelfth book in the combined series, Craniofacial Sutures: Development, Disease, and Treatment.

Introduced with a foreword by Michael Cohen Jr., this book of twelve chapters is a composite of the leading osteogenic fronts of sutural biology by the most authoritative scientific and clinical exponents of the field. The topics covered are divided into sections ranging from genetics, molecular biology, signaling, and embryology; to paleontology and evolution; through clinical syndromes; to ultimate treatment and therapeutic proposals.

The chapters are essentially comprehensive review articles with extensive references. With twenty-four authors contributing to this volume, there is considerable repetition of some material, but in different contexts. The chapter on the genetics of human craniosynostosis is the most comprehensive of all, including extensive tables and no fewer than 131 references. The chapter on suture neontology introduces a neologism in describing the comparative ontogenesis of sutures and provides a fascinating insight into skull evolution.

The incorrect usage of “calvarium” (pp. 60, 83, and 86) is inconsistent with the correct “calvaria” used elsewhere. The number of typographical errors suggests that more careful proofreading would have been beneficial, particularly in incorrect references to figure numbers (p. 167).

This book forms an updated companion to Michael Cohen’s magisterial volume Craniosynostosis: Diagnosis, Evaluation, and Management, published eight years ago. However, the fast pace of investigation of sutural biology makes even this book lag in currency compared to the most recent publications in this field, even those by the same authors who appear in this collection.

The book’s high-quality production on acid-free, non-aging paper, printed in Switzerland, reflects the reputation of the publisher and no doubt accounts for its high price, which will restrict its purchase to all but the most dedicated craniofacial biologists.

As the influence of molecular biology on clinical practice becomes more pervasive, the role of review books on seemingly esoteric subjects, such as craniofacial sutures, becomes more significant. To that end, this book should attract geneticists, molecular and developmental biologists, and clinical researchers.