Session A
Systemic Health and Destructive Periodontal Diseases

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The group accepted the report following a few amendments. The term 'destructive periodontal diseases' was used throughout the session to differentiate the clinical situation from diseases such as gingivitis.

The group recognized that dental hygienists have a profound role as oral health promoters and educators. The focus arising in relation to the possible associations between destructive periodontal diseases and a number of systemic diseases and conditions, incorporated thoroughly into the dental hygienists' curricula, could expand the preventive work into the area of general health. Dental hygienists have the advantage of meeting the patients often and on a regular basis, which allows dental hygienists to play an important role in improving both oral health and quality of life of their patients.

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Scope and Questions

1. WHAT IS THE RATIONALE AND PRIORITY FOR CONSIDERING SYSTEMIC DISEASES AND CONDITIONS IN THE DENTAL HYGIENE CURRICULUM?

The following facts have been emphasized:

- Systemic diseases may affect examination, treatment planning, course and outcome of therapy of oral diseases
- Cross-infection should be prevented
- Diseases that the patient is unaware of may be recognized by the dental hygienist.

This knowledge is fundamental to the practice of dental hygiene and to patient welfare and must be an essential part of the curriculum.

2. WHAT ARE THE SYSTEMIC DISEASES MOST LIKELY AFFECTED BY DESTRUCTIVE PERIODONTAL DISEASES?

Although the evidence is scarce, a possibility exists that destructive periodontal diseases may affect systemic diseases. The order of probability at present would be:

- Aspiration pneumonia
- Cardiovascular diseases
- Diabetes.

3. WHAT ARE THE SYSTEMIC DISEASES AND CONDITIONS AFFECTING THE PATHOGENESIS OF DESTRUCTIVE PERIODONTAL DISEASES?

At present there is scientific evidence that the pathogenesis of destructive periodontal diseases may be affected by a number of systemic diseases and conditions.

Systemic diseases:

- Diabetes
- Neutropenia
- Leukemia
- HIV.

Genetic disorders:

- Familiar cyclic neutropenia
- Down syndrome
- Chèdiak-Higashi syndrome
- Papillon-Lefèvre syndrome
- Ehlers-Danlos syndrome
- Leukocyte adhesion deficiency syndrome (LDS)
- Glycogenic disorders
- Hypophosphatasia.

Conditions:

- Emotional disorders
- Pregnancy.

4. HOW IS THE KNOWLEDGE OF THESE INTERACTIONS IMPLEMENTED IN PRACTICE BY DENTAL HYGIENISTS?

The knowledge of these interactions is implemented in every day clinical practice by:

- Updating medical history at each visit
- Appropriate intra and extraoral examination
- Adapting individual treatment planning accordingly
- Executing the defined prevention and treatment plan
- Effecting the maintenance therapy.

NOTE: At each stage, communication with the dentist and/or other healthcare professionals may be necessary.

5. WHICH CONDITIONS NECESSITATE THE INTERACTION WITH THE DENTIST AND/OR THE MEDICAL PROFESSION?

It is beyond the scope of this workshop to identify every situation in which the dental hygienist needs to consult either the dentist or other health professionals. However, such consultations would be needed in all clinical situations going beyond the dental hygienist's responsibility, e.g. patients in need of pre-medication and/or patients on medication which may affect examination and/or treatment.

6. WHAT SHOULD DENTAL HYGIENISTS' CURRICULA INCLUDE IN TERMS OF SYSTEMIC DISEASES AND CONDITIONS?

A variety of delivery methods exist in the different teaching establishments including lectures, seminars, tutorials, case presentations and problem-based learning. It is essential to consider that the oral cavity is an integrated part of the body and that oral and general diseases have interactions. Therefore, appropriate time should be devoted to covering areas relevant to the subject matter, including:

- Systemic diseases, e.g. diabetes, respiratory diseases, cardiovascular diseases, osteoporosis and blood disorders
- Infectious diseases, e.g. HIV and hepatitis
- Auto-immune diseases, e.g. lichen planus and pemphigus
- Malignancies, e.g. carcinoma and leukemia
- Genetic disorders, e.g. Down syndrome and leukocyte adhesion deficiency syndrome (LDS)
- Systemic conditions, e.g. pregnancy and bulimia
- Emotional disorders, e.g. anxiety and depression.

For an appropriate understanding of the above mentioned systemic diseases and conditions, adequate time should be devoted to covering these areas within the relevant modules both theoretically and clinically, such as general and oral pathology, microbiology, immunology and pharmacology.