

Classification of Periodontal Diseases in Children and Adolescents

Japanese Society of Pediatric Dentistry (2021)

Periodontal diseases in children and adolescents show significant clinical differences as compared to those occurring in adults. Plaque-induced gingivitis, known as filth gingivitis, is found in most child and adolescent cases, and pubertal gingivitis related to sex hormones can generally be identified. Furthermore, most periodontitis cases are associated with systemic diseases in spite of rare levels of incidence.

Tooth eruption is the most characterized oral event in children and replacement of primary teeth with permanent teeth is another important aspect to be considered. In addition, apparently different periodontal pocket conditions in cases with primary, mixed, and permanent dentition should be considered. Furthermore, inappropriate individual oral management is a matter of concern, though it should be noted that the intensity of individual independence increases with age.

Based on these background factors, the following “Classification of Periodontal Diseases in Children and Adolescents” has been produced for daily clinical practice under the supervision of pediatric dentistry specialists.

I. Gingival lesions

1. Plaque-induced gingivitis

1) Gingivitis induced by dental plaque

2) Gingivitis induced by systemic factors

Related to adolescence, menstrual cycle, pregnancy, diabetes, and leukemia

3) Gingivitis induced by malnutrition

4) Eruption gingivitis

2. Non-plaque-induced gingivitis

Related to bacteria without production of plaque, such as membrane or skin diseases, allergic reaction, traumatic lesion, or mouth breathing

3. Gingival overgrowth

Related to medicine and hereditary

4. Necrotizing ulcerative gingivitis

5. Gingival abscess

Related to dental caries, periodontal diseases, and hypoplastic teeth (X-linked hypophosphatemic rickets)

6. Gingival recession

Related to traumatic injury, mechanical stimulation, and foreign bodies

II. Periodontal lesions

1. Periodontal lesions associated with systemic diseases

1) Chronic periodontitis with systemic diseases

Hereditary background: familial periodic neutropenia, Down syndrome, leukocyte adhesion deficiency syndrome, Papillon-Lefèvre syndrome, Chédiak-Higashi syndrome, Histiocytosis syndrome, others

Non-hereditary background: leukemia, diabetes, osteoporosis, AIDS, others

2) Non-inflammatory periodontal lesions associated with systemic diseases

Hypophosphatasia

2. Periodontal lesions associated with non-systemic diseases

1) Aggressive periodontitis

2) Necrotizing ulcerative periodontitis

3) Periodontal abscess

III. Combined endodontic-periodontic lesions