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Advice sheet for patients with periodontal disease

Periodontal disease causes the loss of more teeth in adults than all other dental ailments together. Before the age of 35, decay is the primary cause of tooth loss; thereafter periodontal disease is responsible for over 80% of tooth loss. Periodontal disease is second only to the common cold as the most common of human diseases.

An understanding of periodontal disease is essential to assist in its prevention and its successful treatment. It is for this reason that this "question and answer" advice sheet has been prepared. It is intended primarily for patients suffering from periodontal disease in order that they may acquaint themselves with some of the problems that have arisen in their mouths. This information will also be of interest to any individual wishing to prevent its occurrence.

What is periodontal disease?

Periodontal disease is a slowly progressing chronic inflammation that affects the structures supporting the teeth. These supporting structures are the gums and the bone that hold the teeth within the jaws by means of fibres known as the periodontal membrane.

How does periodontal disease appear in the mouth?

There are two main types of periodontal disease. One is known as Gingivitis and the more destructive one as Periodontitis.

Gingivitis

Gingivitis presents as gums that bleed when brushed or sometimes even when just touched. The gums gradually become red, swollen and move away from the teeth forming pockets. There may sometimes be an acute phase (known as "trench mouth"), when there may be some pain. Generally, the condition is painless and causes so little discomfort that it is often neglected for many years, until diagnosed by a dentist.

Periodontitis

When gingivitis is neglected, the inflammation may extend deeper into the tissue causing the gums to separate from the teeth even further, resulting in the formation of deeper pockets which then act as breeding grounds for bacteria and will eventually fill with pus. The inflammation thus extends into the bone surrounding the teeth, which may then become loose, drift out of position and will eventually be lost. Gum abscesses may form at any time during the above course of events.

The terminal stage of this disease was once referred to as "Pyorrhoea", where teeth become loose, surrounded by pus and eventually fall out by themselves.

Remember: An advanced state of periodontal disease may be reached without having experienced any pain or discomfort whatsoever.



What causes periodontal disease?

Bacteria

Bacteria are **normally present** in the mouth. In order to cause periodontal disease they must remain undisturbed at the margin where the gum meets the tooth, **particularly inbetween the teeth**. They accumulate and multiply in the form of an invisible film known as **plaque**.

Plaque starts to accumulate on the tooth at the gum margin almost immediately following its removal. However, it takes 12-24 hours for the plaque to again become harmful to the gum tissues. Wherever plaque is not removed it may remain there indefinitely, and may cause periodontal disease at those neglected sites.

Plaque, together with some constituents of the saliva or pocket fluid, forms tartar (*calculus*). This is a hard crust-like material which is deposited on the teeth and on to which a further deposition of **plaque** takes place, thus increasing the amount of calculus. Once formed, calculus cannot be removed by toothbrushing and should be removed by a dentist or dental hygienist with special dental instruments.

Other common sites for the formation of bacterial plaque are:

- ⇒ Worn out fillings;
- ⇒ Poor fillings or crowns with overhanging edges;
- ⇒ Badly decayed teeth;
- ⇒ Wedging of food particles between teeth into the gums during chewing;
- ⇒ Partial dentures, particularly plastic dentures.

Why treat periodontal disease?

The chief reason for treating periodontal disease is to preserve the natural teeth. Without treatment there is a continuation of the destruction of the supporting tissues of the teeth.

Extensive crown and bridgework should only be done in a mouth free of periodontal disease. Crown and bridgework is usually expensive and every effort must be made to retain the teeth supporting them, for as long as possible.

Can periodontal disease be prevented?

Yes!

- ⇒ Correct oral hygiene will prevent the formation of bacterial plaque and keep the gums healthy.
- ⇒ Learn a correct tooth cleansing technique under the supervision of a dentist or dental hygienist.
- ⇒ Have this technique checked regularly.
- ⇒ Attend regularly to have calculus removed.
- ⇒ Have regular periodontal examinations and periodic x-rays to reveal otherwise undetectable changes in jaw bone. Remember there will usually be no pain or discomfort to warn you.

Can periodontal disease be treated?

Yes!

Do antibiotics play an important role in the treatment of periodontal disease?

Yes!

- ⇒ Antibiotics, particularly tetracycline are essential as adjuncts to the treatment of certain aggressive forms of the disease.
- ⇒ Antibiotics are often administered to prevent post-treatment infection when surgery has been extensive.

- ⇒ Although Periodontal Disease is of bacterial origin, **antibiotics alone** are not a solution to the eradication of the disease.

How long will the treatment take and how much will it cost?

This will depend on the nature and severity of the disease. Generally, the fee has a direct proportion to the treatment time involved as well as to the complexity of the procedures required. Do not forget that your dentist and dental hygienist may have to spend several hours teaching you correct oral hygiene procedures and checking your progress at frequent intervals besides repairing the damage that has resulted.

What does treatment involve?

In order to assess the state of health in your mouth, a dentist must examine your mouth and, if your suspicions are confirmed, a detailed clinical examination must be undertaken. This examination consists of inspection of the gum tissue, measurements of the extent of gum destruction around the entire mouth and the taking of a set of full-mouth radiographs. The dentist will then discuss the results of the examination with you and outline the treatment that will be required to restore your mouth to health.

Treatment usually consists of the following:

- ⇒ Learning an effective oral hygiene technique.
- ⇒ Having your teeth scaled and polished.
- ⇒ Root planning - where an attempt is made to decontaminate the surfaces of the roots of your teeth using special dental instruments in order that the gum tissue may become reattached to the tooth surface. This usually requires local anaesthetic.
- ⇒ Where the periodontal condition is advanced minor surgical procedures may be necessary to gain access to the roots requiring decontamination; as well as to correct any major bone changes that may have resulted from the disease.
- ⇒ Each patient will have different problems which will have to be handled on an individual basis. It is impossible to mention them all in this pamphlet. Your dentist will discuss these with you.

What happens when treatment has been completed?

You will be scheduled to commence a periodontal maintenance programme which will usually consist of three-monthly visits to a dentist or oral hygienist. This interval may be reduced or extended depending on several factors such as the original severity of the disease, your progress following treatment and your ability to effectively remove plaque.

Will treatment ever have to be repeated?

Usually not. Sometimes an isolated area may require further treatment. With regular periodontal maintenance therapy, treatment may never have to be repeated. During maintenance therapy screening will be carried out to ensure that your oral hygiene technique remains efficient and to detect and treat any recurrence as early and as simple as possible.

Should periodontal disease recur due to poor oral hygiene or failure to attend for maintenance, *repeating periodontal treatment would be futile.*

Can periodontal treatment be guaranteed?

No. It is against the law for members of the dental or medical profession to guarantee treatment. We are dealing with a biological science in which responses to treatment usually vary. We, can, however, guarantee that, once treated, the disease **will** recur in the presence of plaque.

Is periodontal disease inherited?

No. Many experts, however, feel that it is possible to inherit a pre-disposition to periodontal disease particularly the advanced forms of the disease. Just like flu and colds more easily affect some people, some people may be more susceptible to periodontal disease.

Is periodontal disease contagious?

No.

Why do some people who look after their mouths fairly well suffer from periodontal disease whereas others who hardly ever use a toothbrush do not?

We do not know the answer to this at the moment. Recent research has given us some clues. We must accept the fact that some individuals are more susceptible to the disease for the rest of their lives. In the absence of efficient oral hygiene **recurrence will occur.**

Those susceptible to periodontal disease must practice effective oral hygiene for as long as they would like to keep their teeth.

Preventive knowledge and programs are the foundation of modern dentistry and of a healthy smile.

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