
1987 YEAR BOOK OF

DENTISTRY®



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Acta Odontologica Scandinavica
American Journal of Epidemiology
American Journal of Orthodontics
Anesthesia Progress
Archives of Otolaryngology–Head and Neck Surgery
ASDC Journal of Dentistry for Children
Australian Dental Journal
British Dental Journal
British Journal of Orthodontics
British Journal of Radiology
Canadian Dental Association Journal
Canadian Medical Association Journal
Cancer
Clinical Preventive Dentistry
Clinical Radiology
Cleveland Clinic Quarterly
Community Dentistry and Oral Epidemiology
Compendium of Continuing Education in Dentistry
Danish Medical Bulletin
Endodontics and Dental Traumatology
European Journal of Orthodontics
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International Journal of Oral Surgery
International Journal of Periodontics and Restorative Dentistry
Journal of Advanced Nursing
Journal of the American Dental Association
Journal of the American Medical Association
Journal of Antimicrobial Chemotherapy
Journal de Biologie Buccale
Journal of Clinical Orthodontics
Journal of Clinical Periodontology
Journal of the Dental Association of South Africa
Journal of Dental Research
Journal of Endodontics
Journal of Maxillofacial Surgery
Journal of Neurology, Neurosurgery and Psychiatry
Journal of Oral and Maxillofacial Surgery
Journal of Oral Pathology
Journal of Oral Rehabilitation
Journal of Pedodontics
Journal of Periodontal Research
Journal of Periodontology
Journal of Prosthetic Dentistry
Laryngoscope
Nephron
New York State Dental Journal
Oral Surgery, Oral Medicine, Oral Pathology
Pediatric Dentistry
Plastic and Reconstructive Surgery

Proceedings of the Finnish Dental Society
Quintessence International Dental Digest
Radiology
Revue de Stomatologie et de Chirurgie Maxillo-Faciale
Scandinavian Journal of Dental Research
Special Care in Dentistry
Swedish Dental Journal

Introduction

The 1987 YEAR BOOK OF DENTISTRY reflects the many advances made in the dental field in the past year. The National Institutes of Health, industry, and private foundations continue to investigate basic and clinical dental problems and publish their findings in various U.S. and foreign journals.

From the more than 700 journals surveyed for this YEAR BOOK, the editors have selected articles that they believe to be of significance to the clinician—both the generalist and specialist alike. Most of the articles abstracted are followed by an editorial comment from one of the editors.

Diseases such as acquired immunodeficiency syndrome have changed the methods used to protect the dental team and patients. Treatment of dental caries and esthetics and function are being improved by new materials and techniques. Microbiology is becoming increasingly significant to the profession. Recent developments in implantology are encouraging for both patients and clinicians. More sophisticated techniques of diagnosis and treatment of malocclusions are being published and, in response, a chapter dedicated to temporomandibular disorders has been added to this edition.

On behalf of the YEAR BOOK OF DENTISTRY editors, I hope that this edition will be valuable to the clinician.

D. Walter Cohen, D.D.S

1 Craniofacial Growth and Development

Introduction

Research on the modes, methods, and control of craniofacial growth is one of the most active areas of all of oral biology. So much fine work is being done all over the world that it is difficult to select a few papers representative of current trends. Furthermore, research in this area has such import and impact on practicing orthodontics, it is essential for clinicians without access to this research literature to understand current thinking.

As we'll be seeing in subsequent articles, much attention is focused on the old "form and function" relationship. Included here are two articles indicative of newer directions in research. Stabrun, following the lead of Dibbets in The Netherlands, reports on craniofacial growth and rheumatoid arthritis. Smith, Garn, and Hunter examine secular trends in face size.

There was an unusual paucity of articles on occlusal development in the past year.

Robert E. Moyers, D.D.S., Ph.D.

Mandibular Growth Direction Following Adenoidectomy

S. Linder-Aronson, D. G. Woodside, and A. Lundström (Karolinska Inst., Stockholm, and Univ. of Toronto)

Am. J. Orthod. 89:273-284, April 1986

1-1

As increasing evidence indicates that environmental influences can alter facial structure, a study was undertaken to determine whether establishment of normal breathing in children with nasal obstruction affects mandibular growth direction (MGD). The relation between nasopharyngeal airway capacity and MGD in 38 Swedish children after adenoidectomy was compared with that in 37 controls matched for age and sex.

The experimental sample initially showed significantly longer lower face heights, steeper mandibular plane angles, and more retrognathic mandibles than the controls. During the 5 years after adenoidectomy, girls had significantly more horizontal MGD. A corresponding, but not significant, trend was found for boys (Fig 1-1).

Because of the unexpected difference between boys and girls, these data were compared with those from a similar, but larger, Canadian study. Findings in the Swedish and Canadian female controls corresponded well