

RECENT ADVANCES
IN CLINICAL
PERIODONTOLOGY

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PREFACE

In any of the civilized countries in both the Occident and the Orient, only one out of two or three individuals is totally edentulous with no natural tooth remaining in the mouth, while others have only a few remaining teeth, after the age of 60, which is a miserable situation. The loss of the teeth is equivalent to the loss of the eyes, the heart or the brain for animals living in nature, meaning they will no longer be able to survive.

To see what causes the loss of permanent teeth among modern man, periodontal diseases and tooth decay account for 50% and 35% of the causes, respectively, followed by trauma and tooth extraction for orthodontic treatment.

Thus, periodontal diseases are one of the two major diseases in dentistry, the other being dental caries.

Dental caries is a disease that destroys the tooth itself and which causes excruciating pain as the lesion progresses enough to affect the dental pulp. The disease is prevalent among young people.

In contrast, the bone supporting the tooth roots is gradually destroyed, which is difficult to see with the naked eyes because it progresses underneath the gums. If the disease advances, the tooth in the affected area becomes mobile, resulting in a diminished chewing ability and eventually the loss of the tooth. The disease is prevalent among adults.

Why do many people develop periodontal disease and lose their valuable teeth helplessly?

The first reason is that almost all of the periodontal diseases are diseases incidental to civilization. That is, since humans eat a large amount of cooked and processed soft food, a severe bacteriological environmental contamination occurs intraorally, which causes not only caries but chronic periodontitis.

The second reason is that periodontal diseases are silent diseases in most cases. In other words, periodontal diseases lack such subjective symptoms as the excruciating pain caused by caries. Furthermore, the destruction of the tissues supporting the teeth progresses extremely slow and silent. By the time one notices the presence of the disease, it may be too late to save the affected tooth.

The third reason is that the history of the prevention and treatment of periodontal diseases is still short, although the diseases are now preventable and treatable in civilized countries thanks to the efforts made by our predecessors and that not every corner of this planet has yet benefited from these efforts.

The International Academy of Periodontology was inaugurated in March, 1985 at a meeting held in Cambridge, England, with the participation of delegates from 13 countries, with a main objective of consolidating and enhancing the prevention and treatment of periodontal diseases which are inflicting significant damage to modern man together with dental caries.

The other objective of this Academy is to extend assistance to pioneers in develop-

ing countries who are struggling to realize periodontal education and improve clinical periodontology.

Dr. Steven I. Gold (U.S.A.), president of the society, and Drs. Jean Tecucianu (Fr.), Marcos Vechini and Marshall Midda (U.K.) and other staff members have been very active to achieve these objectives.

The second conference was held in Buenos Aires, Argentina, in November, 1986.

The third conference of the International Academy of Periodontology was held at the International Conference Hall in Kyoto, an ancient capital of Japan for 3 days from April 14 to 16, 1988 in conjunction with the Japanese Association of Periodontology with 1700 participants from 24 countries. The conference enjoyed very good reputation.

This book, 'Recent Advances in Clinical Periodontology' contains 4 lectures by researchers and clinicians who are engaged in the most advanced periodontal research and clinical activities and detailed contents of the 5 symposia, as well as over 130 presentations in general communication and poster sessions.

One of the 5 symposia was entitled 'The Origins of Traditional Oral Hygiene Procedures and Their Modern Development'.

Although brushing, which is an absolute necessity for the prevention and treatment of periodontal diseases, may appear to be a new concept, it has a very long history. People in the ancient era are said to have rubbed the teeth with ashes or salt placed on a finger or used a tooth brush made of a piece of a branch of a tree chewed and crushed. It is said that the origin of brushing almost coincided with that of agriculture. These cleaning methods traveled to various parts of the world with religions. In this sense, the presentations made by delegates from 10 countries including Japan, China, India, African countries and Mexico were extremely interesting not only dentally but also ethnically.

Two of the clinical symposia were 'Pros and Cons of Root Resection in Periodontal Practice of General Practitioners' and 'Prosthesis in Periodontal Therapy'.

The other clinical symposium was 'A Team Approach to Periodontal Treatment in General Dental Practice' in which both dentists and dental hygienists participated as symposiasts.

'Molecular and Cellular Biology of the Periodontium' was the only symposium in the field of basic sciences.

All of the special lectures dealt with basic clinical problems of periodontology.

A total of 132 presentations were made in the general communication and poster sessions under the categories of Diagnosis: Initial Preparation, Periodontal Surgery and New Materials, Case Presentation, Prosthesis in Periodontal Therapy, Periodontal Tissues and Periodontal Pathology, Regeneration and New Attachment, Immunology and Host Response and Microbiology.

Periodontal diseases, compared with dental caries, are easy to overlook due to their silent and slow behaviors, although they often do irreversible damage to modern man, especially adults. The final consequence is the loss of many natural teeth. One has to rely on artificial teeth after he becomes edentulous. It is necessary for dedicated experts to exchange ideas and opinions, encourage each other and strengthen solidarity in order to establish and disseminate efficient methods of preventing and treating periodontal diseases.

This book will be presented to the world with a belief and a hope that it will help achieve these objectives.

Jun Ishikawa, D.D.S., D.M., D.M.Sc.

President,

3rd Meeting of International Academy of Periodontology

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