

ANTICIPATORY GUIDANCE IN PEDIATRIC DENTISTRY



Anticipatory Guidance is defined as proactive counselling of parents and patients by their Pediatrician and Pediatric Dentist, about developmental changes that will occur in the interval between health supervision visits (*that includes information about daily caretaking specific to that upcoming interval*). It is the process of providing practical developmentally appropriate information on children's health to prepare parents for significant physical, emotional and psychological milestones. It provides a framework for prevention that goes beyond Dental Caries to address all aspects of children's oral health.

Individualised discussion and counselling are an integral part of each visit and parents are generally counselled on topics such as oral hygiene maintenance and its importance, dietary habits, development of oral tissues, fluoride needs, non – nutritive habits, use of antimicrobials and medications on oral health, speech and language development, injury prevention, tobacco abuse, substance abuse, and intraoral and perioral piercing. All of these factors have the potential not only to affect the physical health but can also affect the emotional health and psychological well-being of the child. Henceforth, Anticipatory Guidance needs to start from the prenatal period itself as the health status of the mother significantly affects the child.

Prenatal Counselling

Maternal oral health and caries status adversely affects infant's oral health as Vertical Transmission of Mutans Streptococci has been well documented and the condition so caused is also aptly named as "**Maternally Derived Streptococcus Mutans Disease.**" Studies have revealed a reduction in the caries activity in children whose mothers used xylitol products during pregnancy. Expectant mothers should take the necessary professional oro-dental advice during their pregnancy to ensure optimal oral health for the infant.

Preterm infants and infants with very low birth weight experience a higher incidence of enamel (tooth) defects and enamel hypoplasia, making them at a higher risk of developing caries eventually.

Peri Natal Oral Health & Oral Hygiene

Parents should be instructed to start wiping the baby's mouth with a soft cloth or finger along the baby's upper and lower gums twice a day before teething is initiated. With the onset of teething, brushing with an extra soft toothbrush and a smear of non-fluoridated toothpaste should be started. Parents should also be advised against sharing of utensils and cups with their babies to reduce the spread of bacteria (Horizontal Transmission of Mutans Streptococci bacteria).

Diet, Nutrition And Food Choices

Caries conducive dietary practices appear to be established early by 12 months of age. The Parents / caregivers should be intimated against putting baby to bed with a bottle. The ill effects of Ad Libitum breast feeding are also to be intimated. Children should be encouraged to use the cup as early as possible (by 1 year of age).

Parents should be educated that the ***frequency of sugar exposures is more detrimental to oral health rather than the amount of sugar***. Prolonged bottle feeding with sugar containing drinks and frequent between meal consumption of sugar containing snacks or drinks (juice, formula, soda) should be thoroughly discouraged. Acids in carbonated beverages can have a deleterious effect on tooth enamel causing erosion. Emphasis should also be placed on importance of balanced diet for children. Parents and patients should also be educated about the complications of Eating Disorders in young adolescents such as Bulimia and Anorexia Nervosa which are psychosomatic in nature, result in cervical erosion of the teeth.

Non-Nutritive Habits

Non – Nutritive oral habits and pacifier habits may apply forces to teeth and dento alveolar structures. Although the use of pacifiers and digit sucking are considered normal (till 3 years), habits of sufficient intensity, duration and frequency can contribute to deleterious changes in occlusion and facial development. It becomes important to discuss the need to wean from such habits as early as possible (by 3 years of age).

Speech And Language Development

Speech and language are integral components of child's early development. Deficiencies and abnormal delays in speech and language production should be recognised early and appropriate referral made to address these concerns. Communication and Co-ordination of dental appliance therapy with a speech and language professional can assist in timely treatment of speech disorders.

Antimicrobials, Medications And Oral Health

Presence of sucrose and/or other fermentable carbohydrates in the formulation of pediatric medicines and the low pH values contribute to the cariogenic potential of these drugs. One of the most common practices observed is the tendency to add sugar to the medicine to make the taste more acceptable thus contributing to the cariogenic potential of the drug. Patients with Respiratory and Renal diseases are at a greater risk of caries development.

The use of sugar products (syrups, expectorants antibiotics in solution, tonics, and homeopathic products) and those medications which can reduce the salivary flow (antihistamines, benzodiazepines, appetite suppressants (used mainly by adolescents), antiparkinsonian drugs, muscle relaxants, hypotensive drugs and diuretics make the child more susceptible to dental caries as they need to be administered for potentially longer duration of time period. When these medications are given at night, the salivary flow is less with reduced reflexes of swallowing and muscle movement, thus ensuring the retention of carbohydrate intraorally for a greater duration.

Parents and caregivers should be informed that medicines containing sweeteners can cause tooth decay (medicine caries) and that the baby's mouth is to be wiped with a soft damp washcloth or should brush the child's teeth after administering medicines.

Conclusion

Applying Anticipatory Guidance to dental preventive education is an organised way for all Pediatricians and Pediatric Dentists to enjoy the attention of parents and be more successful in preventing children's oral health ailments. Early dental intervention using Anticipatory Guidance may be the next frontier in dental caries reduction.