

THE ROLE OF ORAL HYGIENE IN THE PREVENTION OF DENTAL DISEASES**Ahadova Shahrizoda Behzod qizi**

Kokand University, Andijan Branch,

Faculty of Medicine, Dentistry Department

Scientific supervisor: **Xasanov Mirzolim Ilyosbek og‘li**

e-mail: mirzaolimkhasanov@gmail.com

Abstract: This article highlights the importance of oral hygiene in maintaining human health and its role in preventing dental diseases. The study analyzes how observing oral hygiene affects the development of dental calculus, caries, gingivitis, and other dental diseases. The article also discusses proper methods of dental care, criteria for selecting oral care products, the importance of a healthy diet, and the preventive role of regular dental check-ups.

Keywords: oral hygiene, dental diseases, prevention, dentistry, healthy lifestyle, care, caries, antiseptic, gingivitis.

Introduction

Human health is a complex process influenced by many factors. It does not depend solely on the condition of vital organs such as the heart or lungs, but also on the health of the oral cavity, teeth, and gums, which directly affect overall well-being. Today, the field of dentistry demonstrates that paying attention to oral hygiene can prevent numerous diseases. The oral cavity serves as the “gateway” to the human body, allowing food, air, and many microorganisms to enter. Maintaining oral hygiene not only prevents dental diseases but also helps reduce complications related to cardiovascular, digestive, and even endocrine system disorders. Thus, maintaining oral hygiene is not just a daily habit, but an essential part of a healthy lifestyle. In this article, we will discuss the concept of oral hygiene, its role in the development of dental diseases, preventive measures, modern tools, and its impact on general health.

1. The concept of oral hygiene and its main principles

Oral hygiene refers to a set of measures aimed at keeping the teeth, gums, tongue, and entire oral cavity clean, reducing microbial growth, strengthening tissues, and preventing various diseases.

The main hygienic principles include:

- Brushing teeth regularly — at least twice a day using proper technique.
- Cleaning between teeth — with dental floss or interdental brushes.
- Tongue hygiene — reducing bacterial growth on the tongue’s surface.
- Rinsing the mouth — using antiseptic mouthwashes.

Regular dental check-ups — visiting a dentist at least once every six months.

If these simple habits are maintained regularly, most dental and gum diseases can be stopped at an early stage or even prevented entirely.

2. Dental caries and oral hygiene

Dental caries is the most common dental disease worldwide. According to the World Health Organization (WHO), the global prevalence of dental caries is 80–90%. It mainly occurs due to bacterial activity, food debris, and the effects of sugar, which lead to the demineralization of tooth enamel.

The process of caries development occurs as follows:

- Carbohydrates in food are broken down by bacteria.
- Organic acids are produced during this process.
- These acids begin to dissolve the enamel, leading to mineral loss.
- White spots appear on the enamel, later developing into cavities.

Proper oral hygiene can stop this process at its early stage, allowing enamel to remineralize. Fluoride-containing toothpaste also plays a crucial role in this recovery.

3. Gum diseases and the role of hygiene

Gingivitis (gum inflammation) and periodontitis (deep inflammation of the gum and surrounding tissues) are the main causes of tooth loss.

When oral hygiene is neglected, bacterial plaque accumulates around the teeth. Over time, this plaque hardens and forms “tartar.” As a result, the gums become red, swollen, and bleed easily. If left untreated, periodontitis develops, causing teeth to loosen and fall out. Studies show that regular oral hygiene practices can reduce the risk of gingivitis by 40–60%.

4. Modern oral hygiene tools

Today, dentistry offers various tools in addition to simple toothbrushing:

Electric toothbrushes — remove 15–20% more bacterial plaque than manual brushes.

Fluoride toothpastes — strengthen enamel and prevent caries.

Mouth rinses — containing chlorhexidine, fluoride, menthol, and other ingredients provide antibacterial effects.

Dental floss — effectively cleans food debris from between the teeth.

Tongue cleaners — reduce bacterial accumulation on the tongue’s surface.

5. The link between nutrition and oral hygiene

A healthy diet is an integral part of oral hygiene. Sugar, carbonated drinks, and fast food contribute to enamel erosion, while dairy products, vegetables, and hard fruits strengthen enamel and massage the gums. Drinking sufficient water helps neutralize the acidic environment in the mouth.

6. Oral hygiene and overall health

Numerous studies show that poor oral hygiene contributes not only to dental problems but also to systemic diseases:

Cardiovascular system: Gum disease increases the risk of ischemic heart disease.

Diabetes: Periodontitis worsens diabetic complications.

Digestive system: Improperly chewed food causes gastrointestinal problems.

Pregnancy: Gum disease increases the risk of premature birth.

7. Current situation in Uzbekistan

In Uzbekistan, public awareness of oral hygiene remains insufficient. Research indicates that more than half of schoolchildren brush their teeth incorrectly, and many fail to follow daily hygiene rules. Therefore, enhancing dental prevention and public education programs is a pressing issue.

Conclusion

In conclusion, oral hygiene is a simple yet highly effective preventive measure. It plays an important role not only in preventing caries and gingivitis but also in reducing the risk of many systemic diseases. Regular and proper brushing, using dental floss and mouth rinses, maintaining a healthy diet, and attending regular dental check-ups are the key to strong teeth and lasting health. Thus, oral hygiene should be regarded not only as a means of maintaining a beautiful smile but also as a vital component of overall health.

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