

ORAL Health and mangment of children with systemic Disease.

**Down syndrom:

- is chromosomal disorder, trisomy 21 (47 chromosome, instead of 46)
- **general manifestation:**
 1. mental Retardation
 2. chronic infection
 3. Dry skin
 4. Cardiac Disease
 5. Leukemia
 6. Visual and auditory proplem
 7. Compromised Immune System.
- **cranifacial characteristic:**
 1. Brachycephaly
 2. under-developed mid face
 3. up-slanting eye
 4. small ears
- **Dental features:**
 1. tongue is large, protruding and heavily fissured
 2. small maxilla + high palate
 3. class III malocclusion
 4. cleft lip and palate
 5. Delayed eruption and doesn't follow the normal sequance
 6. congenitally missing teeth
 7. microdont / hypoplastic.
 8. Increased Risk for periodontal disease.

- Consideration for dental treatment:
 - 1) Access to

- the Low caries prevalence can be attributed, why?

- ① higher salivary pH
- ② higher salivary bicarbonate levels
- ③ Low streptococcus mutans count
- ④ microdontia, hypodontia
- ⑤ spaced dentition
- ⑥ delayed eruption
- ⑦ shallow fissures in premolar and molars

- several Dietary habits can lead to rapid caries progression:

- 1- Given a nursing bottle
- 2- Given less parental help with ORAL hygiene
- 3- Given Syrup-based ~~medication~~ medicines for repeated Respiratory tract infection.

- Malocclusion:

- posterior and anterior crossbites
- Anterior open bite and Incisal class III

- Down Syndrome - Management:

- ① early contact with the dental team as early as 6 month but no later than 18 month of age.
- ② Regular
- ③ Developing a preventive program.

- ④ Oral hygiene instruction
- ⑤ Advise regarding the use of antimicrobial agent
- ⑥ Appropriate dietary management
- ⑦ use of sugar free medication when possible

** Autistic Spectrum Disorder (ASD)

- characterized by abnormal emotional and social behavior and linguistic development
- males more commonly affected
- usually diagnosed before 3 years of age.
- **Diagnostic criteria:**
 - ① Restricted stereotypical behavior
 - ② Qualitative impairments in social interaction and communication.
- **Several factors may increase caries risk:**
 - soft and sweet food preference
 - poorer masticatory abilities
 - food pouching.
- **Challenges to dental team:**
 - Reduced ability to communicate
 - uneven intellectual development
 - repetitive body movements
 - Hyperactivity and limited attention span.
 - tactile and auditory hypersensitivity
 - Self-Injuries behavior.
- **management:**
 - communicative behavior management
 - Desensitization
 - Gradual and slow exposure to the dental environment

** Attention Deficit Hyperactivity Disorder

- neurodevelopment disorder characterized by definite behavioral pattern that might impair the affected individuals' performance in the social, educational, or work environment.
- **characteristics:**
 - Inappropriate levels of inattention.
 - Hyperactivity
 - Inability to pay attention
 - Inability to remain sitting,
- **etiology:**
 - Maternal mental disorder
 - Violence, Stress, ~~sm~~ smoking and drinking alcohol in the prenatal period,
 - premature Birth,
- High Levels of Hyperactivity - Inattention symptoms were found to be possible risk factor for ADHD diagnosis in the investigated 10 years old.
- **Dental consideration:**
 - Difficult to treat in the dental clinic
 - Continued movement
 - Behavioral management technique
 - Nitrous oxide sedation, GA

** Congenital Heart Disease

- A defect in structure of Heart or vessels that present at birth
- Increased risk of developing ORAL disease.
- Increased Risk of Systemic effect of ORAL Disease. [Infective endocarditis]
- **Dental management:**
 - Always consult the family medical practitioner
 - prevention
 - Definitive treatment is preferable to temporary
 - poor prognosis of FPMs

** Asthma

- Reduced salivary flow
- Increased caries Risk
- Gingivitis
- Erosion
- Candida
- Orofacial abnormalities \Rightarrow including:
Increased facial height, higher palatal vault, greater OJ, higher prevalence of crossbite
 \Rightarrow due to mouth breathing \rightarrow tongue become in lower position \rightarrow over eruption of posterior teeth