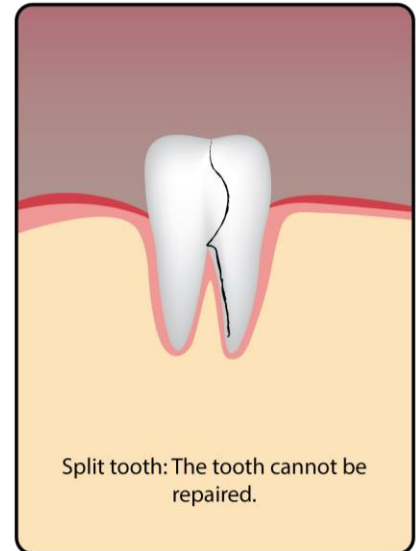
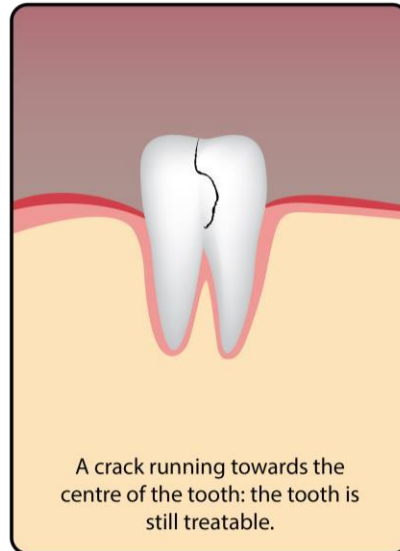
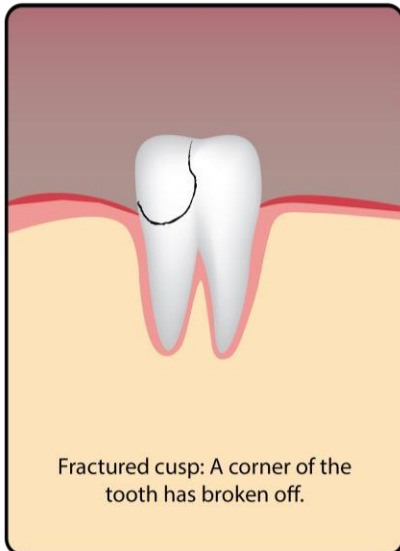


## Cracked Tooth Syndrome

### Types of cracked teeth



### Signs of a cracked tooth

- Sharp pain on biting, especially on release or opening, that quickly disappears
- Usually on a premolar or molar (back teeth)
- Spontaneous pain
- Pain while eating or drinking
- Extreme sensitivity to hot and cold food or drinks
- Some cracks may be asymptomatic
- A cracked tooth may not be visible or on an x-ray



### Causes of a cracked tooth

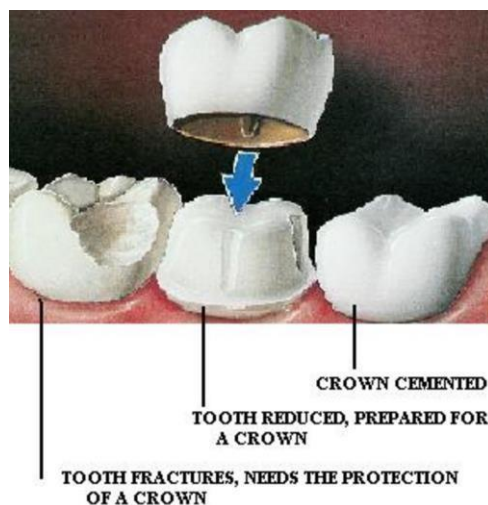
- You can cause a tooth to crack by chewing on foods such as ice, nuts, or hard candy
- For example, as a blow to the mouth may cause a tooth to crack
- Clenching and grinding your teeth often causes teeth to crack
- Brittle teeth that have had a root canal may crack easily
- Loss of tooth structure through wear, large fillings, or other restorations may cause a tooth to crack. This is especially true for older amalgam (silver fillings), as they have a tendency to expand and shrink over time, resulting in flexure of the remaining tooth structure which cracks
- Uneven chewing pressure from missing teeth or imperfections in the way teeth bite together. For example, high fillings or mal-aligned teeth



### Treatment for a cracked tooth

Treatment for a cracked tooth depends on the size and location of the crack and your symptoms. These include:

- Sometimes no treatment is recommended if the crack is small and not causing the patient any pain
- Reducing the height of the tooth or filling slightly or placing a metal band around the tooth if diagnosis is uncertain
- Repairing the tooth with a filling material and reducing the height of the remaining tooth to protect it
- Placing a crown, or only on the tooth to protect the tooth from further damage



- Root canal treatment if the nerves and pulp are involved
- Extraction of the tooth if the crack is severe and the tooth cannot be saved

The best treatment is to have a suspected cracked tooth checked by your dentist as early as possible.

## What are dental sealants?

Many of the permanent teeth develop with very deep grooves. These grooves are difficult to clean and are prone to decay. Dental sealants are thin protective coatings that are applied to the grooves to protect them from tooth decay. Most tooth decay in children and teens occur on the chewing surfaces. Sealants protect the chewing surfaces from tooth decay by keeping germs and food particles out of these grooves.



### **Why are sealants important?**

Decay damages teeth permanently. Sealants provide an easy and cost-effective way to prevent dental decay.

### **What age is suitable for my child to have sealants?**

Permanent molars are the most likely to benefit from sealants. The first molars usually come into the mouth when a child is about 6 years old. Second molars appear at about age 12. It is best if the sealant is applied soon after the teeth have erupted, before they have a chance to decay.

### **How long will sealants last?**

A sealant can last for many years. Sealants should be checked at your regular dental 6 monthly appointment and can be reapplied if they are no longer in place.



### **What is a preventive resin restoration (PRR)?**

A preventive resin restoration is a more definitive treatment for sealing teeth if early decay has already started in the grooves. This procedure involves cleaning out the grooves rather than just sealing the surface. The grooves are generally cleaned out with a conventional drill without local anaesthetics. Once the grooves have been cleaned out, they are filled with white filling (resin) material. If the decay has spread deeper than the grooves, then a conventional filling is required.

### **How do sealants / PRRs fit into a preventive dentistry program?**

Sealants / PRRs are one part of a child's total preventive dental care. A complete preventive dental program also includes fluoride, twice-daily brushing, wise food choices, and regular dental care.

## What are dentures?

Dentures are removable prosthetic devices used to replace a missing tooth or multiple teeth in the mouth. A more colloquial term is 'false teeth'. They are commonly used after extractions or after loss of teeth due to trauma or missing teeth that never developed to begin with.

### When are dentures indicated?

If there are missing teeth in the mouth and you would like to fill those gaps for aesthetic purposes, to aid in chewing and talking as well as to maintain cheek and lip tone, then dentures may be an option. They are also used as an alternative to fixed prostheses such as bridges or implants, as they could be more economical cost-to-tooth ratio in replacing multiple teeth. However, they do consume more space in the mouth.

### Who can use dentures?

The majority of people with missing teeth are able to have them. Some exceptions exist, but ultimately each case is unique and requires assessment by your dentist to make a final decision.

### What types of dentures are there?

1. Chrome - probably the most expensive but most durable- it is less intrusive than the other types but is very strong. However, it is difficult to add teeth onto this type of denture, should you have an existing chrome denture that will require additional tooth added to it after an extraction.
2. Acrylic resin - is the most intrusive in terms of size and thickness, but is approximately half the cost of a chrome denture. Although it is bulky, it is relatively easy to add teeth onto.
3. Valplast - a flexible type of resin which is more comfortable than acrylic, but a little more expensive than acrylic. It, however, is not as intrusive as acrylic, yet it is as durable as chrome; it is probably a balance between cost and comfort/durability. This is just a simple comparison, however, speak with one of our dentists for more information and to find out which would best suit you.



**Chrome**



**Acrylic resin**



**Valplast**

### Can you see a denture when you are wearing it in the mouth?

In most instances, more than 99% of a denture is hidden and it appears as just a great set of teeth. In some cases, such as chrome denture, there may be visible at the front, two tiny metal 'clasps' that wrap around the teeth to secure the denture. They are usually quite tiny and hidden by the lip, but they are about the only part that give away the fact that you have a denture. If this is a concern for you, speak to our dentists about having these clasps constructed in ceramic tooth colour and the pros and cons of doing this. For the most part, valplast dentures cannot be seen, and acrylic too; however, some acrylic dentures may also have clasps, as described above.



### **Can dentures be repaired or added to if I lose teeth?**

It is not easy to add teeth onto a chrome denture. Although it can be done, the result is not as secure as adding onto an acrylic one. Valplast also suffers from this downside as well.

### **I am tired of having dental work done, can I just have all my teeth removed and have a set of dentures made?**

In most cases, this is highly discouraged. Although dentures are an alternative to natural teeth, they are not a replacement. Once a tooth is lost, the bone surrounding it will shrink significantly over the years to follow. With the loss of multiple teeth, a large proportion of bone loss and gum loss will take place which could significantly change your facial profile and give the appearance of premature ageing. In addition, the more natural teeth you have remaining, the more stable any prosthesis will be.

### **What if I have fillings done after the denture is made?**

Although this is not an ideal situation, our dentists can custom shape your filling to fit under a pre-existing denture. However, the fit may not be as perfect as would be the case if a denture were constructed to conform to a pre-existing filling. We do strongly encourage that you have a comprehensive dental examination and have all fillings done prior to having dentures made, to ensure the fit of your denture is of the highest quality.

## Sedation Dentistry

We understand that for some individuals, the right dentist and psychological techniques alone are insufficient to do the trick for you. There are available pharmacological alternative for coping with dental anxiety.



### When is sedation useful?

- When you want to be “out of it” and unaware of what's happening during a procedure. IV sedation is the method of choice.
- When you would like a little help to relax. “laughing gas” can offer you a pleasant relaxed feeling during the procedure.
- When you have a “gut feeling” that sedation would help you and assist you to get work completed which otherwise you would not be able to tolerate.
- When your fear is procedure-specific (e.g. needles, extractions), especially if you know that the fear would still exist in the presence of an empathetic dentist and adequate pain-control.
- When you perceive your anxiety to be entirely irrational and not helped by either an empathetic dentist or psychological techniques.
- When you have other mental health problems and you believe you will benefit from sedation.
- When it’s an unpleasant or invasive procedure such as more complex extractions.

### When should I NOT consider sedation?

- Control and trust are a major problem for you.
- you feel you would benefit from a gentle approach which include being talked through procedures, going at your pace, and using stop signals.
- You have an intensive dislike for of fear of the drugs used for sedation.
- You’re concerned that sedation will interfere with your judgment and your ability to communicate your concerns to your dentist.

### What are the 3 most common forms of dental sedation?

1. Inhalation sedation ("laughing gas", "happy gas", nitrous oxide).
2. Oral sedation (anti-anxiety pills or a liquid).
3. Intravenous (IV) sedation (drugs administered into the blood-stream through a vein).

The above mentioned do not involve "being put to sleep". You can be put to sleep under general anaesthesia, or GA for short.

### Inhalation sedation?

Inhalation sedation (laughing gas, RA, happy gas, nitrous, nitrous oxide) uses nitrous oxide (N<sub>2</sub>O) and oxygen (O<sub>2</sub>), which you can breath in. Nitrous oxide has no colour, smell and does not irritate.

### What are the effect of "laughing gas"?

- Helps to reduce pain.
- Induces a pleasurable feeling.
- After 5 minutes or so of breathing in the gas, you will feel a euphoric feeling spread throughout your body.
- You may have auditory (hearing) or visual effects.
- Some light headedness might occur.
- Often people get 'the giggles' (hence the name laughing gas!).

### Stages of inhalation sedation

Depending on the concentration and length of administration of laughing gas, four levels of sedation can be experienced (after an initial feeling of light-headedness):

1. A tingling sensation, especially in the arms and legs, or a feeling of vibration ("par aesthesia").
2. The tingling sensation can be quickly followed by warm sensations.
1. Following that the feeling of well-being, euphoria and/or floating may occur. During heavier sedation, hearing may dissolve into a constant, electronic-like throbbing.
2. at a deeper level of sedation again, sleepiness, difficulty to keep one's eyes open or speak ("dream") can occur.

Should nausea set in, it means you could be over sedated. If you experience any unpleasant symptoms, let your dentist know so that they can adjust the percentage of N<sub>2</sub>O. Alternatively, just remove the mask.



## Why are crooked teeth a problem?

“Malocclusion” is a condition where teeth are not aligned properly in your mouth. Untreated malocclusion can lead to periodontal disease (gum disease) and create abnormal amounts of stress on teeth and jaw bone, which leads to premature wear.

### Types of malocclusion & potential issues:

1. Crowding

- a. Buildup of plaque and tartar
- b. Harbors harmful periodontal bacteria
- c. Periodontal disease, tooth and bone loss



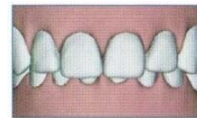
2. Spacing

- a. Food lodges between teeth
- b. Risk of sore, tender gums
- c. Risk of periodontal disease



3. Deep bite

- a. Over-erupted lower front teeth can damage the palate
- b. Premature wear and chipping of the lower front teeth



4. Crossbite

- a. Premature tooth wear and risk of chipped teeth
- b. Abfraction – small notches in tooth at the gum line
- c. Periodontal disease, tooth and bone loss



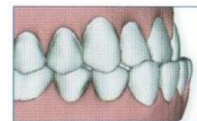
5. Excessive overjet

- a. Chipped or fractured front teeth
- b. Trauma to front teeth



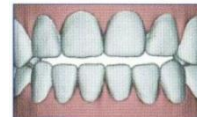
6. Edge-to-edge bite

- a. Risk of teeth chipping and breaking
- b. Jaw joint pain
- c. Shortened or worn down front teeth



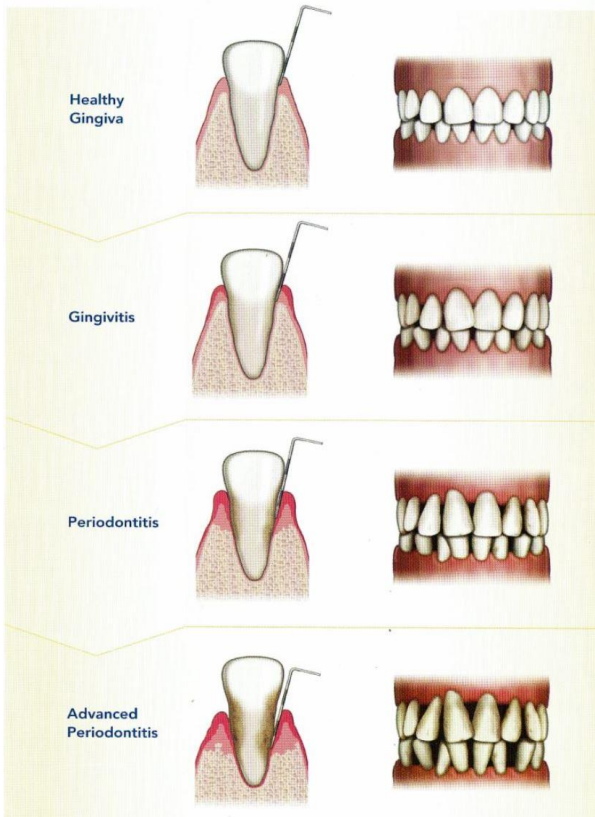
7. Open bite

- a. Abfraction – small notch in tooth at gum line
- b. Gum recession, loose teeth and bone loss
- c. Excessive, premature wear on back teeth





## Malocclusion and periodontal disease



When teeth are crowded, plaque with harmful bacteria can attach to tooth surface down to the bottom of the pocket. These crowded areas are often difficult to brush and floss resulting in bone loss when untreated.

Poorly aligned teeth can also create unnatural stress and pressure on teeth and jaws. Teeth that are subject to excessive pressure can develop chipping and notches at the gum line called abfractions. Premature wear can lead to poor root support, loose teeth and eventually tooth loss.

Severe periodontal infection, if untreated, may increase the risk for atherosclerosis-induced conditions such as coronary heart disease and stroke, complications of diabetes, adverse pregnancy outcomes, and respiratory diseases.

### **Straight teeth are healthier teeth**

Straight, properly aligned teeth can help you avoid the negative effects of periodontal disease.

- Healthier gums – properly aligned teeth are easier to brush and floss than crowded or crooked teeth. Properly positioned teeth can help gums ‘fit’ more tightly around them, which may

lead to better periodontal health.

- Improved hygiene – with good oral hygiene, the chances of having plaque retention, tooth decay, and periodontal disease can be reduced
- Decreased risk of abnormal wear and trauma – properly aligned teeth also reduce the risk of expensive procedures required to repair the effects of abnormal force, such as tooth chipping, breaking, or wear; and can be less stressful on the supporting jaw bone and joints

**Straightening your teeth can make a significant difference to having a healthy mouth and keeping your teeth for life.**

Start on the road to a healthy mouth today!