## Pathogenesis and Morphogenesis of Craniofacial Developmental Anomalies

G H Sperber,\*MS, PhD, FICD

## Abstract

A condensed review of the morphogenetic mechanisms of facial fabrication, providing insights into developmental anomalies of clinical concern. Genetics, epigenetics and regulation of molecular, cellular, tissue and organ formation are being elucidated in normal and dysmorphological patterns. The pathogenesis of craniosynostosis is related to fibroblast growth factor expression. Analysis of a 28-month-old-child's dysmorphic synostotic skull explores possible mechanisms of malformation and deformation.

Ann Acad Med Singapore 1999; 28:708-13

Key words: Dysmorphology, Epigenesis, Genetics, Morphogenesis, Teratology

\* Professor

University of Alberta, Edmonton, Canada

Department of Dentistry, Faculty of Medicine and Dentistry

Address for Reprints: Professor G H Sperber, Department of Dentistry, Faculty of Medicine and Dentistry, University of Alberta, Edmonton,

AB T6G 2N8 Canada.

E-mail: gsperber@ualberta.ca.