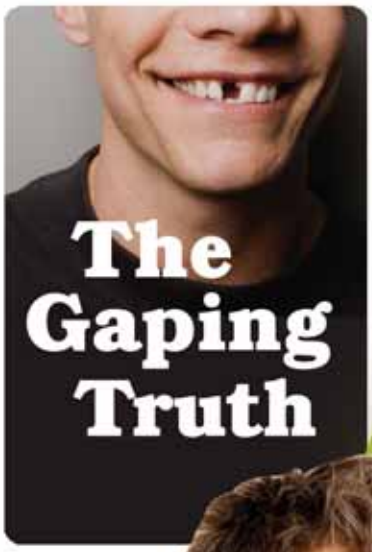
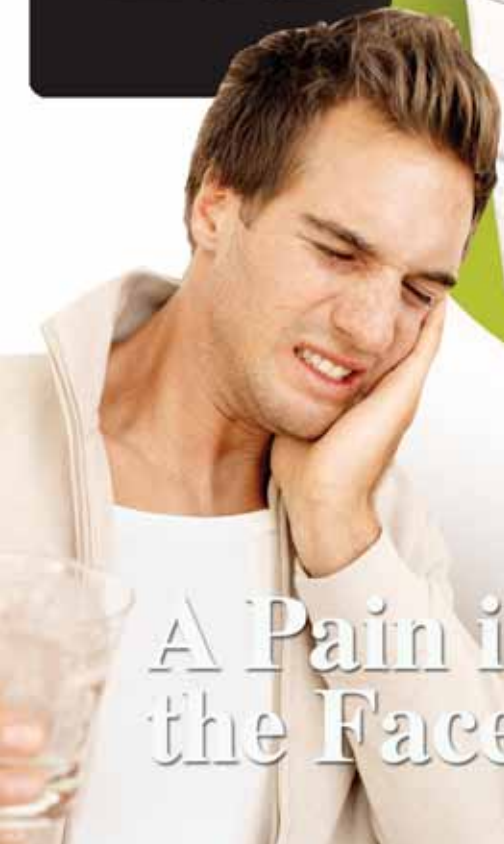
Oral Health Zone

Issue 3



The Gaping Truth

Banish Bad Breath



A Pain in the Face

Tooth Whitening

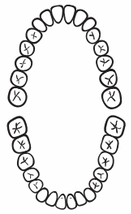
Latest craze or here to stay?

Did you know?

False teeth have been in use since as early as 700 B.C., when the ancient Romans made false teeth out of ivory and bone.

Tooth enamel is the hardest mineralised tissue found in the human body. It covers the crown portion of each tooth to provide protection.

Current thinking is that the first people to use a toothbrush were the Hindus of India, who used the end of a fresh twig, which was frayed into fibers, in 4000 B.C. The Babylonians in 3500 B.C. called their toothbrush a "chewing stick." The first toothbrush, as we know it today, was invented in 1857 by an American named H.N. Wadsworth, but it wasn't until 1938 that nylon brushes with plastic handles were invented.



Each person's set of teeth is unique, much like their fingerprints. Even identical twins do not have exactly the same set of teeth. Did you know that your tongue print is also unique?

The hand you write with can affect your teeth. Right-handed people tend to chew food on their right side, while left-handed people tend to chew on their left side.

Dental toothpaste has been used since 500 B.C. in China and India. In 1824, a dentist named Dr. Peabody actually added soap to toothpaste. Many compounds were added to toothpaste, like chalk and flavours, during the 1850s and in 1892, Dr. Washington Sheffield created the collapsible tube dispenser. After World War II, other agents were used, ultimately resulting in the addition of fluoride.

It is a myth that calcium from your teeth will be lost during pregnancy. If you do not take in enough calcium, your body will use calcium stored in your bones, not from your teeth, to help your baby grow. So be sure to eat a healthy and nutritious diet.

Get in touch
T: 1890 130 017 | E: query@decaredental.ie | W: www.decaredental.ie

DeCare Dental

Oral Health Zone

Welcome to the third edition of the Oral Health Zone, our oral health education magazine.

Oral Health Zone has been created by DeCare Dental Insurance Ireland as an initiative to promote awareness and knowledge about dental health issues throughout Ireland.

It is a non-profit magazine designed to provide useful tips, articles and advice to help promote the benefits of good oral health routines for young and old alike.

Why not take some time to uncover the truth about tooth whitening and getting to the bottom of a common painful condition, sensitive teeth. You can also find out about having a root treatment and how to fill gaps in your teeth. Explore the mysteries of facial pain, find out how to banish bad breath and finally, get great advice from our resident dental expert.

We hope you enjoy
The Oral Health Zone Team

inside

Tooth Whitening

Latest craze or here to stay?

There has been a surge of interest in and demand for tooth whitening by the general public in Ireland over the last number of years. This interest has been driven to a large extent by images portrayed in the media of celebrities displaying bright white teeth and also by pharmaceutical companies anxious to sell new products. This is despite the fact that adult teeth are not normally bright white but more of a creamy white yellow appearance. As we age our teeth become darker in appearance. This can be due to staining but mostly it is a natural phenomenon.

So, how does tooth whitening work?

In the late 1960's it was discovered that 10% carbamide peroxide, which is equivalent to 3% hydrogen peroxide, was capable of whitening teeth. This product has been studied carefully since 1989 and has been licensed for use in the U.S. by the Food and Drugs Administration (FDA).

Hydrogen peroxide, or its derivative carbamide peroxide, is held in contact with the outside surfaces of teeth. The 'whitening' or lightening effect occurs following prolonged penetration of hydrogen peroxide throughout the entire substance of the tooth and the subsequent release of oxygen.

Is tooth whitening right for you?

To determine if tooth whitening is right for you, start by talking to your dentist, who will need to accurately assess the underlying reasons for discoloration of your teeth and advise if you are a good candidate for bleaching.

In some cases, it may be more appropriate to pursue other treatments, especially if you already have crowns or bridges, as their colour will not lighten like natural teeth when bleached. White fillings may need to be repaired or replaced after whitening for the same reasons.

If tooth whitening is recommended, your teeth and gums should be healthy and free of dental decay before you commence treatment.

Tooth whitening options in Ireland

In September 2011 the Council of the European Union amended the European Cosmetics Directive regarding the use of hydrogen peroxide in tooth whitening products. This amendment will become statutory in Ireland sometime in 2012. The revised directive provides that tooth whitening products containing hydrogen peroxide greater than 0.1% and less than 6% only be sold to dentists and used appropriately by them on consumers over 18 years of age. The dentist may also supply these products for home use to continue a course of treatment.

The options that are available through your dentist in Ireland include:

Dentist-supervised home bleaching

In this instance, your dentist will advise the correct choice of bleaching kit and construct a clear plastic mouth tray for the bleaching gel, which is a custom fit for your mouth. The snug fit of this tray will maximise contact between the bleach and tooth surface and minimise contact of the bleach with the gums.

Sources:
1. www.vanhaywood.com
2. Council Directive 2011/ 84/ EU 20th September 2011. Official Journal of the European Union, 29th October 2011
3. EU Scientific Committee on Consumer Products: Opinion on Hydrogen Peroxide in Tooth Whitening Products, 15th March 2005

Bleaching kits containing 10% carbamide peroxide (equivalent to 3% hydrogen peroxide) are ideal and have a long-term safety record. The gel is syringed into the specially constructed trays and worn at nighttime for two to six weeks. The majority of cases look good after two weeks.

Dentist applied in-surgery bleaching systems

Here, dentists use the same basic materials but apply hydrogen peroxide in stronger concentrations, which may now be limited to 16% carbamide peroxide (equivalent to 6% hydrogen peroxide).

Despite claims to the contrary, there is no evidence to show that in-surgery bleaching with or without a high intensity light produces a better result than dentist supervised home bleaching, which is also considerably less expensive. Several studies have shown that there is no difference after two weeks between different bleaching techniques, including dentist supervised home bleaching.

There are greater risks attached to using high strength hydrogen peroxoide whitening treatments and great care has to be taken to avoid injury to soft tissues. There is also greater risk of sensitivity to the teeth both during and after bleaching.

Does dental bleaching cause side effects and can they be prevented or alleviated?

The most common side effect of bleaching is tooth sensitivity. This can be prevented before bleaching by using special toothpaste for tooth sensitivity for two to three weeks beforehand. If the teeth are very sensitive either during or after bleaching the dentist may recommend applying special desensitising toothpaste to the teeth on a tray for between 10 to 30 minutes. In some circumstances bleaching may be stopped altogether or carried out on alternate days.

Some patients complain of gum irritation and a chemical taste in the mouth. A better fitting appliance, made by a dental laboratory, will reduce this risk as its custom fit prevents peroxide leaking on to the gums.

It is also recommended that teeth whitening products should not be used in pregnancy and should be used with caution by people who continue to smoke and drink alcohol.

Are You The Sensitive Type?

Sensitivity of teeth, DS (dentine sensitivity) or more recently DH (dentine hypersensitivity), is one of the most common clinical conditions encountered in dental practice worldwide.
It can have a significant negative impact on the quality of life of affected persons if not managed and treated properly.

Dentine hypersensitivity (DH) is characterised by short sharp pain from exposed dentine. It occurs in response to stimulation from cold, heat, touch, acids and osmotic changes and cannot be explained by any other dental defect or disease.

The necks of teeth near the gum margins are the most commonly affected areas, especially in the front incisor and premolar teeth regions.

What causes this sensitivity?
Dentin hypersensitivity is caused by a variety of factors coming together which cause dentine, a living, highly enervated tissue, to become exposed to outside stimuli. These stimuli would normally only be encountered by the hard enamel, which protects the tooth and is not a living, sensitive tissue.

Toothbrush abrasion and gingival recession, brought about by excessive pressure from tooth brushing or from gum disease, has been identified as an important initiating factor. Dentine hypersensitivity eventually occurs due to loss of protective enamel and the opening of dentine tubules. This can be caused by exposure to a variety of acids contained in fruit drinks or due to gastric reflux.

The bouts of short sharp pain are thought to be caused by the movement of fluid within exposed dentinal tubules, which activate nerve endings near the dental pulp.

Can it be prevented?

Dentine hypersensitivity can only be prevented and managed successfully by first diagnosing and dealing with the causative factors and removing them systematically one at a time.

They may include:

- Faulty tooth brushing, including use of hard brushes
- Using excessive force
- Scrubbing at the necks of the teeth
- Exposure to erosive agents from the diet and also internally from the body

The correct method of tooth brushing, using a soft brush, avoiding abrasive toothpastes and brushing two hours after exposure to acidic drinks will all help to reduce the loss of enamel from vulnerable areas prone to dentine hypersensitivity.

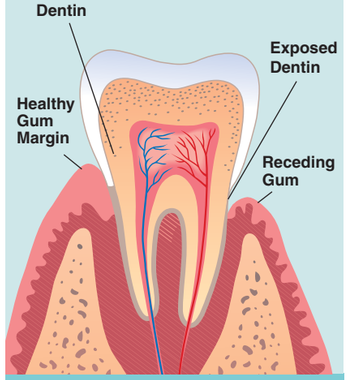
A detailed dietary history will help to identify the acidic foods and other acids which accelerate the loss of dental enamel and expose sensitive dentin. These acidic substances include soft drinks, citrus fruits, wines, yogurts and smoothies. Gastric reflux and eating disorders result in internal acids causing rapid enamel loss and dental erosion. Control or alteration of these co-factors will prevent recurrence of dentine hypersensitivity, especially when combined with the use of desensitising agents.

Can it be treated?

At home, desensitising agents are mostly in the form of toothpastes, mouthwashes and chewing gums. Only toothpastes containing combinations of potassium salts, fluoride ions, and strontium show evidence of limited efficacy and are best applied using a soft brush without water and not rinsing out afterwards. If there is no relief after 4 weeks, in-surgery desensitising should be requested.

In-surgery desensitising therapy is wide ranging and can encompass both short-term immediate relief and therapy aimed at more permanent relief. Various applications of topical fluoride are useful for temporary relief, while composite filling material and bonding agents, especially those containing a combination of gluteraldehyde, fluoride, benzalkonium and methacrylate, are showing promise for long term relief. New innovations in dentine hypersensitivity relief include bioglass, which is also used to repair bone and calcium silicate cement.

A major study is currently underway to investigate the efficacy of laser treatment.



This diagram shows how receding gums, often caused by heavy-handed tooth brushing or gum disease, causes the sensitive dentin of the tooth to become exposed. The exposed dentin contains small tubules which lead directly to the nerve of the tooth. Stimuli, such as cold and hot drinks or foods, are now exposed to the dentin, which can trigger nerve pain.

Sources: 1. Diagnosis and treatment of dentinal hypersensitivity: Porto C.M et al, Jour. Oral Science, Vol 51, No.3, 323-332, 2009
2. Potassium containing toothpastes for dentine hypersensitivity: The Cochrane Library, http://onlinelibrary.wiley.com
3. Laser therapy for dentinal hypersensitivity: The Cochrane Library, http://onlinelibrary.wiley.com

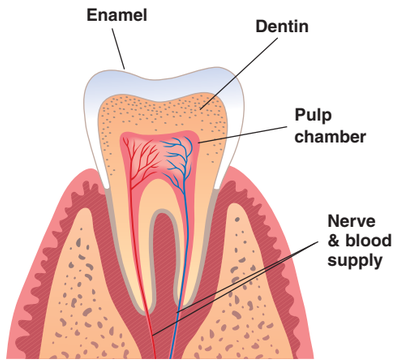
I am having a root canal!

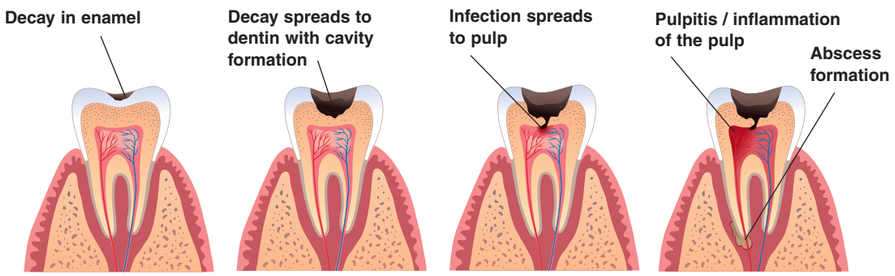
Why do I need a root canal?

A root canal treatment becomes necessary when the soft tissue containing the nerve and blood vessels inside the pulp chamber of a tooth become irreversibly infected with bacteria. If untreated it may become painful and develop an abscess.

The transition from a healthy tooth to a tooth with an infected root canal happens over a period of time, where a tooth affected by tooth decay enters a restorative cycle. A decayed tooth is filled and replacement fillings / restorations become larger and deeper, until eventually the pulp chamber becomes exposed and infected. It can also result from direct physical trauma to the tooth, which causes death to the dental pulp complex of nerves and blood vessels. Certain dental treatments, such as crown preparation on vital teeth, also carry a risk of causing death of the nerve and infection of the root canal.

Healthy Tooth





This illustration shows in a simplified format how, in a molar tooth, dental decay starts as a small cavity in the enamel, gradually spreads through the dentine and eventually reaches the pulp chamber, which houses the nerves and blood vessels, causing a pulpitis or inflammation of the pulp. This causes severe pain and gradually results in the death of the nerve and other tissue as the inflammation spreads to the root, cutting off an adequate supply of blood. A root treatment performed at this stage will prevent an abscess forming in the bone near the root tip.

What is the purpose of a root canal?

The purpose of a root canal treatment is to remove all dead tissue and decontaminate the empty canal space, fill the empty space with a biologically compatible material and seal off this space so that nothing can leak in or leak out. Sealing the root at its tip in the bone and at the occlusal (biting) surface of the tooth in the mouth is the ultimate objective of root canal treatment, which will ensure its success.

Root canal treatment is a highly successful therapy in dentistry, resulting in many more teeth being preserved for a lifetime, provided that proper follow up care is provided, including placing a protective crown over a root treated tooth.

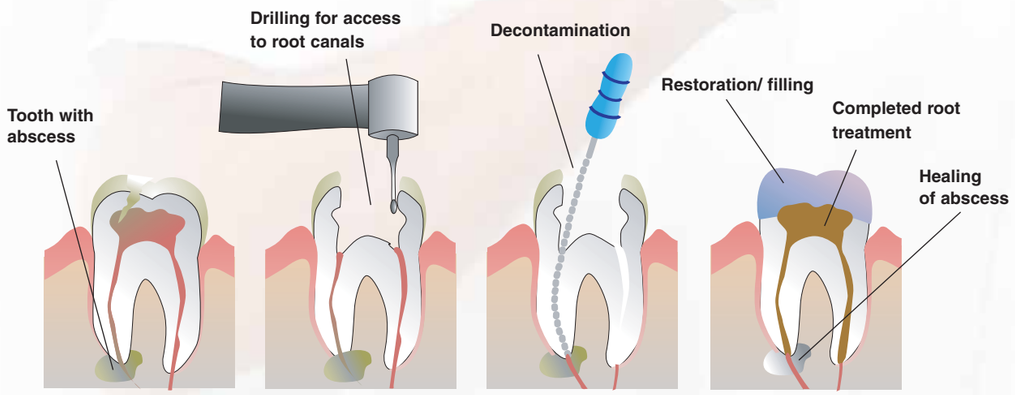
Who will carry out my root canal?

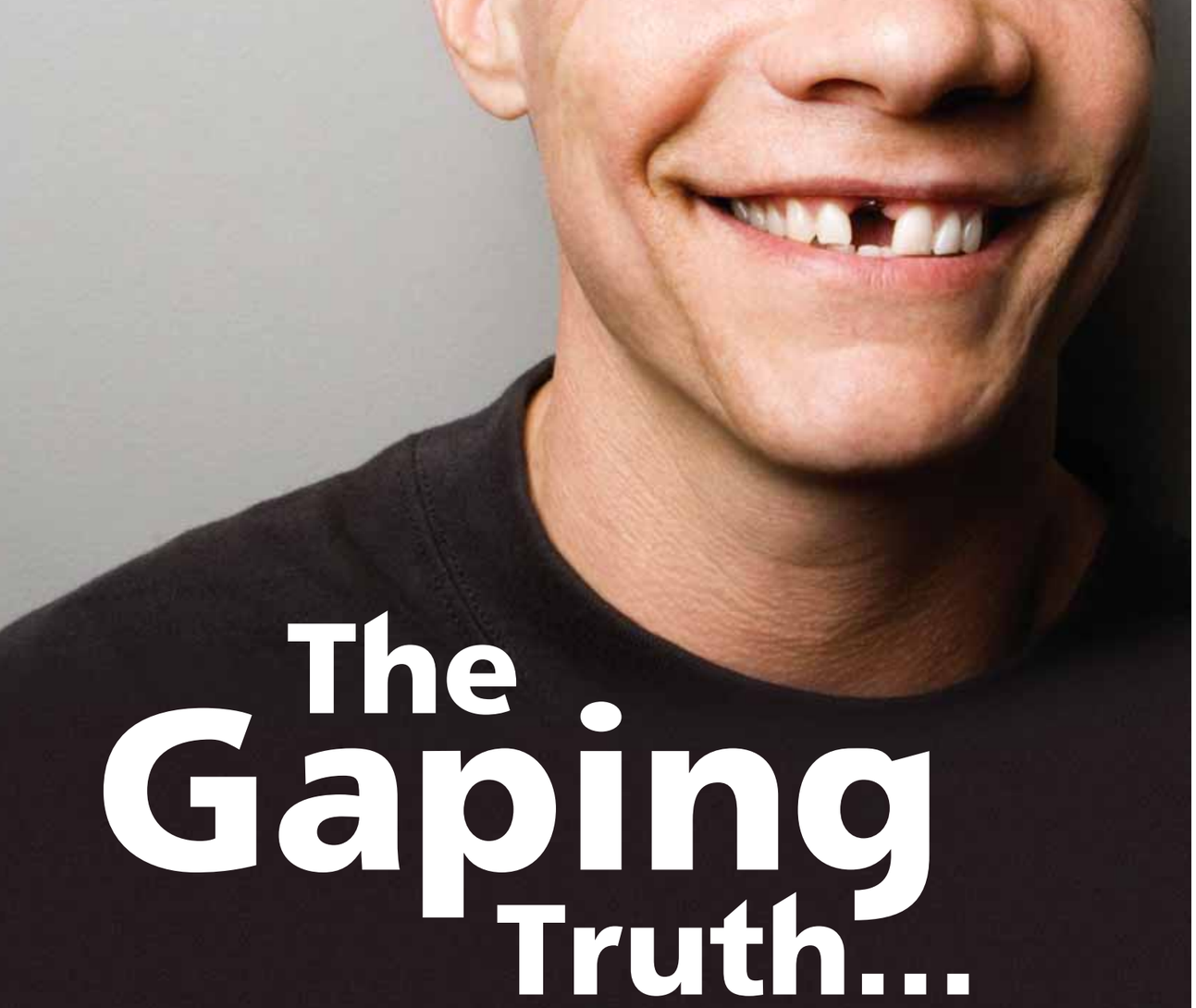
Carrying out a root treatment successfully requires a high level of skill, precision, expert knowledge and high tech equipment. Most root canal treatments are carried out by general dental practitioners. The procedure is straight forward in many respects, especially when carried out on a single rooted tooth like a front incisor tooth. However, it can become complex in multi rooted teeth, in teeth with additional lateral canals and in individuals with unusual anatomical variation. These cases are sometimes referred by a general dental practitioner to an endodontist who limits his or her practice exclusively to carrying out root canal treatments.

Root canal treatment – step-by-step

The treatment usually follows the following steps. It may be carried at one treatment visit or it may require 2 visits or more depending on the level of complexity.

1. Diagnosis, including radiographs and treatment plan
2. Local anesthetic and placement of rubber dam to isolate tooth
3. Access cavity created in tooth to allow easy instrumentation
4. Removal of nerve and pulp contents and decontamination of root canals
5. Placement of biologically compatible root filling and seal apex near root tip
6. Filling/ restoration placed to seal the access cavity and restore function to tooth





The Gaping Truth...

What are the options to fill gaps in your teeth?

Sometimes it is not possible to save a tooth with treatment because of clinical or financial reasons. In these circumstances the tooth is extracted or removed and the question arises as to what to do about the missing tooth.

There are six options for replacing missing teeth.

1. Leave it alone
2. A removable partial denture and flexi partial denture
3. A conventional fixed dental bridge (fixed denture)
4. An adhesive resin retained maryland bridge
5. A dental implant
6. An orthodontic treatment combined with any of the above.

Leave it alone

It is not always necessary to replace a missing tooth. The decision to replace it is based on a number of factors, including appearance, loss of function, health of surrounding teeth and bone and opposing teeth, whether there are other missing teeth and financial considerations. You would be surprised how often the best course of action is to leave it alone.

Removable partial denture and flexi partial denture

The least costly and most common option for replacing a missing tooth is to have a removable partial denture, usually made from a combination of a metal called chrome cobalt and acrylic. Flexi partial dentures, made from flexible nylon resin, are gaining in popularity with dentists and patients because of greater comfort and aesthetics than chrome cobalt partial dentures.

Both chrome cobalt and flexi partial dentures are fairly easy for the patient, requiring very little preparation and several teeth can be replaced if required. Appearance is good but patients can take a while to adjust to having a metal or plastic object in their mouth.

Conventional fixed dental bridge

The third option for replacing a missing tooth is a conventional fixed dental bridge (sometimes referred to as a fixed denture). The procedure is expensive and takes a number of visits to complete.
A disadvantage is that the healthy tooth on either side of the missing tooth requires extensive removal of tooth tissue with a dental drill to enable a mold to be taken. The mold is taken to a dental laboratory and a dental bridge is constructed of porcelain and gold. To replace one tooth the bridge will consist of three units, two crowns to fit over the existing teeth and a third to fit into the missing space all joined together by a precious metal framework. More than one missing tooth can be replaced. The result is usually very good with the appearance and fit very life-like. You can expect a lifespan of five to ten years. There is a moderate risk of root treatment being required on the crowned teeth.

Adhesive resin retained maryland bridge

An adhesive resin retained dental bridge, sometimes referred to as a maryland bridge, is less expensive and less treatment invasive than a conventional fixed dental bridge. There is less removal of tooth tissue so there is less damage to surrounding teeth. It is useful when replacing a single tooth. It is more successful when placed in the upper jaw (over 80% success after 10 years) and less successful in the lower jaw because of a tendency for slight natural tooth movements. This type of bridge consists of a porcelain crown (pontic) fused to a metal framework, which is specially treated so that it can be glued with an adhesive resin to the back of the teeth on either side of the missing tooth. A debonding (loosening) of the bridge, if it happens, can be quickly corrected by cleaning the metal framework and reapplying an adhesive resin.

Dental implant

Another option for replacing a missing tooth, which is heavily promoted worldwide by the dental industry and which is gaining momentum with dentists and the public, is a dental implant. A dental implant is made from a precious metal, called titanium, in the shape of a root. This is screwed into the bone, where it integrates into it like a root. Implants have a number of uses. They can be used to support a crown, a bridge or a denture. They can also be used in orthodontic treatment. They are ideal for use in a situation where a tooth replacement is necessary but a bridge cannot be used. They feel very natural and surrounding teeth do not need any preparation. The disadvantages are high cost, the required surgery and the fact that many dental visits are required over a number of months.

Combined orthodontic treatment (braces)

Orthodontic treatment on its own or combined with other treatments can be used to help close the gap caused by the loss of one or several teeth.

How to Prevent Tooth Decay in Children

Tooth decay and rising levels of obesity in Irish children share a common risk factor, which is the widespread availability of sugar in our diet. Another common risk factor for several major diseases, both in the developed and the developing world, is poor hygiene, which is also the second major risk factor for tooth decay. Almost a third of three year old and half of twelve year old Irish children have decay in their teeth.

Tooth decay is caused by bacteria in the mouth interacting with various types of sugars in our diet producing acids, which can gradually soften and penetrate the outside hard enamel of the tooth, the softer dentine inside and eventually the nerve and pulp chamber of the tooth. If left untreated the disease may cause a cavity (hole in the tooth), pain, death of the nerve tissue, abscess, infection in the surrounding tissues, emergency hospitalisation, loss of the tooth, and very rarely, death.

However, this outcome is not inevitable and can be prevented by understanding dental decay as a dynamic process which can be modified and arrested by changing the diet and adopting preventive measures, including:

Fluoride

The most important preventive measure is keeping fluoride at a certain minimum level in saliva close to the tooth surface, where it continually hardens and rehardens the outside surface of the tooth. This works very well on the smooth surfaces of the teeth. Fluoride in water and in toothpaste helps to achieve this. Use a small pea sized amount of fluoride toothpaste when tooth brushing for children over two years.

Fissure sealants

On the biting surfaces of the teeth the grooves and fissures are more difficult to keep clean, so a hard plastic or glass-like material called fissure sealant was developed to prevent dental decay on these sites. Fissure sealants are best used on the permanent molar teeth of children, considered to be at high risk to developing dental decay, as soon as these teeth come into the mouth.

Early childhood dental decay

Children who have the misfortune to get dental decay on their baby teeth should be brought to a dentist at the earliest opportunity. Parents and carers should accustom themselves to examining children's mouths. A brown or black discoloration on a tooth should be treated with suspicion. In the early stages, tooth decay can be arrested by changes to the diet, by reducing the amount of fermentable carbohydrates, especially sugars and by applying topical fluoride.

If you have a young child less than 6 years of age who needs a lot of dental treatment, you may need to ask about referral to a paediatric dentist. A paediatric dentist is a dentist, who is specially trained to look after the dental needs of young children.

Treating Cavities in Young Children

To fill or not to fill!

Once an obvious cavity is present in a young child, it should ideally be cleaned and restored to full health and function with a restoration/filling. Failure to restore a decayed tooth in a child may expose the child to a certain level of risk. For a normal healthy child this level of risk may be small, but for a child who has other health problems or who is disabled in any way, the risk to the health and wellbeing of the child may be unacceptably high.

Glass ionomer filling

This type of filling is often the most appropriate for small to medium sized cavities in baby teeth. Glass ionomer type fillings are made from acrylic and glass particles. They have adhesive properties and are easier to place than other fillings because little or no drilling is required. They are not as strong as white composite or silver fillings and they last less than five years. This is not as important for baby teeth as these teeth have a limited life span. Unusually, they release fluoride which is good for children who are prone to dental decay.

Silver amalgam filling

The next most common type of filling for baby teeth is the silver amalgam filling, which is fairly easy to place, is relatively inexpensive, and lasts longer than a white or glass ionomer filling. However, this type of filling is becoming less popular for children because it is less aesthetic than a white filling and also because of parental anxiety arising from negative media coverage of silver amalgam.

White composite filling

White composite fillings look better but can be more difficult to place, especially in very young children, do not last as long and are more expensive than silver fillings.

Stainless steel crown

Preformed stainless steel crowns are the treatment of choice for children who have medium to large cavities in their baby teeth. In experienced hands they are relatively easy to place with little or no trauma to the tooth and little or no drilling required. They last a long time and rarely need to be replaced. They are a bit more expensive than a composite filling, but much better value in the long run.

Child having dental treatment with inhalation sedation using a mixture of nitrous oxide (laughing gas) and oxygen.

Root treatment in deciduous (baby) teeth

It is important that baby teeth are retained, especially baby molar teeth, until at least seven and a half years to ensure that the replacement permanent teeth come into the mouth in their correct positions. Baby teeth perform important functions - as well as being essential for eating, speaking and appearance, they also help to guide the permanent teeth into their proper positions.

If dental decay spreads very deeply into a baby tooth and comes close to or extends into the nerve tissue, there are a number of steps that a dentist can take to save the tooth and prevent an extraction. This may involve cleaning away most of the dental decay and placing special cement-like material close to the nerve tissue (pulp chamber) to arrest further spread of the infection. If the infection is inside the pulp chamber, it may involve removing infected tissue and placing a special cement material over the remaining nerve tissue in the root canals. If the tooth is dead, all the nerve tissue will be removed and replaced with a biologically compatible material. This will allow the tooth to be retained and shed in the normal way as the successor tooth erupts underneath.

Space maintainers

When a child loses a baby molar tooth prematurely, before seven and a half years, it may be necessary to hold the space for the permanent molar successor tooth. This can be achieved by placing a device or appliance called a space maintainer, that will hold the space and guide the permanent tooth into its proper position. Failure to keep the space for the permanent tooth may result in crowding, rotation (twisting) or impaction (unable to erupt properly) of the permanent tooth.

A space maintainer is specially made from plastic or metal or a combination of both and most children adjust to the appliance in a few days.

...ask the Dentist

Welcome to the 'Ask the Dentist' corner, where your dental queries and worries are answered.

The following questions are a sample of your most frequently asked queries. If you have dental queries that you would like answered, please visit www.decaredental.ie to submit your question online or browse our archive of dental questions and answers. Dr. Gavin will endeavour to answer all queries. Answers provided are for general, non-diagnostic purposes only. Information provided is not a substitute for the professional medical advice provided by your dentist.

Meet our resident dental expert, Dr. Gerard Gavin

Dr Gerard Gavin, who is a registered dentist with the Dental Council of Ireland, is the Chief Dental Officer for DeCare Dental in Ireland and Europe. Dr Gavin joined the DeCare team in 2004 from the Department of Health and Children, where he held the post of Chief Dental Officer.

In this role, he advised the Minister and Department on all matters relating to oral /dental health. He had specific responsibility for planning dental health services, including The Dental Health Action Plan 1994–1998 and for strategy and development of dental services and oral health 1998–2004.

Dr. Gavin, in his previous roles as a Lecturer in the Dublin Dental Hospital / School of Dental Science, Trinity College Dublin and Principal Dental Surgeon in the Eastern Health Board, played a leading role in developing dental health education / oral health promotion as an academic discipline and also as a practical intervention in the community health services in the Dublin region.

A Trinity College Dublin dentistry graduate, Dr. Gavin is widely published in dental public health. He is also responsible, unless otherwise stated, for the content and scientific accuracy of the oral health tips and dental articles of the Oral Health Zone publication.

Q: I got a filling in my back tooth approx 3 years ago but the filling came away and so did half of my tooth. I had the tooth refilled and built back up again but I am now starting to get a pain in the tooth. Would it be better to have the tooth pulled?

A: You certainly need to look at all options and tooth extraction is one of these.

However, you will need to talk this over with your dentist carefully. A lot depends on which tooth it is and the health of surrounding teeth and gums. Certain back teeth in the molar area play a pivotal role in keeping your dental arch (row of teeth) functional and intact. Sometimes it is essential to keep these teeth in position, or replace them with a bridge or an implant tooth. Which option you choose will depend on a number of factors. Usually it is better if you can root treat the original tooth and then crown it to prevent any further breakdown. From the symptoms you describe, it is likely that your dentist may present you with this option once the diagnosis of your tooth is confirmed.

Make an appointment with your dentist immediately before any further damage occurs.

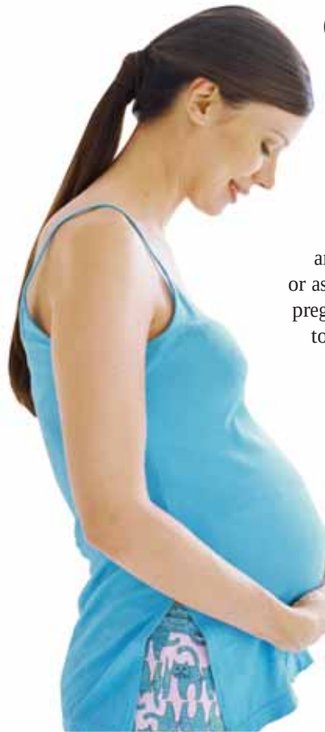
Q: My three year old daughter grinds her teeth while sleeping. Is there anything I can do or do I need to take her to the dentist?

A: Teeth grinding (bruxism) is a common habit in young children and usually disappears on its own as children grow older. The two peak periods for bruxism are when the baby teeth arrive and again when the permanent teeth begin to come in at five to six years of age.

Usually there is no need to intervene as damage to the baby teeth is limited by their shorter life span. Thankfully the habit usually stops for most children before any damage is done to the adult teeth.

Stress has been identified as a cause in some children. An important tip is to try and relax children as much as possible before going to bed.

If the habit persists into adolescence, a dentist may make an appliance like a sports mouth guard to help break the habit. If you are still concerned why not mention the problem to your own dentist at your next dental appointment.



Q: When is the best time to visit the dentist for a check up and clean during pregnancy?

A: Ideally you should visit the dentist for a check up if you are planning to become pregnant or as soon as you find out you are pregnant. Your dentist will be able to assess your oral health status and plan any dental visits you may need during your pregnancy. The initial emphasis will be on a healthy diet and good oral hygiene practices.

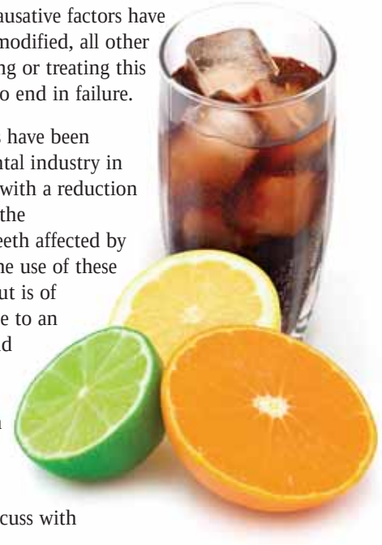
It is a general convention that as little operative treatment as possible be carried out during pregnancy in order to avoid any possible distress to you or your developing baby. However, it is also accepted that you can have emergency dental treatment at any time. If you require planned treatment, which is considered essential, the middle of the second semester and the earlier part of the third semester is the time when it will be most comfortable for you. This would be an ideal time to have light treatment like a cleaning carried out.

If you would like to find out more about dental visits during pregnancy look up the Oral Health Tip 'Dental Visits While You are Pregnant' on the DeCare Dental Insurance Ireland website www.ddii.ie under Your Oral Health.

Q: The bottom of my top two teeth seem to be becoming see-through. There are little lines on them, is there anything I can do?

A: You may have dental erosion (tooth surface loss TSL). If so, this condition should be carefully monitored by your dentist. The first and most important consideration is to get an accurate diagnosis and recording of the extent of the condition. The next consideration is to accurately identify the probable cause so that remedial action can be taken immediately to prevent or minimise any further tooth surface loss (TSL).

The following have been identified as causative factors either on their own or in combination; citrus fruits eaten more than twice a day, daily consumption of soft drinks, regular consumption of sports drinks. The risk of TSL is also high in individuals who have gastric symptoms or who have vomiting associated with bulimia or who have reduced salivary flow associated with certain medications. Until causative factors have been identified and modified, all other attempts at controlling or treating this condition are likely to end in failure.



A variety of products have been developed by the dental industry in recent years to assist with a reduction in symptoms and in the remineralisation of teeth affected by tooth surface loss. The use of these products is helpful but is of secondary importance to an accurate diagnosis and elimination of the causative factors associated with tooth surface loss.

Make an early appointment and discuss with your dentist.

A Pain in the Face...

Understanding toothaches and jaw pains

Have you ever wondered why toothaches hurt so much more than other pains in your body? A really bad toothache is something you won't forget quickly.

The answer is simple...

Your mouth is the most sensitive part of your body! There are more tiny nerves in each square millimetre of tooth than you find in your finger tips or eyes. Your brain also pays a lot of attention to what happens in your mouth. This is not surprising when you consider how important your mouth and the lower part of your face are. Important daily functions like speech, smiling, grimacing, chewing, tasting food, swallowing, our sense of smell, etc. all depend on having a healthy mouth that functions normally.

The truth about toothaches

Toothaches are normally triggered by dental decay or injury, which means that the tooth becomes infected. Bacteria can move through the decay to the inside of the tooth (called the dental pulp) where the toxins released by the bacteria irritate the nerves. A mild toothache is generally described as dull and aching. But as the damage to the inside of the tooth becomes more severe, pain intensity can dramatically increase. At this point you may be experiencing excruciating throbbing pain.

How to get relief

A visit to the dentist for extraction of the tooth or a filling to repair the damage will almost always ease the pain. Thankfully, there are a number of ways that dentists can repair teeth that are badly decayed. A root canal treatment means that all of the nerve tissue inside the tooth is removed, and the space where the nerve was placed is disinfected and sealed with a special type of filling. The long term success rate for this type of procedure is very high thanks to the improvements in dental technology.

But not all toothaches are due to decay or injury. In a small number of cases the toothache pain is caused by a mix-up in the way pain signals are sent to the brain. For example, pain which initially starts in other tissues close to the mouth like the jaw muscles, jaw bones and even the upper part of the neck may be interpreted by the brain as coming from the teeth. This can cause tremendous confusion as dental x-rays and a clinical examination will not show evidence of tooth decay, despite the presence of intense toothache. Patients may continue to experience this type of pain until the real problem is addressed. For some unlucky patients this condition can continue for months or even years.

A real pain in the face

Have you ever referred to someone as a 'pain in the face'? You hear this term used quite frequently in conversation. It usually means the person you are referring to is awkward, difficult or unpleasant. Episodes of acute anxiety and stress can actually bring about a type of face pain or toothache that is not related to injury or disease. The part of the brain that controls impulses coming from the face begins to malfunction due to the acute stress that is being experienced.

The result is that some patients may begin to feel persistent toothache and jaw pain that is easily confused with the pain we normally associate with tooth decay. This 'atypical' toothache is sometimes recognised and diagnosed by the fact that it moves from one location to another in the oral cavity, and (even more unusually) may cross the midline of the mouth to switch from one side to the other. It is frequently experienced in teeth that are otherwise perfect in their structure, with no evidence of tooth decay or gum disease. Once the correct diagnosis is made, treatment is based on controlling the anxiety through counselling or with the use of nerve calming medication. This condition is not always easy to diagnose and may continue for years if left untreated.

What causes facial pain?

The most common cause of facial pain is soreness that arises in the facial muscles and jaw joints. These problems are often bunched together and labelled as TMD conditions. This term refers to Temporomandibular Joint (jaw joint) Disorders. When jaw joints are inflamed or mechanically restricted the symptoms may include pain with chewing, difficulty in opening the mouth fully, spontaneous locking of the jaw, and clicking or cracking noises in the jaw joints. While these conditions can affect any age group, they appear most frequently in young female patients between the ages of 15 and 35. The symptoms experienced by different patients may appear to be similar but the underlying cause in each case may vary enormously.

How can it be treated?

The treatments offered for facial pain are quite varied depending on the nature of the jaw problem. The usual range of treatments includes medications, exercise programs, physiotherapy, mouth braces, injections and, in extreme cases, jaw joint surgery. For the vast majority of patients with TMD problems, recovery is relatively rapid once the correct diagnosis is made.

Any type of persistent toothache or facial pain may trigger a headache response (e.g. migraine). Over time the episodes of headache may become more frequent. The symptoms of jaw joint pain and headache may begin to overlap, making an accurate diagnosis more difficult to accomplish.
These symptoms of facial pain and headache may become extremely severe. Under these circumstances some patients will find it impossible to function normally and their quality of life will deteriorate. Normal pain killers may make the situation worse rather than better. Patients with these complex problems are generally referred to specialist pain clinics for treatment.

Expert View

This article was contributed by Dr Dermot Canavan.

Dr Canavan is a dental graduate of the Dublin Dental University Hospital and holds a membership in general dental surgery (MGDS) from the Royal College of Surgeons in Edinburgh. He completed his post-graduate studies at the University of California in Los Angeles, with a master's degree in oral biology and a clinical certificate in orofacial pain management (1994).

He currently lectures in orofacial pain management at Dublin Dental University Hospital and conducts private clinics in Dublin, Galway and London.

Banish Bad Breath

Halitosis, more commonly known as bad breath, can be an embarrassing problem. If you are concerned about bad breath, first make sure that you are taking care of your mouth and gums by practicing good dental habits. The mouth is the source of over 90% of all malodours.

If bad breath persists, your dentist may be able to identify the cause and develop a treatment plan to help you eliminate it. There are many causes of bad breath. The good news is that it can often be prevented with a few simple steps.

What causes bad breath?

Neglecting your brushing and flossing: If you don't properly clean your teeth, gums, and tongue, particles of food and bacteria left in the mouth, especially at night-time, can cause an unpleasant odour.

The foods you eat: Certain foods, like garlic and onions, can cause bad breath because they contain pungent oils that are carried to your lungs and out of your mouth.

Dry mouth: Saliva is necessary to cleanse the mouth and remove odour causing particles and bacteria. It contains enzymes that break down food particles and other enzymes that kill bacteria. A condition called xerostomia (dry mouth) occurs when the flow of saliva is decreased and can cause bad breath. Decreased saliva flow also occurs naturally at night-time, so it is important to clean your mouth last thing at night.

Tobacco: Smoking not only causes bad breath, but can also stain your teeth, irritate your gums, and reduce your ability to taste foods.

Gum disease: Persistent bad breath is a warning sign of periodontal (gum) disease.

Medical disorder: In a small percentage of cases, bad breath could be a sign of a medical disorder, such as infection of the respiratory tract, chronic sinusitis, postnasal drip, diabetes, gastrointestinal disturbance or a liver or kidney problem.

Good dental habits can banish bad breath

In most cases, embarrassing bad breath can be prevented by good oral hygiene.

- Brush your teeth with a fluoride toothpaste twice a day to remove food debris and plaque
- Use floss daily to remove any food particles trapped between teeth. Any food particles left in the mouth can cause bad breath
- Your tongue can harbour odour-causing bacteria. Be sure to brush your tongue with a toothbrush, or clean it with a tongue scraper
- Use toothpastes containing zinc chloride/ triclosan/ baking soda for cleaning your tongue if you have malodour. This will give temporary relief for up to four hours
- Visit your dentist for regular checkups. Professional cleanings will help to get rid of plaque and bacteria build-up that may contribute to bad breath. Your dentist may also be able to determine the source of persistent bad breath and formulate a plan for treatment. This may include a chlorhexidine spray for the pharynx (throat area behind the mouth), which is an additional source of malodour in a significant number of cases

Do I need to use a mouthwash or rinse?

Some antiseptic mouth rinses have exhibited therapeutic benefits in reducing plaque and gingivitis (gum disease). However, many mouthwashes or rinses are cosmetic and while these can be used to freshen breath, they do not generally have a long lasting effect on bad breath. If you choose to use mouth rinse, look for an over-the-counter antiseptic mouthwash containing zinc chloride or chlorhexidine. Mouth rinses should not be swallowed - follow the instructions on the bottle. If you find that you are constantly using a mouth rinse to mask odour, see your dentist.

Other solutions

Besides keeping your teeth, gums, and tongue clean and healthy, these are some other remedies that may help cure the problem of bad breath.

- Quit smoking! Kicking the habit will go a long way to improving bad breath and your overall health
- If you wear dentures or removable appliances, be sure to remove them at night and clean them thoroughly before replacing them in your mouth
- If you are experiencing problems with dry mouth, your dentist may prescribe artificial saliva. Other possible remedies for dry mouth include sucking a sugar-free sweet or a piece of sugar free gum to increase saliva flow, and increasing your fluid intake.

Sources: 1. Steenberghe, D. V. Quirynen, M. (2006). Breath Malodor. In Clinical Periodontology and Implant Dentistry (edits: J. Lindhe, T. Karring, N.P.Lang) pp. 512-518 Blackwell Munksgaard. Blackwell Publishing Ltd. Oxford.
2. www.jada.org

DeCare Dental

INSURING IRISH SMILES since 2004

Get great value dental insurance

1890 130 017

www.decaredental.ie

DeCare Dental