

# **Gum Disease. What is its impact in our lives?**

Gum disease can affect our medical condition or health and vice versa. Let's look at how various medical conditions and medication can affect the gums and oral condition. This has become more relevant in this present age as people have longer life expectancies but may be on long-term medication to treat illnesses such as diabetes, high blood pressure, cancer or osteoporosis.

## **Diabetes**

Diabetes and periodontal disease have one thing in common. Both are chronic (long-term) diseases that can never be cured but can be well controlled or maintained.

People with diabetes are more likely to have periodontal disease than people without diabetes. Periodontal disease is often considered the sixth complication of diabetes. Those people who don't have their diabetes under control are especially at risk. They also heal slower with periodontal (gum) treatment.

Diabetics, who are under optimal control, have HbA1c readings which are consistently less than 7 %. Well-controlled diabetics respond better to periodontal treatment and are less likely to lose teeth compared to poorly-controlled diabetics.

There is also some research to suggest that the relationship between periodontal disease and diabetes goes both ways - periodontal disease may make it more difficult for people who have diabetes to control their blood sugar.

## **Heart Conditions and High Blood Pressure**

There has been some research to show an association between gum disease and heart attacks. This means that the people who had a cardiac attack are more likely to also have periodontal disease. Whether this is just an association or there is a direct link still remains to be seen or proven.

More importantly though, people with cardiac problems are often on anti-coagulants and that makes dental treatment complicated. Hence, if the patient had not been maintaining his teeth and gums professionally before the cardiac event, he will run into many dental problems thereafter that further complicates his cardiac care.

A particular medication for high blood pressure, nifedipine, has also a side effect of producing gum hypertrophy (enlargement) usually in patients who already have gum disease.

## **Medications and the oral condition**

### Hypertrophic (overgrowth) gums.

Nifedipine is not the only medication that can produce enlargement of the gums. Cyclosporin, which is used in *transplant* cases eg kidney transplant patients and Dilantin, an epilepsy medication, can cause a similar condition. This in turn makes it difficult for the patient to keep his gums and teeth clean and increases his risk of periodontal (gum ) disease.



This condition can be treated successfully by the Periodontist to give a normal looking appearance again. Good follow ups and maintenance on a regular basis can keep this condition under control.

### Bisphosphonates eg Fosamax and Zometa

Fosamax is a commonly used medication to treat osteoporosis especially in the post-menopausal woman. Other bisphosphonates are used to treat certain cancers and bone conditions eg Zometa. For those patients on bisphosphonates such as Fosamax, there is a small risk of contracting osteonecrosis (destruction of the jaw bone) whenever an extraction or oral surgery has to be done. However, this risk increases after 3 years of continuous usage. Those on intravenous bisphosphonates such as Zometa have a 1-12% risk of contracting osteonecrosis spontaneously. This means that if a patient on these medications need to get an extraction due to gum disease or decay, the socket that remains may never heal and destruction of the jaw bone may follow.

These patients are often sent by their doctors before the commencement of the medications for a dental clearance. Imagine if the patient had untreated gum disease, the dentist or Periodontist would have had no time to get it treated before the commencement of the medication especially if the medication is for cancer treatment. This is because gum treatment usually takes a minimum of 2 months to treat. Hence, the patients end up with many extractions instead just so that they have an infection-free mouth to start on the bisphosphonates as soon as possible. This can be avoided if everyone ensures that their gums are in a healthy state at any time in their lives.

These patients on bisphosphonates should also be under close supervision by their dentists or Periodontist for the rest of their lives as osteonecrosis can occur spontaneously. The treatment for osteonecrosis has not been predictably successful to date.

### Radiotherapy in the head and neck region

Those patients who have gone through radiotherapy for cancers in the head and neck region, the most common being nasopharyngeal cancer, suffer from lack of saliva flow after the therapy. This leads to a dry mouth, ulcers, burning gums and an increased risk to decay and gum disease. They also run a similar risk to osteonecrosis.

Various prescription and over the counter creams, mouthwashes and ointments can help alleviate all these conditions. Such patients should seek dental clearance and treatment before and after radiotherapy to avoid long term dental problems which become major and decrease the risk of osteonecrosis.

### **Conclusion**

There is no reason why someone who has gum disease should be suffering. There is treatment available and results are always better when detected and treated early.

You can turn your gum health around from looking like picture (a) to picture (b) and have teeth for life.



(a) Reddish gums at the junction between the teeth and the gums.

Note the black deposits (tartar) between the teeth.



(b) Pink and healthy gums