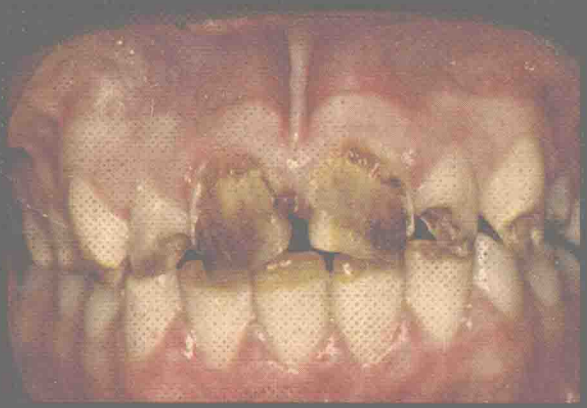
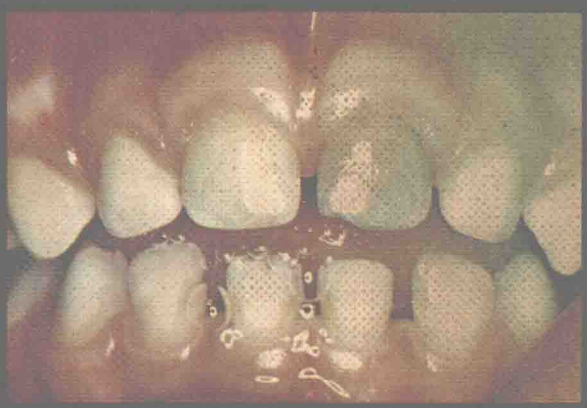
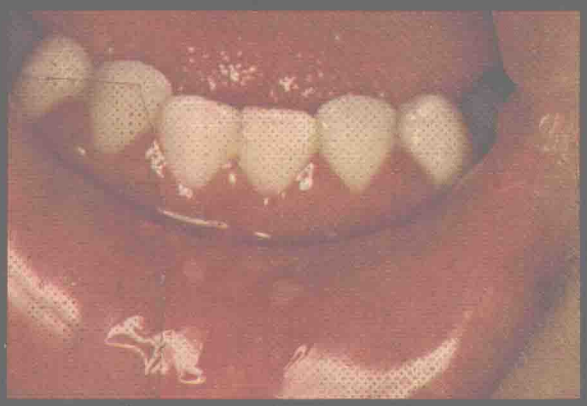
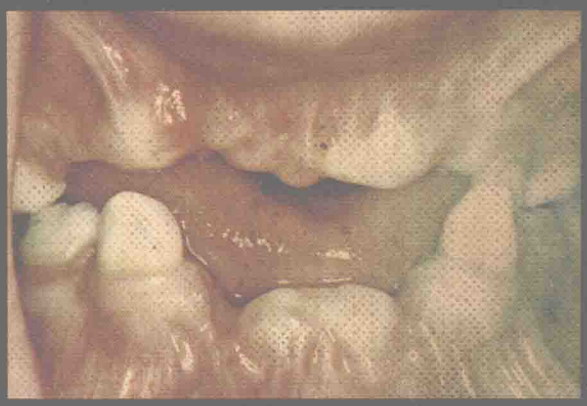
Color Atlas of Clinical Conditions in Pedodontics

R. Rapp and G. B. Winter









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To

Connie, Jason, Jordan

and

Eva, Simon, Caroline

Acknowledgements

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Introduction

This Atlas is a collection of clinical and radiographic illustrations depicting oral and related diseases and anomalies which have been observed in our patients and patients of many of our colleagues. Our objective in preparing this book is to provide clinicians and students with an easily usable reference tool to assist in the recognition and diagnosis of such conditions.

An Atlas of this type is not a textbook and therefore is not meant to be thoroughly comprehensive. Descriptions of the normal may be found elsewhere and no further duplication is intended here. This Atlas elects solely to illustrate a series of abnormal conditions with some of their variations. The format and size of the book preclude presentation of treatment.

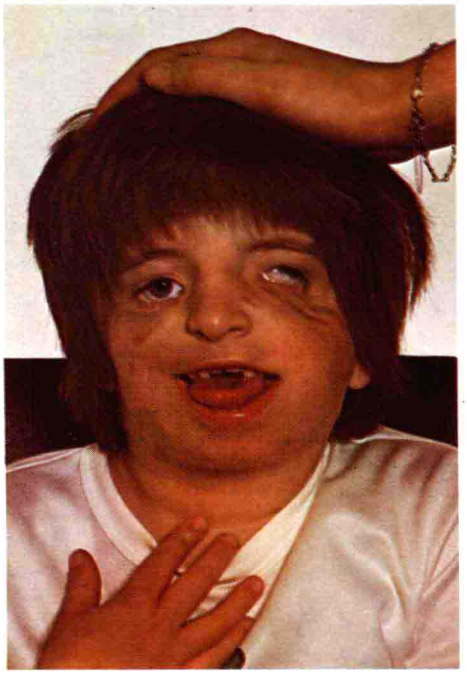
As this Atlas is designed to serve as a consultative source for the types of disease and abnormality mentioned above, the reader may benefit from a description of its organisation. The opening chapter is subdivided into sections listed under the principle anatomical features of the head; the following five chapters deal separately with the intraoral structures; the penultimate chapter covers the problems related to the jaws, and the final chapter concerns the limbs. This last chapter may appear out of place in an Atlas devoted to conditions in paedodontics, but the intention is to limit the illustrations to conditions already dealt with or closely related to those described elsewhere in the book. It is our belief that a general examination of the patient may assist in establishing a diagnosis for an otherwise puzzling condition, and that the limbs are the most accessible portions of the body for this purpose. An anatomical 'regionalisation' of this type may also be of assistance to the busy clinician who, when confronted with an unusual condition, need only consult the chapter appropriate to the part concerned to establish a diagnosis. Such an approach, however, is not meant to minimise the importance of a thorough history, detailed clinical and radiographic examinations and, when appropriate, a biopsy.

The authors feel their efforts will be amply rewarded if this Atlas helps to expedite the recognition of diseases or abnormalities in our young patients.

1. The cranium and face

a. Cranium

1



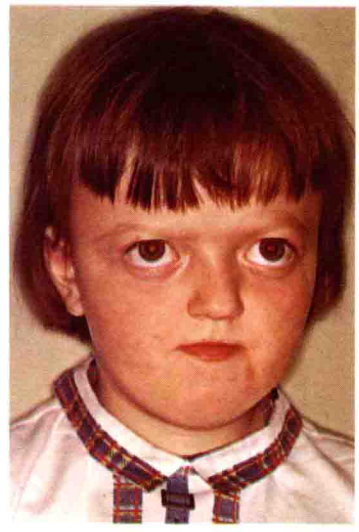
1 Mandibulofacial dysostosis (Treacher Collins syndrome) Marked facial deformity in a 6 year old boy with typical antimongoloid obliquity of the palpebral fissures due to maxillary and zygomatic bony hypoplasia; micrognathia of the mandible; bilateral deformity of the pinnae with atresia of the external auditory meati; severe subnormality and a cleft of the secondary (posterior) palate. Sielastic implants have been inserted into the cheeks in an attempt to improve facial appearance.

2

2 Unilateral facial hypoplasia The soft tissues and bone on the left side of the face are markedly underdeveloped in this 13 year old girl. The cause is unknown and there is no family history. A generalised irregular microdontia of permanent teeth displaying enamel hypoplasia is associated with the facial deformity.

3, 4 Craniofacial dysostosis (Crouzon's syndrome) The malformations of the face and skull in this 3 year old girl are due to the premature fusion of the cranial sutures associated with maxillary hypoplasia. Bilateral proptosis, maxillary retrognathia and a beak nose are all typical features of this syndrome.

3



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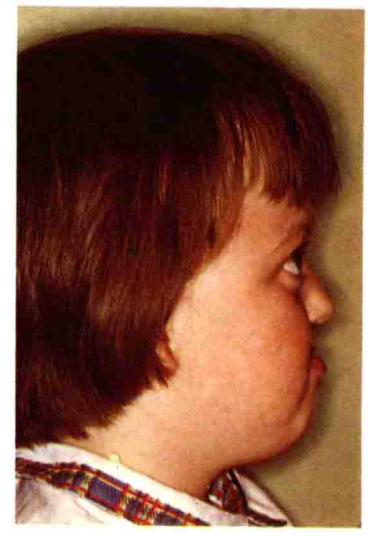
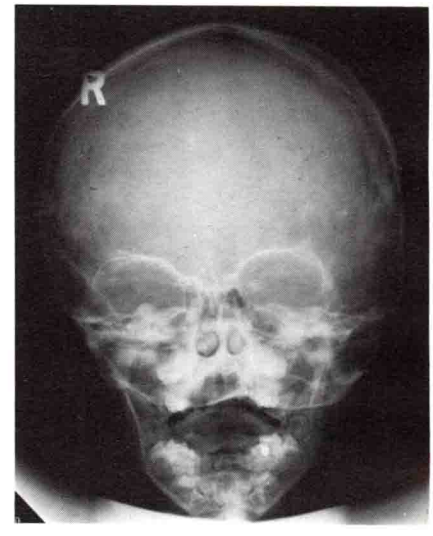


5, 6 Radiographs of the child seen in **3** and **4** show the characteristic premature synostosis of the coronal and sagittal sutures and the 'copper beaten' appearance of the calvarium due to the increased digital markings.

5



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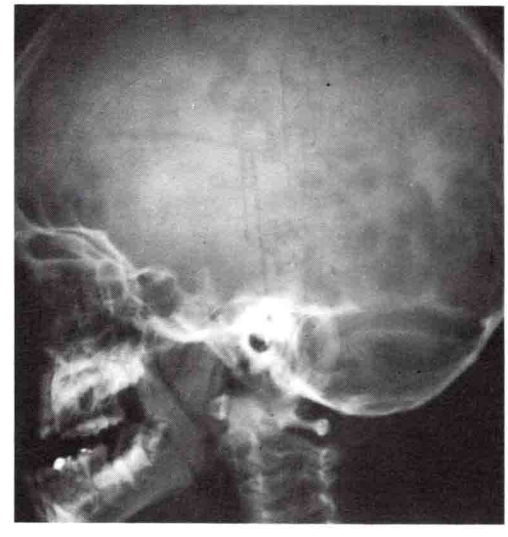
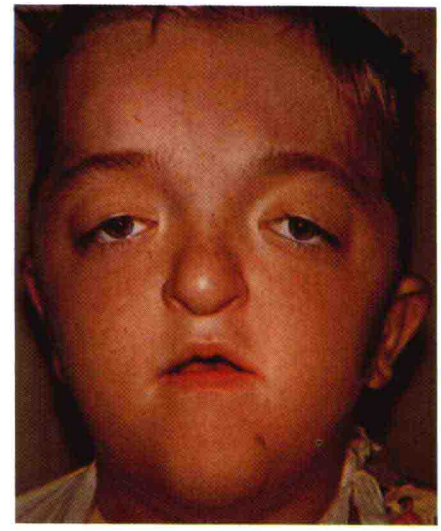


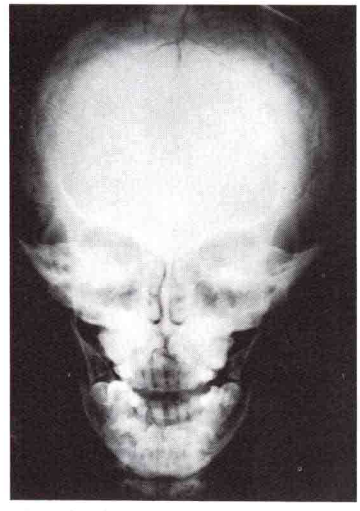
7 Acrocephalosyndactyly (Apert's syndrome) The characteristic facial appearance of Apert's syndrome is seen in this boy with a high towering forehead, small beak-like nose and a tendency to proptosis. Premature fusion of a number of cranial sutures, especially the coronal, and maxillary hypoplasia are also seen in this condition which is frequently associated with mental subnormality. (See **378** and **476**)

7



8, 9 Cleidocranial dysostosis Radiographs of 10 year old boy with cleidocranial dysostosis. Note retrognathic maxilla, persistence of many cranial sutures, numerous Wormian bones in the region of the lambdoidal suture, bitemporal bossing and multiple supernumerary teeth in the anterior portions of the maxilla and mandible. (See **79**)

8



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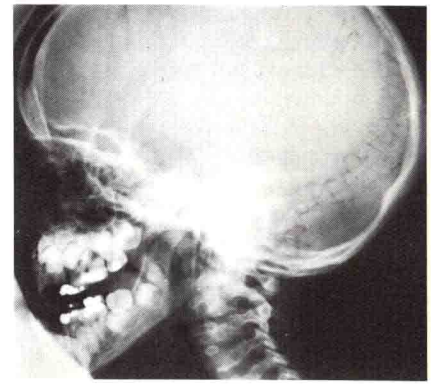
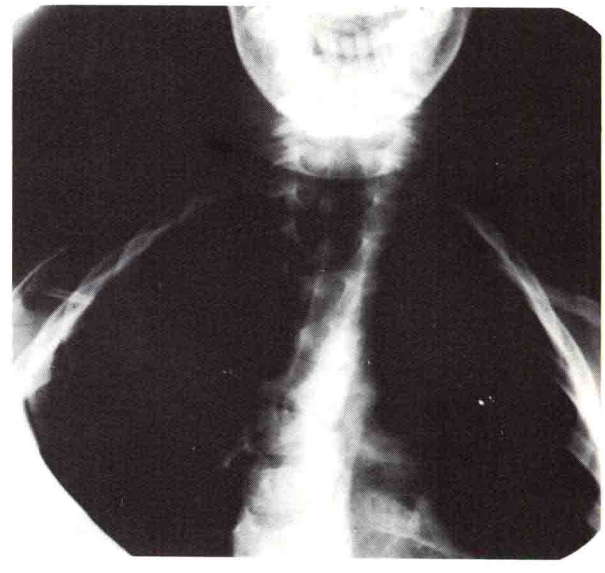


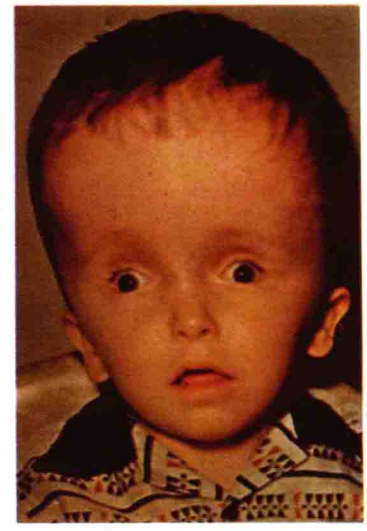
10 Almost total absence of clavicles can be seen in this chest radiograph of the case seen in **8** and **9**.

10



11 Hydrocephalus The abnormal accumulation of cerebro-spinal fluid intracranially at an early age led to the enlarged cranium in this 7 year old boy with hydrocephalus.

11

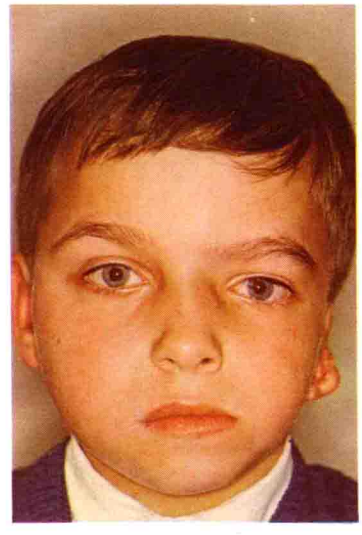


b. Face

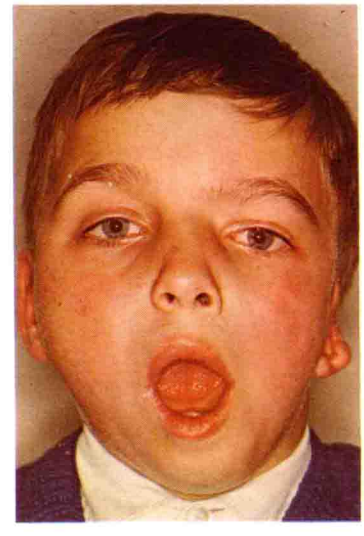
(i) General

12, 13 Hemifacial hypoplasia (First Arch syndrome) Structures developed from the first branchial arch are defective in this 8 year old boy. Such defects are manifested by hypoplasia of the left side of the mandible, the left maxilla and zygomatic bones, malformation of the left pinna (which has already undergone plastic surgery) and atresia of the external auditory meatus.

12

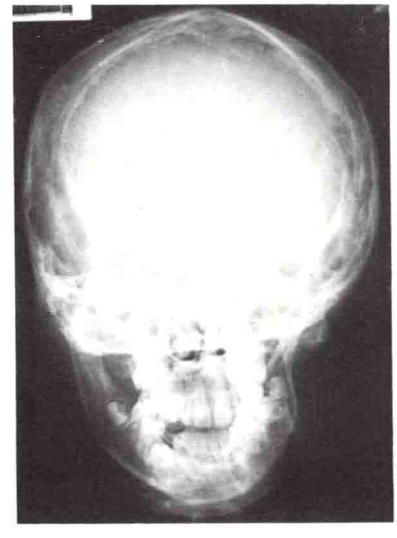


13



14 Radiograph of the child shown in **12** and **13**.

14



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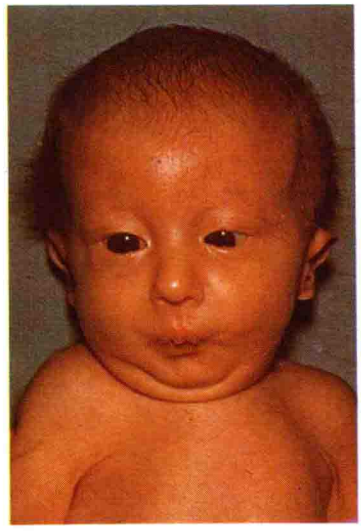

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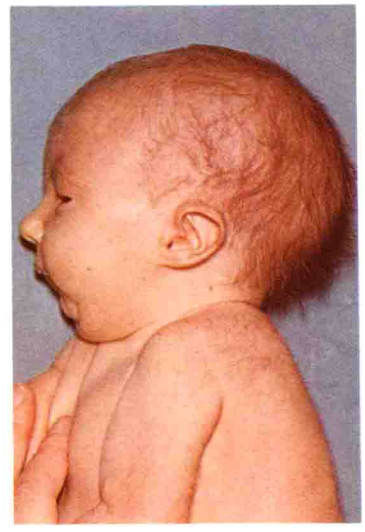
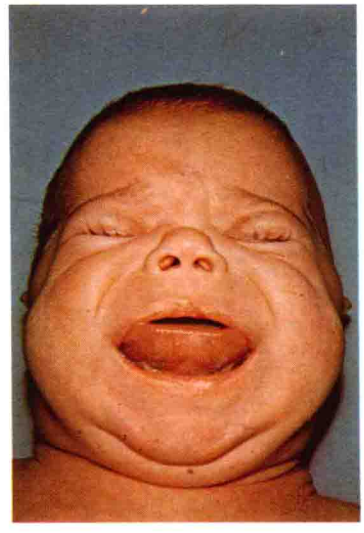


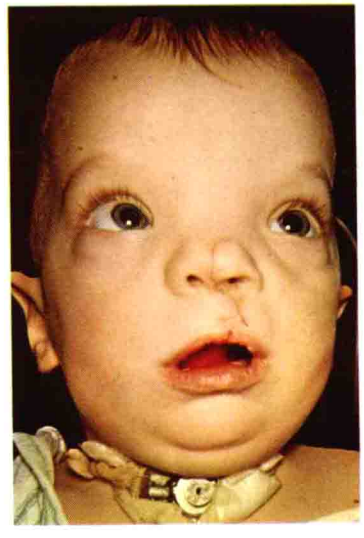
15, 16 Pierre Robin syndrome The severe mandibular micrognathia characteristic of the Pierre Robin syndrome is seen in this affected infant. The other manifestations of the condition are a cleft of the secondary (posterior) palate and glossoptosis.

17



17 Congenital hypothyroidism (Cretinism) This infant with cretinism or congenital hypothyroidism has the classical features of puffiness about the eyes, large protruding tongue and sparse dry hair.

18



18 Hypertelorism Hypertelorism, as seen in this infant, is characterised by an abnormally large distance between the pupils of the eyes and a flattening of the bridge of the nose. Mental retardation is more common in children with hypertelorism than in the normal population. The tracheostomy was required for postoperative complications after a repair of the cleft lip and palate.