



## Connection between Oral Health and General Health

### Lalrotlingi Sinate\*

Associate Dentist, Department of Dentistry, Zion Clinic, India

\*Corresponding Author: Lalrotlingi Sinate, Associate Dentist, Department of Dentistry, Zion Clinic, India.

Received: April 4, 2019; Published: April 12, 2019

### Introduction

The oral cavity is the first part of the digestive tract. It contains the mouth, teeth, gums, soft and hard palate, floor of the mouth and buccal mucosa. Maintaining the oral health indicates that the body is healthy. The mouth or the oral cavity is a window into the health of the body. It can show signs of nutritional deficiencies or general infection. Systemic diseases that affect the entire general health may show signs of infection in the mouth such as gingival inflammation or bleeding, mobility of teeth, mouth ulcers, halitosis and caries.

The connection of the mouth-body relation is essential in maintaining every stages of life. Taking good care of the mouth, teeth and gums help prevent bad breath, caries and periodontal disease. The mouth contains many bacteria but most of them are harmless. Periodontal disease have been associated with a number of systemic infections. Bacteria from the mouth can cause infection in other parts of the body when the immune system has been compromised by disease or medical treatments. Studies also suggest that oral bacteria and inflammation associated with periodontitis play a role in some diseases.

The food and drinks we consume to nourish our body and our eating habits have an important influence on our health and well-being. A good diet provides the body with appropriate quantity and quality of nutrients it requires to sustain health. Maintaining the oral health is a key indicator over health, well-being and quality of life.

### Definition of oral health

- The WHO [1] defined oral health as the retention throughout life of a functional esthetic and natural definition of not less than 20 teeth and not requiring a prosthesis.
- WHO defines oral health as a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal disease, tooth decay, tooth loss and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking and psychological well beings.

### Definition of health

- According to WHO, "Health is a state of complete physical, mental and social well being and not merely the absence of infirmity".

### Conditions that linked oral health and general health

- Oral health conditions have an impact on overall health and diseases. Normally, with proper oral health care by brushing, flossing and using of mouthwash can keep the bacteria under control. Without proper care of the oral hygiene, the bacteria can reach levels that may lead to oral infections such as periodontal disease, tooth decay, mouth ulcers, mobility or loosening of teeth. Poor oral health can cause these serious health consequences.

Heart disease- Researchers have found that long term periodontitis, an infection of the gums, can lead to coronary heart disease/ atherogenesis, a condition in which plaque forms in arteries. Poor oral health increases the risk of a bacterial infection in the blood stream, which can affect the heart valve. In fact, people with periodontal disease are nearly twice at risk for heart disease.

Stroke- Missing of some or all of the teeth, or have significant amounts of bone and tissue around the teeth may lead to increased risk of stroke. There is evidence that severe periodontitis is also a risk for developing atherosclerotic plaques, which can cause strokes and heart attacks.

Diabetes- Studies have found that the periodontal disease somehow affects the body metabolism and can contribute to the development of pre-diabetes. On the other side, people who have Type 2 diabetes and get treatment for periodontitis may experience reduced levels of oxidative stress. Severe periodontal disease can increase blood sugar levels. This puts diabetics at increased risk for diabetic complications.

Pregnancy complications- Pregnant women may be more prone to cavities and morning sickness can increased the acid in the mouth wearing off the enamel layer. Some pregnant women may have a condition of pregnant gingivitis, an inflammation of the

gums and swelling. Periodontal disease can increased the risk of delivering a pre-term baby with a low birth weight.

Kidney disease- Poor oral health also links to chronic kidney disease, which affects blood pressure and bone health and can lead to kidney failure . People with kidney disease have weakened immune systems and they are more susceptible to infections. Calcium imbalance contributes to loss of calcium from the bones which results in weakening of the bones. Bone loss in the jaw can occur due to weak bones.

Anaemia- Due to reduced number of red blood cells ,the colour of the gingiva may be pale or whiter than the normal colour (coral pink). There may be pain in the tongue, redness and swollen tongue.

Osteoporosis- Osteoporosis is a condition in which the bones become less dense and more likely to fracture. Research suggests a link between osteoporosis and bone loss in the jaw. The bone in the jaw supports and anchors the teeth but when the bones in the jaw becomes less dense, there may be loosening of teeth and the jaw bones become fragile and more prone to fracture of the jaw.

Obesity- Overeating or excessive intake of nutrients leads to obesity. Being overweight and obese increased the risk of chronic heart disease, stroke and Type 2 diabetes. People who are obese may lbe more ikely to have dental problems than non-obese

Pneumonia- It is an infection of the lungs that can cause mild to severe illness in the people of all ages. Poor oral hygiene may increased the bacteria in the mouth and cause periodontal disease and tooth decay.

Hepatitis - Periodontal disease, bleeding of gingiva and loosening of teeth are associated with risk of hepatitis. (Patient with hepatitis B reported loosening of teeth and gingival recession and bone loss in the upper and lower anterior region).

HIV- Poor absorption of HIV medication may be more susceptible to their disease progression. HIV medications have side effects such as dry mouth, periodontal disease, tooth decay and fungal infections. (Patient with HIV under medication reported with continuous bleeding on the posterior region and Grade III mobility of lower posterior teeth).

Severe Aplastic Anaemia and Typhlitis- Severe aplastic anaemia is a disease in which the bone marrow does not make enough blood cells for the body. Typhlitis is the inflammation of a part of the large intestine known as the cecum. (Patient reported with continuous bleeding of the gums and mouth ulcers for 2 months before the

diagnosis of this disease, patient was sent for CBC and referred to haematologist).

Mental health problem- Studies have now shown a strong relationship between periodontal disease and many mental health problems including stress, depression, distress, anxiety and loneliness [2,3].

### Conclusion

A healthy mouth enables not only nutrition of the physical body but also enhance social interaction and promotes self esteem and the feelings of the well-being. The oral cavity/mouth and body are linked to each other. Taking care of the oral cavity by brushing the teeth twice daily, regular flossing and regular dental check ups will keep the bacteria away and have a healthy life.

### Bibliography

1. WHO (1982)
2. Peter Soben, Arya (Medi) Publishing House (P 2 & 23)
3. WHO

**Volume 3 Issue 5 May 2019**

**© All rights are reserved by Lalrotlingi Sinate.**