# THE COMPREHENSIVE GUIDE TO









































AN EDUCATIONAL GUIDE | ORTHODONTICS | ADVANCED DENTISTRY | FACIAL AESTHETICS

**Platinum Orthodontics and Dental Care Services** 108 Finali Drive North, Airport East, Accra, Ghana, West Africa

- **ORTHODONTICS FOR** ADULTS AND CHILDREN
- **INVISIBLE BRACES**
- **CHILDREN'S DENTISTRY**
- **FILLINGS**
- **VENEERS CROWNS**
- BRIDGES

- **IMPLANTS**
- **GUM PROBLEMS**
- **TOOTH WHITENING**
- **SMILE MAKEOVERS**
- **ANTI SNORING DEVICES**
- **NERVOUS PATIENTS** (SEDATION SERVICES)
- **DERMAL FILLERS AND BOTOX**



# **Practice Location**





Address:

Platinum Orthodontics and Dental Care Services 108 Finali Drive North, Airport East, Accra, Ghana, West Africa Telephone the practice on:

+233 302 998750

+233 508 923041

Visit our website for more information: www.platinum-dental.com

# How to find us Map and directions

**Directions: Next to Lister Hospital.** 

From Tetteh Quarhie: Take the first exit at Flower Pot / Palace Junction, Turn Right at the T Junction and follow the road around, over the railway line and Left at Airport Hill entrance.





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# It all begins with a smile

# Dr. Norvishie Arkutu

BDS, MFDS RCPS, MSc, M'Orth RCS, F'Orth RCS, MMed Ed

# Why you need to visit Platinum Dental

We know how you feel when you are not sure of what treatment or service you are getting, how much it will cost, or when you are not given enough information by your doctor. At Platinum Dental we listen to your concerns and opinions as this will enable us to deliver the best and most appropriate treatment for you

as an individual. You will be provided with ample information, a variety of options and a chance to ask questions as we work with you on your journey to achieving and maintaining a healthy and beautiful smile.

You are treated with the attention you deserve as we strategically

analyze every procedure and protocol, ensuring you get the very best care and unparalleled dental experience every time you step through the doors; your feedback is always welcome and paramount in achieving this.

At Platinum Dental, we understand that 'it all begins with a smile'.

# Qualifications

#### **BASIC DENTAL DEGREES:**

**\*** BDS BACHELOR OF DENTAL SURGERY - BRISTOL UNIVERSITY (UK)

#### **POSTGRADUATE RESIDENCIES:**

- **\*** BIRMINGHAM DENTAL HOSPITAL (UK)
- **\*** KINGS MILL HOSPITAL (UK)
- **\*** QUEENS MEDICAL HOSPITAL (UK)
- **\*** NOTTINGHAM COMMUNITY DENTAL SERVICES (UK)

#### **ADDITIONAL AND SPECIALIST QUALIFICATIONS:**

- \*\* MFDS RCPS MEMBERSHIP OF THE FACULTY OF DENTAL SURGEONS ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW
- MSC HEALTH SERVICES RESEARCH UNIVERSITY OF NOTTINGHAM
- M. ORTH MEMBERSHIP IN ORTHODONTICS ROYAL COLLEGE SURGEONS OF ENGLAND
- \* F.ORTH FELLOWSHIP IN ORTHODONTICS ROYAL COLLEGE SURGEONS OF ENGLAND
- M.MED ED MASTERS IN MEDICAL EDUCATION UNIVERSITY OF WARWICK

#### PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS:

- REGISTERED SPECIALIST ORTHODONTIST
  WITH THE GENERAL DENTAL COUNCIL (UK)
- ₱ FULL REGISTRATION WITH THE GENERAL DENTAL COUNCIL (UK)
- ★ WORLD FEDERATION OF ORTHODONTISTS
- **\*** AMERICAN ASSOCIATION OF ORTHODONTISTS
- CONSULTANT ORTHODONTIC GROUP (BRITISH ORTHODONTICS SOCIETY)
- \* EXAMINER MJDF (ROYAL COLLEGE OF SURGEONS OF ENGLAND)
- PEER REVIEWER FOR THE COCHRANE COLLABORATION (ORAL HEALTH GROUP)

#### **PROFESSIONAL PRIZES:**

- **\*** 1998 WINNER WILKES ORTHODONTIC PRIZE
- **\*** 2009 JOINT WINNER SMILE AWARD ORTHODONTIC SMILE
- \* 2010 HIGHLY COMMENDED SMILE AWARD ORTHODONTIC SMILE

#### **ACCOLADES:**

TR. ARKUTU HAS LECTURED DENTISTS AND OTHER ORTHODONTISTS IN MANY COUNTRIES INCLUDING INDIA, SULTANATE OF OMAN, MOROCCO AND NIGERIA TO NAME BUT A FEW.



'Thank you for creating my

award winning smile. I will

always remember you"

# Interview with Dr. Norvishie Arkutu

# Why did you become an orthodontist?

It is quite pain free and life enhancing. It involves forming long term relationships with your patients and watching them grow in self esteem as the treatment progresses.

# What fascinates you about your work?

Being able to harness the latest scientific technologies together with art to create a smile that is individual and exceeds the patient's expectations. It is both powerful and humbling.

### What is your chairside style

Professional, relaxed, kind and considerate. Every patient is an individual and should be treated as such.

# What are your hobbies?

Travelling and learning about different cultures, Dancing, Self improvement.

### Best advice you ever received?

The only things you regret in life are the risks you never took.

# One thing you would teach every patient?

Ask, ask, ask if you need more information and be involved in making decisions about your treatment. We are here to help you.





# Practice Profile

LISTEN TO YOUR NEEDS, MAINTAIN HIGH STANDARDS, RESPECT OUR CLIENTS, Exceed all requirements for safety and sterility within the practice

**Practice Aim:** By combining professionalism with a passion for high standards, up to date technology and communication in a relaxing environment, Platinum Dental promises to continually strive to be competitively priced and seek innovative ways to serve our patients better.

**Practice Ethos:** Every patient counts. Getting it right first time and every time.



# Smile with style

Platinum Dental is proud to be the first purpose built dental and orthodontic centre in Accra, Ghana providing first class treatments and services in a fully equipped, state-ofthe-art, modern environment.

Upon entering this five star practice you could be mistaken for thinking you had walked into a boutique hotel with its inviting atmosphere, friendly staff and glamorous lounge area instantly creating a feeling of relaxation. Each treatment room benefits from the latest high-tech equipment and technologies. There is a separate decontamination / cleaning room designed to meet the highest safety standards in cross infection meaning that you can rest assured that the instruments we use have been properly

cleaned and sterilised. A laboratory to get your appliances to you as quickly as possible, and an educational facility to aid continuous professional development ensuring we keep up to date with the very latest advancements in dentistry.

As well as the specialist services and treatments for adults Platinum Dental provides world class treatments for children too. We understand the importance of making children feel at ease within a dental practice. This is why a separate treatment room as well as kid's corner / waiting room has been designed as a fun area where they will benefit from all sorts of interesting games to thrill and educate them through their dental and orthodontic journeys. The clinicians place an

emphasis on assessing children at an early age in order to educate and correct dental flaws so that the all children benefit from a future of healthy, happy and attractive smiles.

Every clinician and specialist has been trained abroad to the highest standards with at least 10 years of experience enabling them to offer and carry out the very latest dental treatment on an international level. The educational facility on the mezzanine floor shows our commitment to Continuing professional development and maintaining standards.

CHANGE YOUR SMILE, CHANGE YOUR LIFE FOREVER

# Services and techniques available at Platinum Orthodontic and Dental Services

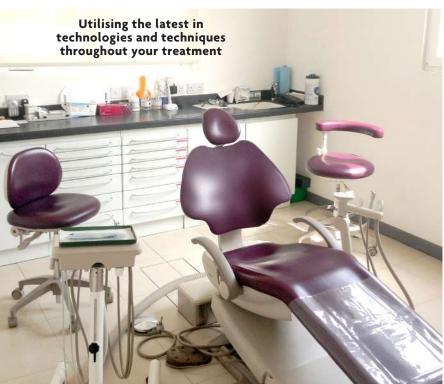
- \* ORTHODONTICS FOR ADULTS AND CHILDREN
- **\* INVISIBLE BRACES**
- **\* CHILDREN'S DENTISTRY**
- **\*** FILLINGS
- **\* VENEERS**

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- \* NERVOUS PATIENTS (SEDATION SERVICES)
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# Understanding Smiles & Faces

IF YOU WANT TO COMMUNICATE, USE YOUR FACE! FACIAL EXPRESSION IS THE MOST COMMON FORM OF EFFECTIVE COMMUNICATION.

xpressions communicate our emotions and are read by others around us to assess our mood or reaction. Even when we purposefully mask our true feelings we can be betrayed by involuntary subliminal facial signals which indicate the opposite of what we intend others to think. Some people, usually extrovert types, are more expressive and show more animation in their faces. Research has shown that some facial expressions can be learnt or faked - comedians and actors utilise their expressive talents to mimic various human emotional conditions and we as the audience are 'face readers'.

Gender differences do exist because women have smaller facial muscles and the overlying tissue tends to obscure some of the muscle movement. However, men are less facially expressive because they do not

Our ability to manipulate the facial canvas is based on our control of our facial muscles. There is a complex interaction between our brains, emotions, the nerves and the muscles of facial expression which ultimately produce recognisable facial forms such as fear, joy, disgust, sadness and elation.

We all have a natural basic expression of happiness, a smile. It exhibits amusement and happiness, even when we are alone. Sometimes a smile may not come naturally but it may be necessary, so we create the conscious smile. This type of smile is essential to enhance communication when socially interacting, to build rapport with others or to communicate a welcoming message. Conscious smiles can be used to hide unhappiness or discomfort, when we feel it would be inappropriate to show our true feelings (be honest, a fake smile is always handy when you receive a disappointing birthday present!). These conscious smiles can be transparent depending on how convincing we are.

Once our teeth are revealed in a smile. we are communicating positively and powerfully. It can feel like the baring of the soul. Not surprisingly, we feel more comfortable if the teeth are straight, white and healthy. Research has suggested that there are around eighteen 'varieties of smiles' and the best ones involve an element of tooth show. We hope this magazine gives you the information you need to understand your teeth, your smile, your mouth and to understand the role of dental rofessionals in achieving this.



# Smile Engineers know your specialists

# DENTIST OR GENERAL DENTAL PRACTITIONER

A dentist is a healthcare professional qualified to practice dentistry after graduating with a degree from a University Dental School. You might have noticed some letters after their names such as BDS which stands for Bachelor of Dental Surgery or DDS - Doctor of Dental Surgery. Most dental degree courses take between 4-6 years of study and clinical experience working with patients under supervision. In most countries dentists are called "Doctors" because their training is very similar to that of their medical colleagues.

#### ORAL SURGEON

An oral surgeon is a specialist who removes teeth that are buried and causing problem. In addition to this they work with the roots of the teeth (apicectomies) and perform Biopsies in the oral cavity employing sedation techniques when necessary.

# **IMPLANTOLOGIST**

Implantology is a branch of dentistry that involves inserting an artificial tooth into a patient's jaw. An implantologist is a dentist who specialises in implant planning and placement. There are several types of dental implants; the most widely accepted and successful is the osseointegrated implant, based on the discovery by Swedish Professor Per-Ingvar Brånemark that titanium can be successfully fused into bone. A variation on the implant procedure is the implant-supported bridge, or implant-supported denture.

#### **PAEDODONTIST**

A paedodontist is a dentist who specialises in the care of children's teeth. These specialists help train children to accept dentistry. They restore and maintain the baby, mixed, and permanent teeth. They employ preventive measures for dental caries and periodontal disease and help correct various problems of the bite.

### **PERIODONTIST**

A periodontist is a dental specialist with expertise in diagnosing, preventing and treating gum disease. A Periodontist specialises in the diagnosis and surgical and non-surgical treatment of diseases and conditions of the supporting structures of the teeth (periodontium). Periodontists are experts in the management of patients with periodontal diseases including gingivitis, periodontitis and gum recession.

# **PROSTHODONTIST**

A prosthodontist is a specialist who can replace and restore damaged or missing teeth using various techniques including crowns and bridges. They have spent additional years of post graduate study advancing their knowledge, skill, and ability. A prosthodontist is a diagnostic and treatment-planning expert who deals commonly with complex dental problems. Multidisciplinary dental treatment requires teamwork. A prosthodontist will usually network in a team to achieve optimal long-term dental health.

### **ENDODONTIST**

An endodontist is a dentist specialising in diseases of the dental pulp and nerve. Endodontics is the branch of dentistry which focuses on the morphology, physiology, and pathology of the dental pulp and its surrounding tissues. Endodontists understand the etiology, diagnosis, prevention, and treatment of diseases and injuries of the internal part of the teeth.



# ORAL AND MAXILLOFACIAL SURGEON

An oral and maxillofacial surgeon is a specialist who treats the entire skeletal frame work of the head and neck including the anatomical area of the mouth, jaws, face, skull and other associated structures. They are essentially plastic surgeons specialising on the head and neck. Maxillofacial surgeons are usually initially qualified in dentistry and have undergone further surgical training. Most maxillofacial surgeons have qualifications in dentistry and medicine.

# ORTHODONTIC SPECIALIST

The specialist has overall responsibility for orthodontic patients in their care. Their role is to diagnose any problems and suggest treatment options for the patient, explaining the risks and benefits, and then provide or supervise the care. To train successfully as a specialist orthodontist usually takes at least ten years. The career pathway starts with a degree in dentistry followed by at least two years of vocational training and a higher dental qualification. A further three years of combined study and supervised clinical work in a university hospital leads to a specialist qualification and a listing on the General Dental Council's specialist register.

# **DENTAL NURSE**

The role of the dental nurse is to assist in the efficient operation of the dental practice. There are many tasks for which the dental nurse is responsible, from preparing and clearing up the surgery, ensuring that hygiene standards are maintained at all times, to taking notes, passing instruments and materials to the clinician and caring for the patient. Dental nurses must be qualified or be in training to register with the General Dental Council. Additional qualifications are available and for dental nurses working in orthodontics the most likely is the Orthodontic Nursing Certificate.

# Children's Dentistry

hildren's dentistry, also known as paediatric dentistry, is the specialty of dentistry involving oral care for children from birth through adolescence.

This discipline focuses on growth and development, causes and prevention of disease, child psychology and management of all aspects of dental treatment for this age group.

At Platinum Dental we emphasise building trust and confidence between our young patients and our dentists. We therefore have a separate dedicated waiting room and surgery for our young patients to promote learning as well as the use of different communication styles with an emphasis on teaching preventative dental habits and dental etiquette to remove any anxiety about dental treatment. We prioritise prevention as we know that that poor oral health care in children can lead to impaired school performance and poor social relationships. We give specific advice on how to make the teeth strong, develop healthy eating habits and protect the teeth.

It is recommended that a dental visit should occur within six months after the presence of the

first tooth or by a child's first birthday. It is important to establish a dental home for a child. This is because early oral examination aids in the detection of the early stages of tooth decay. Early detection is essential to maintain oral health, modify aberrant habits and treat as simply as possible.

Parents are also given advice on preventative home care including brushing, flossing and fluorides, finger, thumb, and pacifier habits, preventing injuries to the mouth and teeth, diet counselling and growth and development.



No fillings please, I'm only a kid!

he importance of cleaning my teeth was drummed in to me at a very young age.

No matter how much I moaned and fidgeted (which I did, every single time) my mother always made sure I'd cleaned my teeth thoroughly and thank goodness she did! I was the lucky one, some of my friends needed their first fillings at 10 years old, and nowadays we hear of children as young as 7 requiring fillings and

astoundingly children who require them in their baby teeth. So how has it come to this?

The mass production of processed fast foods, huge selection of sweets and fizzy energy drinks available has definitely had an impact. Our children can so readily find these tooth rotting foods it can often be difficult to stop them, do we ban pocket money all together? Maybe we need to focus on cleaning the teeth and as much as we

focus on moaning that they shouldn't eat so many sugary foods.

As my own mother painstakingly sat down every morning and every night with not just me but my two other siblings, who were as equally displeased at having their teeth meticulously cleaned, we need to do the same with our children. When we grow older it becomes second nature, so start their routine from the first tooth, they'll thank you when they grow up.

# Top tips for cleaning your children's teeth

- Make sure they brush their teeth twice a day after breakfast and dinner.
- Supervise them when they're brushing, even when they're old enough to do it themselves pop your head round the door to make sure they are doing a good enough job!
- Brush for at least two minutes using circular movements concentrating on each tooth try counting the teeth to them as they brush.
- Buy a fun toothbrush. You'll find lots of gimmicky brushes with their favourite action hero or Barbie on make it fun!
- Fluoride ensure you use a low fluoride paste when they are very young and increase the fluoride content as they get older.
- Children's toothpaste doesn't have to be mint flavoured they may prefer a tropical or strawberry flavour.
- Use a fluoride mouthwash to strengthen the enamel on their teeth.

# Contact us today to make an appointment with our dental specialists

Telephone the practice on:

- +233 302 998750
- +233 508 923041

Visit our website for more information: **www.platinum-dental.com** 





# OPTIPS! FOR HEALTHY TEETH

BRUSH YOUR TEETH TWICE A DAY WITH FLUORIDE TOOTHPASTE, AFTER BREAKFAST AND AGAIN AFTER DINNER

BRUSH FOR A LEAST TWO MINUTES EACH TIME. YOUR PARENTS SHOULD SUPERVISE YOU IF YOU ARE SEVEN YEARS OR YOUNGER

USE A SMALL TO MEDIUM SIZED BRUSH WITH SOFT TO **MEDIUM BRISTLES** 

WHEN MOST OF YOUR ADULT TEETH HAVE COME THROUGH, GET YOUR PARENTS OR YOUR HYGIENIST TO TEACH YOU HOW TO FLOSS

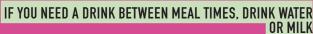


EAT HEALTHILY. YOUR DIET MUST INCLUDE FRESH FRUIT AND VEGETABLES TO ENSURE PROPER FORMATION OF YOUR TEETH

LIMIT SUGARY FOOD AND DRINKS TO MEAL TIMES

GET INTO THE HABIT OF DRINKING OR RINSING YOUR MOUTH WITH WATER AFTER EATING SUGARY FOODS

IF YOU NEED A SNACK BETWEEN MEAL TIMES, SNACK ON THINGS SUCH AS CARROTS OR CELERY STICKS



DO NOT DRINK TOO MANY FIZZY DRINKS

VISIT ONE OF OUR DENTISTS AT LEAST ONCE A YEAR

IF YOU PLAY CONTACT SPORTS, SUCH AS RUGBY OR KARATE, GET ONE OF OUR DENTISTS TO MAKE YOU A **CUSTOM-MADE MOUTHGUARD** 











# DENTAL SEALANTS



OK, OK...
THE TOPIC OF "DENTAL SEALANTS"

DOESN'T SOUND VERY APPEALING

# BUT DON'T LET THE BORING NAME FOOL YOU!

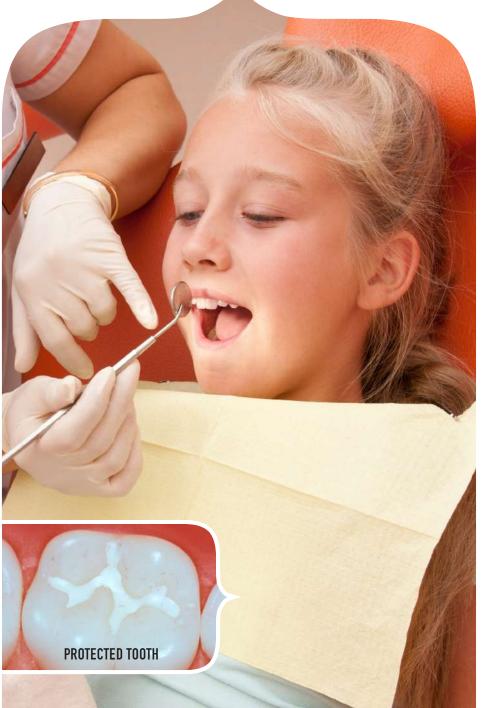
his simple and quick procedure is one of the easiest things we can do to prevent cavities and tooth decay.

Dr. Arkutu recommends sealants as preventive dental care for children. Children's teeth have small grooves and depressions in them that make it harder to properly clean them through brushing alone. Sealants provide protection for these small depressions and grooves and help keep plaque from forming in the small crevices. However, even though it's ideal to get sealants as a child, adults can also be good candidates for dental sealants.

Sealants can be applied during a quick visit to our practice. After we clean and prepare your teeth, the sealing solution is painted directly on tooth surfaces. Then, the sealant is hardened by a curing light and we send you on your way—you don't even have to wait to eat and drink. Routine dental checkups will allow us to keep tabs on your sealants and ensure that they remain in good condition.









# Orthodontics? What is that?

THE TERM ORTHODONTICS COMES FROM THE GREEK WORDS 'ORTHOS' MEANING STRAIGHT OR CORRECT AND 'DONTIA' WHICH MEANS RELATING TO TEETH

entistry has many branches and specialties. Orthodontics is the specialty which treats abnormalities of the bite and jaws in children and adults. Improvements in the appearance of the teeth, smile and face are among the cosmetic benefits derived from orthodontic treatment.

An orthodontist is a specialist in the diagnosis, prevention and treatment of dental and facial irregularities. They undergo an additional two to three years of specialised education beyond dental school to learn the proper way to align and straighten teeth. This formal education is essential if you wish to adopt the title "orthodontist" and only orthodontists may be members of the American Association of Orthodontics (AAO). Learn more about orthodontic care and orthodontic professionals on the AAO's web site, www.braces.org.

"Malocclusion" is a technical term for crooked, crowded, spaced or

misaligned teeth which do not fit properly. Literally, the word means "bad bite."

A malocclusion can exist without immediate or painful symptoms and a lot of people tend to adapt to the improper relationship between the jaws and the teeth to such an extent that it might be perceived as normal. The unfortunate truth is that these orthodontic problems can become worse, if left undetected and untreated. and other orthodontic procedures can be used to correct malocclusions, subsequently producing a harmonious relationship between the teeth and the jaws leaving us to enjoy a healthy and attractive smile.

Children and adults should visit the orthodontist for a specialised analysis of the teeth, bite and jaws because orthodontists can help prevent, diagnose and treat these irregularities.

# Malocclusions can be inherited and can manifest as:

- Crowded or spaced teeth
- Irregular positions or ectopic teeth
- Extra or missing teeth
- Cleft lip/palate
- A myriad of jaw or facial abnormalities

# Malocclusions can also be acquired or caused by known factors such as:

- Thumb sucking
- Tongue thrusting
- Dental disease
- Premature loss of primary teeth
- Accidents and injuries
- Some medical problems



It is important to realise that even if you or your child don't have symptoms, a specialist orthodontic check-up might be helpful to correct undetected problems which may become worse over time.

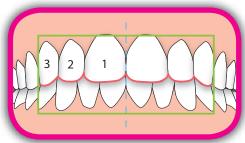


o you feel that your understanding of the term "straight teeth" is incomplete? You're not alone because most people focus on what is visible when you smile and that is usually the front six teeth!

Straight teeth should be assessed on the basis of 32 adult, healthy, working

teeth arranged correctly in the upper and lower jaws. The relationship between all teeth, adjacent and opposing, within each jaw should be harmonious and aesthetic. Not everybody can conform to the ideal or perfect 'dental arrangement' because of differences in tooth shape, size, bone structure and racial characteristics.

However, aesthetic professionals agree that there is no 'normal' because of this variability! When analysed from different viewpoints there are five key features that need to be demonstrated for your orthodontist to be satisfied that your teeth are straight. Here we lay them out for you in plain language.



# WHAT SHOULD IT LOOK LIKE WHEN VIEWED FROM THE FRONT?

In the diagram, the midline (the dashed blue line) between the two middle upper and lower front teeth should coincide. Preferably this dental midline should coincide with the centre-line of the face. There is an aesthetic zone (in the green box) which falls between the canines and the smile zone which includes all the teeth that appear within the lips when you smile. All the teeth that appear in both zones should be in a balanced relationship with each other.

Contrary to popular belief, the biting edges of the teeth need not be straight; it is perfectly natural for your teeth to form a contoured pattern, such as illustrated by the red line. The presence of this contoured pattern enables us to distinguish between somebody who is wearing machined dentures or ill-designed veneers and somebody with a natural look. The ideal relationship between the upper front teeth should be stepwise with the central (1) and lateral incisor (2) and canine (3) at different levels.



# WHAT THEY SHOULD LOOK LIKE FROM THE TOP OR BOTTOM?

The two curved lines drawn over the teeth should be balanced and symmetrical arches in an ideal scenario. However, this is not achievable in everybody due to differences in tooth sizes, shapes and bone structure.



# WHAT SHOULD IT LOOK LIKE FROM THE SIDE?

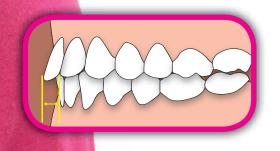
When teeth are viewed from the side there should be an obvious cog-like arrangement, in the same way gears fit together. This aspect of straightness is an indication that your teeth can function properly when you bite together. If you are having difficulty with biting, you may have a problem with overjet or your overbite, which are described next.



# WHAT IS OVERBITE?

When your teeth are together the upper teeth should overlap the lowers - this is defined as overbite. In a perfect smile, the upper teeth should cover no more than 30% of the lowers (the difference between the red and green line).

If there is no overbite and your front teeth meet at the top edges, they will wear down rapidly (reduced overbite and attrition). Deep bite occurs when your teeth overlap too much causing injury to the gums and teeth behind the upper arch.



# WHAT IS OVERJET?

Overjet is the extent to which the front top teeth protrude past the lower front teeth. This is represented by the arrows on the diagram. Preferably, overjet should be between 2 to 4 mm, however this can differ depending on the extent to which your jaws grow. Observe the diagram to see that the upper and lower front teeth stick forward slightly, this is important because they provide a surface on which the upper and lower lips rest (lip support).



# PROBLEMS TO WATCH FOR IN CHILDREN



**Anterior Crossbite** 

(Scissor bite arrangement)



**Posterior Crossbite** 

(Upper arch too narrow)



**Crowding** 

(Overlapping teeth)



**Open Bite** 

(Teeth don't meet at the front - can be caused by thumb sucking)



**Protrusion** 

(Goofy - upper jaw too far forward)



Complete Class III

(Lower jaw protrudes forward of upper jaw)



Diastema

(Spacing)

## Other problems

Other problems can occur of which can only be seen on x-ray. These may include impacted teeth, wisdom teeth, tooth root in the wrong position or not completely developed.

# PROBLEMS TO WATCH FOR IN ADULTS



Crowding

(Overlapping teeth)



Diastema

(Spacing)



**Anterior Crossbite** 

(With forward displacement)



Bruxism

(Tooth wear)



**Periodontal Problems** 

(gum disease)



Protrusion

(Goofy - upper jaw too far forward)



# Open Bite

(Teeth don't meet at the front)



# Deep Bite

(Top teeth overlap lower teeth)

# WHEN SHOULD CHILDREN SEE AN ORTHODONTIST?

# DENTISTS' INFORMATION

Malocclusion, like caries and periodontal disease, creeps up on its victims slowly... and we have the ethical duty to detect and inform.

# **Robert Kirshen**

Orthodontic screening in a minute - BDJ 1998



#### 1 Example: Upper jaw and tooth position

Goofy appearance has resulted from upper jaw being too far forward and upper teeth pointing forward. Lower jaw position
Lower jaw set back relative to top.



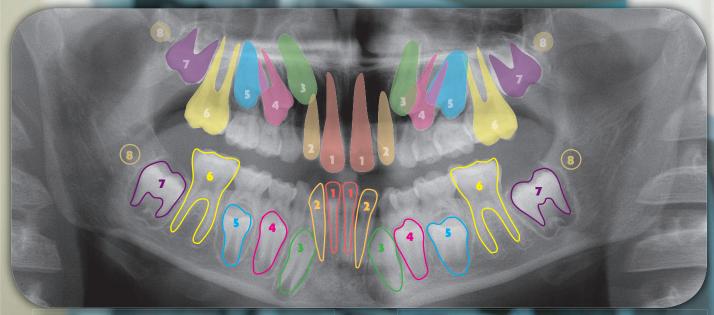
**4 Example:**Supernumerary teeth.

All busy dentists are glad for time saving tips and clear guidance on which cases to refer in order to fulfil their responsibilities to patients who ultimately remain in their care from birth to adulthood. A short and simple clinical examination can lead to the discovery of problems which can be addressed or corrected.

# THINGS DENTISTS CAN CHECK INCLUDE:

- 1 SKELETAL DISCREPANCIES severe class II or III patterns are easy to pick up during facial examination. Moderate or mild skeletal problems require a closer look and might only become obvious through detailed measurements or radiographic examination.
- 2 SOFT TISSUE FORM Lips might not meet at rest or the patient might be unable to close their lips [incompetent]. The lips might protrude excessively as in bimaxillary proclination cases.
- **3 HABITS** Thumb and finger sucking, nail biting and pen chewing can disrupt the occlusion.
- 4 ECTOPIC, MISSING or UNERUPTED TEETH with the help of an eruption calendar a tooth count can determine whether the clinical picture matches the patient's age. Supernumerary and supplemental teeth might not be obvious clinically but a radiographic examination is recommended if these are suspected.
- **5 THE OCCLUSION** teeth can be out of the intercuspal position due to crowding, spacing, cross bites, overjet or overbite problems, centerline shifts and skeletal discrepancies.
- **PREMATURE CONTACTS & DISPLACEMENTS** These can be determined by examining the occlusion in a retruded contact position.

# ERUPTION TIMETABLE



# UPPER

- MAX. CENTRAL INCISORS ERUPTION AGE: 7–8 YEARS
- MAX. LATERAL INCISORS ERUPTION AGE: 8–9 YEARS
- MAX. CANINES ERUPTION AGE: 11–12 YEARS
- MAX. FIRST PREMOLARS ERUPTION AGE: 10–11 YEARS
- MAX. SECOND PREMOLARS ERUPTION AGE: 10–12 YEARS
- MAX. FIRST MOLARS ERUPTION AGE: 5–6 YEARS
- 7 MAX. SECOND MOLARS ERUPTION AGE: 12–13 YEARS
- MAX. THIRD MOLARS ERUPTION AGE: 17–25 YEARS

# LOWER

- MAND. CENTRAL INCISORS ERUPTION AGE: 6-7 YEARS
- MAND. LATERAL INCISORS ERUPTION AGE: 7–8 YEARS
- MAND. CANINES ERUPTION AGE: 9–10 YEARS
- MAND. FIRST PREMOLARS ERUPTION AGE: 10–12 YEARS
- MAND. SECOND PREMOLARS ERUPTION AGE: 11–12 YEARS
- MAND. FIRST MOLARS ERUPTION AGE: 5–6 YEARS
- MAND. SECOND MOLARS ERUPTION AGE: 12–13 YEARS
- MAND. THIRD MOLARS ERUPTION AGE: 17–25 YEARS

# ORTHODONTIC PROBLEMS TO WATCH FOR

# Things to look for in 7 - 10 year olds

- Moderate to severe skeletal discrepancies
- Delayed eruption
- Infraocclusion or submergence
- Large overjets
- Deep overbites
- Centreline discrepancies
- Crowding
- Crossbites
- Impacted first molars or canines
- First molars of poor prognosis
- Persistent habits
- Abnormal soft tissue patterns

# Things to look for in 11 - 13 year olds

- Skeletal discrepancies
- Marked overjets
- Deep or reduced overbites
- Centreline discrepancies
- Buccal segment discrepancies
- Crowding
- Spacing
- Anterior and posterior crossbites
- Missing teeth
- Unerupted teeth



# CAN DAMAGE YOUR TEETH AND AFFECT YOUR BITE!



# **EFFECTS OF SUCKING THE THUMB ON THE UPPER JAW:**

The diagram and radiograph are examples of thumb sucking, although there might be variations to this pattern. The patient usually presses the thumb onto the roof of the upper jaw (the palate) and also onto the back surface of the upper front teeth (the upper incisors). Contact is also made with the lower incisors.

The effect of this thumb sucking action is to push the upper jaw and teeth forward, causing an increase in the horizontal gap between the teeth i.e. the overjet (Class II malocclusion). Contact with the lower teeth causes them to be pushed inwards and sometimes backwards, which results in a vertical gap as well i.e. anterior open bite (the upper and lower incisors are separated and you can see clear daylight between the teeth when the patient bites).

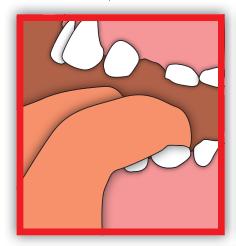






# **EFFECTS OF SUCKING THE FINGERS ON THE LOWER JAW:**

The illustrations below show classic finger sucking but variations of this might happen. Because the fingers press against the front of the lower jaw and the lower front teeth, they disrupt the bite. The upper and lower teeth are pushed outwards towards the lips and an anterior open bite and increased overjet are also seen.







# **HOW TO STOP**

# YOU MUST USE BOTH METHODS SIMULTANEOUSLY TO HAVE ANY SUCCESS!!!

- Use a conscious reminder during the day e.g stop and grow varnish or anti nail biting varnish applied to the fingers and thumbs several times a day
- 2. Employ an **obstructive technique** at night time e.g mittens or socks over both hands to prevent subconscious insertion of the fingers or thumbs into the mouth
- 3. These two methods should be used for at least 3 months after the habit has stopped to prevent relapse
- 4. If all else fails, book your child in to see our Orthodontic Specialists

# ORTHODONTIC ENGINEERING TOOLS OF THE TRADE

# REMOVABLE APPLIANCES

removable appliance is made from a plastic plate with wires coming from the sides which grip the teeth to keep the brace in place. It has a limited number of uses, mainly because it is restricted to moving single teeth and widening either the upper or lower arches. It is important to understand that though your parents might have had one of these in their day, it isn't a precision appliance and cannot be used for complicated or fine tooth movements.

# When should I wear my appliance?

For a removable appliance to be effective, it must be worn all the time except when eating, playing sports and cleaning the brace. In the initial period after one of these is fitted it might feel strange because the plastic plates tend to occupy a bit of space in your mouth, but you will soon get used to it. The mouth also tends to produce more saliva than usual because the brain interprets the presence of the appliance as food; this tends to go after one or two days. If you experience any irritation of the cheek, gum or tongue, the orthodontist can adjust the appliance to make it more comfortable.



# Where should I store my brace when I'm not wearing it?

These appliances need to be kept in a safe place when not being worn because they are easily lost. The best place to keep it is in a brace case which will prevent it from getting broken or thrown away.

# How should I clean my appliance?

In the same way as you keep your teeth clean, you should also clean your brace,

by following the instructions provided by your orthodontist and reading the instructions overleaf.

# When do I come back to get it checked?

You will have regular appointments for adjustments and monitoring of this appliance. If the brace becomes loose or breaks, you would be required to contact your orthodontist as soon as possible. There may be charges for replacement appliances.

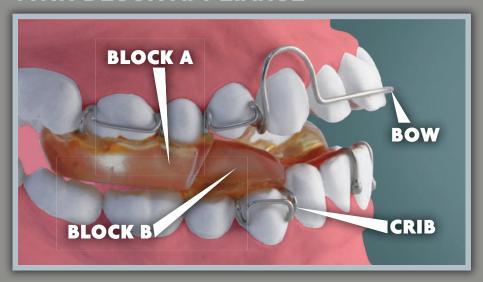
# TWIN BLOCKS OR FUNCTIONAL APPLIANCES

unctional appliances are devices which are used to correct the bite. They are so called because you can function when they are in the mouth. The twin block derives its name from the split nature of the device, in which you have an upper block and a lower block which fit together like twins. These are much more comfortable than the monoblock appliances which were used in the good old days! When you bite, the blocks fit together in a certain way that encourages your jaws to grow into the correct biting position (they are mainly used in growing patients). It is one of the fastest and most effective methods to correct receding jaws, goofy teeth or excess overiet.

Twin blocks can be taken out of the mouth for cleaning or when you want to eat certain foods. Much like the removable appliance discussed earlier, when initially fitted there is an adaptation period of up to three days where your mouth may produce more saliva. If you persevere with wearing this brace it will soon become unnoticeable and feel more comfortable, in fact you will probably feel strange when not wearing it!

To make sure you have a short adaptation period you will need to wear the appliance for the minimum number of hours specified by your orthodontist. For the brace to work correctly the blocks on your brace have

# TWIN BLOCK APPLIANCE



to meet together properly at all times – walking around with your mouth open and the blocks not in contact is not a great idea.

The way in which this appliance works and also how quickly it works relies solely on your commitment to the treatment plan specified by your orthodontist.

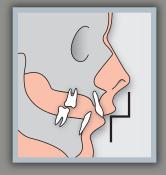
#### How long will it take?

Twin blocks or functional treatments can take anywhere between 6 to 12 months to produce the desired effects. The orthodontist might recommend a course of fixed braces for a further period to refine the results.

# REASONS TO TAKE YOUR TWIN BLOCKS OUT:

- WHEN TAKING PART IN PHYSICAL CONTACT SPORTS, I.E. RUGBY, FOOTBALL, HOCKEY BECAUSE YOU WILL NEED TO WEAR A SPORTS GUARD.
- WHEN SWIMMING TO AVOID LOSING YOUR BRACE WHILST IN THE WATER.
- CLEANING OF THE BRACE MUST BE DONE AFTER EVERY MEAL. WE ADVISE THAT YOU PURCHASE A CLEANING PACK FROM YOUR ORTHODONTIC PRACTICE, AND ONLY USE RECOMMENDED CLEANING PRODUCTS ON THE BRACE

# EFFECT OF FUNCTIONAL APPLIANCES ON THE PROFILE





**Before:** The lower jaw is smaller than the upper causing an adverse profile where the top appears to stick out as shown in the silhouette.





**After:** The jaws have been brought into alignment by wearing functional braces which has corrected the profile creating a much straighter silhouette.



with removable or functional braces and while a fair number of patients benefit from more than one type of brace, most will have fixed braces.

The component of fixed braces which has the greatest variability is the bracket, which comes in various sizes, shapes and colours.

# **A.** LIGATURE OR MODULE

THE ARCH WIRE IS HELD TO EACH BRACKET WITH A LIGATURE. THIS CAN BE EITHER A TINY ELASTIC OR TWISTED WIRE.

#### **B.** ARCHWIRE

THE ARCH WIRE IS TIED TO ALL THE BRACKETS AND CREATES FORCE TO MOVE TEETH INTO PROPER ALIGNMENT.

#### C. BRACKETS

BRACKETS ARE CONNECTED TO THE BANDS, OR DIRECTLY BONDED ON THE TEETH, AND HOLD THE ARCH WIRE IN PLACE

### D. ELASTIC HOOKS & RUBBER BANDS

ELASTIC HOOKS ARE USED FOR THE ATTACHMENT OF RUBBER BANDS, WHICH HELP MOVE TEETH TOWARD THEIR FINAL POSITION.

# E. METAL BAND (NOT SHOWN)

THE BAND IS THE CEMENTED RING OF METAL WHICH WRAPS AROUND THE TOOTH.



# TYPES OF FIXED APPLIANCES



1) METAL BRACKETS

# METAL BRACKETS WITH COLOURS

STAINLESS STEEL METAL BRACKETS ARE EASILY RECOGNISED AND ARE WIDELY USED IN THE TREATMENT OF PATIENTS IN ALL AGE GROUPS. THEIR ROBUSTNESS MAKES THEM SUITABLE FOR MOST COURSES OF TREATMENT. THE DESIGNERS HAVE BEEN MAKING THEM SMALLER AND DECREASING THE PROFILE OF THESE METAL BRACKETS, SOMETIMES WITH BENEFICIAL RESULTS. THEY INCLUDE HIGHER TREATMENT EFFICIENCY, DECREASED FRICTION, DECREASED APPLIANCE BREAKAGE (DUE TO INCREASED BOND STRENGTH) AND SUPERIOR FIT OR SEATING. THESE METAL BRACKETS CAN BE CUSTOMISED WITH COLOURED LIGATURES OR MODULES TO PROVIDE INDIVIDUALITY AND MAKE THEM MORE AESTHETICALLY PLEASING.



2) GOLD BRACKETS

# **GOLD BRACKETS**

OTHERS MIGHT BE MORE ATTRACTED BY THE AESTHETIC APPEAL OF THE GOLD APPLIANCE SYSTEMS WHICH CAN BE COMPLEMENTED WITH GOLD WIRES. THESE PROVIDE THE PATIENT WITH AN ALTERNATIVE TO THE TRADITIONAL STAINLESS STEEL LOOK.



3) CERAMIC BRACKETS

# **CERAMIC BRACKETS**

ATTRACTIVE, TRANSLUCENT OR TOOTH COLOURED, AESTHETIC FIXED BRACKETS APPEAL TO PATIENTS IN VIEW OF THEIR LESS OBTRUSIVE APPEARANCE. THESE ARE MADE FROM A CERAMIC MATERIAL AND DIFFER FROM PLASTIC (POLYCARBONATE) BRACKETS IN TERMS OF THE SUPERIOR DURABILITY, COLOUR STABILITY, STRENGTH AND OVERALL PERFORMANCE THROUGHOUT THE TREATMENT. NOT ALL TOOTH COLOURED BRACKETS ARE CERAMIC, IF YOU ARE HAVING PROBLEMS WITH BREAKAGES AND DISCOLOURATION, YOU MOST LIKELY HAVE BEEN FITTED WITH AN INFERIOR PLASTIC BRACKET.

FIXED BRACES CAN BE MADE "TOTALLY WHITE" BY UTILISING CERAMIC BRACKETS, WHITE OR TOOTH COLOURED ARCH WIRES AND NON-STAINING LIGATURE WIRES. THIS MEANS THAT YOUR APPLIANCE IS VIRTUALLY INVISIBLE!



4) DAMON SELF LIGATING BRACKETS



5) SELF LIGATING BRACKETS

# **SELF LIGATING BRACKETS**

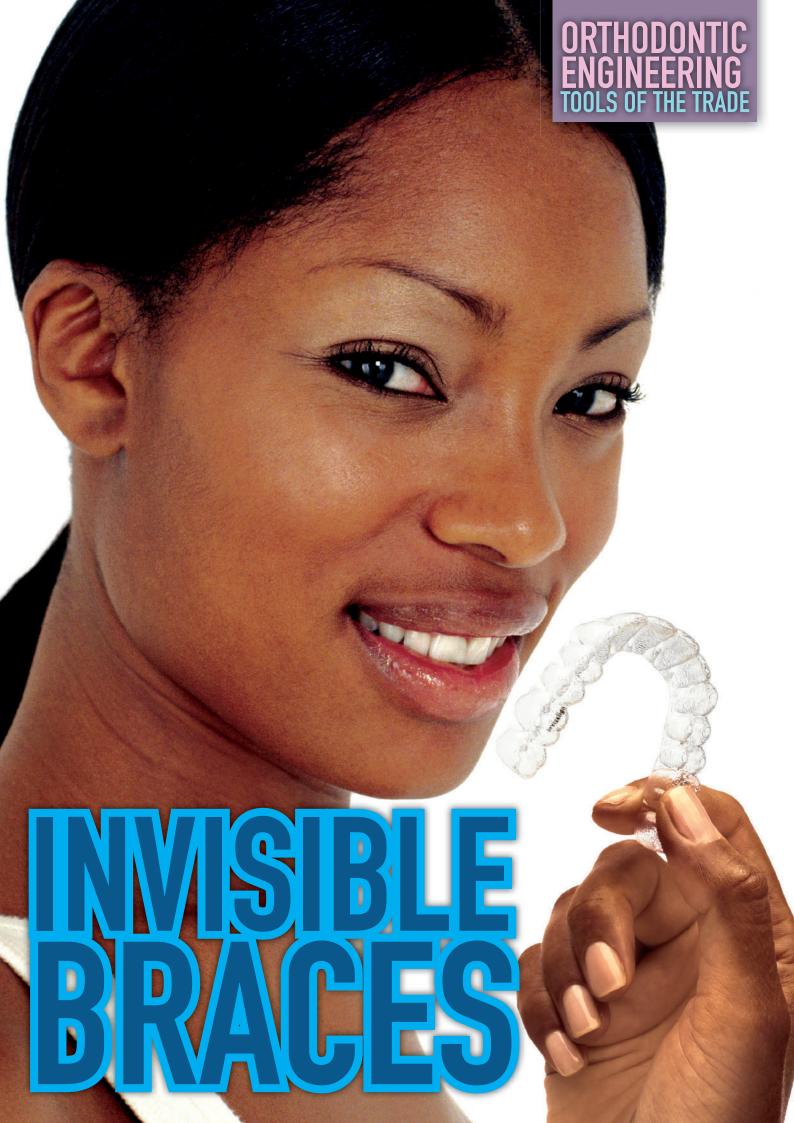
THESE ARE FIXED BRACES WHICH FUNCTION WITHOUT LIGATURES AND MODULES. THESE BRACES ARE DESIGNED TO HELP THE TEETH MOVE MORE EFFICIENTLY AND MAY RESULT IN FEWER ADJUSTMENT VISITS. THE ABSENCE OF MODULES AND LIGATURES ELIMINATES THE HASSLE OF STAINING.

#### ONE ORTHODONTIST SHARES HIS THOUGHTS ON SELF-LIGATING SYSTEMS:

"I AM TREATING MORE AND MORE CASES WITH SELF-LIGATING SYSTEMS AND I AM MORE EXCITED ABOUT WHAT I CAN ACHIEVE FOR MY PATIENTS THAN EVER BEFORE IN 25 YEARS OF PROVIDING ORTHODONTIC CARE. I'VE NOTICED AN INCREASE IN THE NUMBER OF NON-EXTRACTION OPPORTUNITIES, MY PATIENTS' GUMS LOOK HEALTHIER AND I'VE HAD NUMEROUS COMMENTS THAT BREATHING PROBLEMS ARE REDUCED.

USING THE REDUCED FRICTION AND LIGHT FORCES OF SELF-LIGATING SYSTEMS ALLOWS ME TO MOVE TEETH IN A "BIOLOGICALLY-COMPATIBLE" WAY. I BELIEVE THE BODY WORKS WITH THIS TREATMENT INSTEAD OF OPPOSING IT. ORTHODONTIC EXPERTISE COMBINED WITH SELF-LIGATION HAS THE POTENTIAL TO TRANSFORM FACES AND SMILES LIKE NEVER BEFORE!"

- 1) 3M VICTORY METAL BRACKETS IMAGE COURTESY OF 3M UNITEK
- 2) 3M VICTORY GOLD BRACKETS IMAGE COURTESY OF 3M UNITEK
- 3) 3M CLARITY BRACKETS "CERAMIC" IMAGE COURTESY OF 3M UNITEK
- 4) DAMON D3MX BRACKETS "SELF LIGATING" IMAGE COURTESY OF ORMCO CORPORATION
- 5) 3M VICTORY SMARTCLIP BRACKETS "SELF LIGATING" IMAGE COURTESY OF 3M UNITEK





invisalign is a removable brace system that uses a series of custom-moulded aligners to move your teeth. The great thing about

Invisalign is that the aligners are transparent and invisible (no metal bands or wires), therefore nobody is going to realise that you are undergoing treatment - unless you tell them!

nvisalign can be used to treat the vast majority of common problems for adults and children. Using advanced 3-D computer imaging technology to project tooth movement, Invisalign allows you to visualise your treatment from start to finish through animated visuals, which can be viewed online.

Whether your smile needs minor improvements or more extensive adjustments, Invisalign can certainly help. It is successful in treating crowded or widely spaced teeth. It can also relieve more complex issues, including overbites, overjets, under bites and even cross bites. In fact, your orthodontist can use Invisalign clear aligners in all or part of many treatment plans.

Every two weeks you will have to replace the old aligner for a new one which will continue to guide your teeth in the necessary direction. Each new aligner may give an initial feeling of minor discomfort for a couple of days - this sensation is typically described as a feeling of pressure and is a sign that Invisalign is working.

The aligners gradually reposition your teeth over the period of treatment - the length of which is determined by the complexity of the case and what you and your orthodontist have agreed to achieve. You will need to go in periodically for a few orthodontic appointments in order to check your treatment progress and make sure your teeth are responding to the aligners.

Invisalign aligners must be worn all day, except when brushing, flossing or eating. Fortunately, because you can remove your aligners to eat and drink you can eat all your favourite foods. After each meal, however, you must make sure that you brush your teeth prior to re-inserting your aligners to maintain good hygiene.

Irrespective of the simplicity of your case, your treatment is best handled by an orthodontic specialist, who is trained to diagnose and solve any problems which may arise during your treatment.

# CASE STUDY

Age at start of treatment: 16 years old

#### Problem:

Space in-between teeth

#### **Solution:**

✓ Upper & lower Invisalign Teen therapy

#### Number of aligners:

- ✓ Upper: 12
- ✓ Lower: 10

- Upper & lower bonded (fixed) retainers
- ✓ Upper & lower Hawley (removable) retainers for night time

**Treatment duration:** 6 months

















# LINGUAL APPLIANCES

he word "lingual" originates from a Latin word meaning "tongue". Lingual appliances are used to correct misaligned teeth and bite problems, using a fixed brace that has been bonded to the tongue side of the teeth. This enables teeth to be moved into their correct position without having the braces i plain view.

Lingual appliances differ from conventional fixed braces because they are placed behind the teeth giving invisibility with no change in lip contours. In fact a lot of actors and media personalities choose to undergo treatment using lingual appliances.

# LINGUAL APPLIANCE FAQ'S

# CAN ANY MALOCCLUSION BE CORRECTED WITH LINGUAL ORTHODONTICS?

YES. WHEREAS SOME REMOVABLE APPLIANCES ALLOW ONLY SIMPLE, MINOR TOOTH MOVEMENTS, A LINGUAL APPLIANCE CAN CORRECT EVEN EXTREME MALOCCLUSIONS.

#### **CAN CHILDREN USE LINGUAL BRACES?**

YES, BUT ONLY AFTER THE ERUPTION OF MOST OF THE PERMANENT TEETH.

# IS THERE AN AGE-LIMIT FOR LINGUAL ORTHODONTICS?

THERE IS NO AGE LIMIT WHATSOEVER, PROVIDED THE TEETH ARE FIXED FIRMLY IN THE BONE, ANYONE SHOULD BE ELIGIBLE FOR A LINGUAL APPLIANCE. A COMMON MISCONCEPTION IS THE BELIEF THAT BRACES ARE ONLY FOR CHILDREN AND ADOLESCENTS, BUT EVEN IF A PATIENT IS IN THEIR SIXTIES THEY CAN BE FITTED WITH A LINGUAL BRACE.

# HOW LONG DOES TREATMENT TAKE WITH A LINGUAL APPLIANCE, AND WHAT IS THE STANDARD OF THE RESULTS?

BOTH THE TREATMENT TIME AND THE RESULTS FROM A LINGUAL APPLIANCE ARE THE SAME AS FOR A NORMAL FIXED BRACE.

# IS THE ONLY ADVANTAGE OF A LINGUAL BRACE AESTHETIC OR ARE THERE ANY MEDICAL ADVANTAGES?

THERE ARE BOTH MEDICAL AND AESTHETIC ADVANTAGES TO THE LINGUAL BRACE. THE INNER SIDE OF THE TEETH IS MUCH MORE ROBUST AND LESS SUSCEPTIBLE TO DECALCIFICATION AND DECAY. THIS MEANS THAT WITH LINGUAL ORTHODONTICS, PERMANENT DAMAGE TO THE TEETH IS LESS LIKELY THAN WITH A FIXED BRACE WORN ON THE OUTER SIDE OF THE TEETH. IF WHITE SPOTS, TRACES OR DECALCIFICATION BEGIN TO APPEAR ON THE OUTER SIDE OF THE TEETH EVEN PRIOR TO COMMENCING TREATMENT THEN LINGUAL ORTHODONTICS COULD BE A BETTER OPTION FOR YOU.













# RELAINERS

fter braces have been removed teeth have a tendency to return to their original position undoing your great new smile. To prevent this, your orthodontist may advise that you wear a retainer.

Wearing a retainer is simple, but it is actually a complex piece of equipment and a significant part of your orthodontic treatment. To maintain the success of your orthodontic treatment, it is vital that you wear your retainer in the way that your orthodontist advises.

It is difficult to say how long you will need to wear your retainer — each patient is an individual case. Your orthodontist's advice about how long you will need a retainer for will be tailored to you.

There are a range of different retainers available and your orthodontist will recommend to you the type of retainer that will best keep your teeth in position. Here is an outline of the different types of retainers your orthodontist may recommend:

- Hawley Removable Retainers This is the most common retainer and is made of a metal wire that surrounds the teeth, keeping them in place. The wire is rooted to a piece of specially moulded acrylic, which resides in the palate or floor of the mouth.
- Essix Removable Retainers This is a clear or transparent retainer that is moulded to fit over the teeth.
- Bonded Fixed Retainers These consist of a wire bonded to the tongue-side of your teeth. They are designed to hold your teeth in a particular position for a long period of time, and the longer they remain in place the greater the guarantee that your teeth will remain straight.

Your orthodontist will have specially designed your retainer to help you maintain your treatment results.

In order to benefit from a lifelong healthy smile, there are a few guidelines

for wearing and taking care of your retainer that it is essential you follow:

### Wear your retainer as directed

If you don't follow your orthodontist's instructions for wearing a retainer, it will not be effective in preventing your teeth from moving back into their original position. Retainers don't work when they're in your pocket!

#### Keep them clean

Your orthodontist will show how best to keep your particular retainer clean and this must be done very regularly. Also make sure you see your dentist for a thorough cleaning every six months (or more often, if recommended).

#### Handle them with care

If your retainer isn't in your mouth, it should be in its case. This is because retainers are very easy to lose, and expensive to replace.

# If you have a problem, call your orthodontist

If you break or lose your retainer, then contact your orthodontist immediately for a replacement. If your retainer stops fitting properly (which is liable to happen if you don't wear your retainer in the way your orthodontist advises) or if your fixed retainer becomes loose, call your orthodontist right away for an appointment.

#### BELOW: REMOVABLE HAWLEY RETAINER







**BELOW: REMOVABLE ESSIX RETAINER** 



# Teen Angst

#### BY SOPHIE MILLS

hen I was a teenager braces seemed like something that only people with teeth like Dracula needed to wear. They seemed ugly and uncomfortable, not to mention the time it would take for my teeth to move. Everyone else was having them, so ironically I was the odd one out, but I still didn't see the point. Then when I turned 21, I looked in the mirror one day and realised I'd made a big mistake.

Braces are common, especially for teenagers. In fact, in Thailand it's fashionable to wear braces, whether you need them or not! A lot of celebrities such as Tom Cruise and Estelle have worn braces, and Cindy Crawford even wore them in a Pepsi ad once.

It's the teenagers who haven't had orthodontic treatment that appear to be in the minority. Today people are more open to making the most of their appearance, with 'look good, feel good' being an increasingly common mantra. Possibly, one of the most important parts of looking and feeling good is having an attractive smile. After all your smile says a lot about you - a happy and healthy smile exudes confidence and self-esteem.

The idea of having orthodontic treatment as a teenager can still be daunting; it probably feels like you have enough going on in your life without adding braces to the mix, but it's definitely worth it. Firstly, you don't need to worry about being the only one with braces, as you will find that the majority of your friends will also undergo orthodontic treatment at some point. Secondly, advances in technology have resulted in them being almost invisible, and the average treatment time is only between 18 months to 2 years - this is a small price to pay for a lifetime of gorgeous smiles!

There are many reasons for having treatment whilst still a teen such as it being the optimal age for achieving excellent results, which saves your teeth from worsening as you get older. Possible consequences of postponing treatment could be having braces as an adult or maybe even corrective surgery. Also, the sooner you have braces, the sooner you can reap the benefits of an attractive smile, which will make you feel better about the way you look, as well as increasing your confidence. However, orthodontic treatment is not just about a great smile, it has health benefits too, such as preventing the problems which are caused by crooked teeth. These include tooth decay and gum problems which can contribute to losing your teeth at an early age. Crooked teeth may also cause bad breath as plaque builds up in the areas which are hard

At times you may feel like your parents are forcing you to have braces, or they keep giving you grief about taking care of them. When this happens, remind yourself that the braces are for your benefit; therefore it is important that you do your best to look after them. The most important thing to remember is that braces won't ruin your life, in fact, eventually they will make it 10 times better. So don't make the mistake I did and put off having them. Once they're on you will wonder what all the fuss was about!

# 4 Straight Answers to **4 Common Questions**

# 1) Will my friends laugh at me?

It would be unusual to be laughed at or get bullied for wearing braces, most people today are aware of what they are and what their purpose is. It is also important to remember that orthodontic braces are a medical treatment and laughing at someone with braces is comparable to laughing at someone who has broken their leg and is wearing a plaster cast. If you are being bullied, then make sure that you inform a parent or responsible adult.

# 2) Will it interfere with my lifestyle?

No! It will make no difference in this area of your life whatsoever. Having braces actually shows that you care about your appearance and people usually find this to be an attractive quality. Braces are so common nowadays that you may find many people you know also wear braces.

# 3) Will I have to change my eating habits?

Yes. If you were a diabetic, you wouldn't eat sweets because they could have an adverse effect on your health. For the same reasons as a brace-wearer you will have to ensure you avoid foods that can damage your teeth or braces. It is important to note that if you suffer from an eating disorder such as anorexia or bulimia, you will not be able to have braces until you have overcome these conditions.

### 4) Is cleaning my teeth going to be difficult?

It will require a concerted effort to brush your teeth properly after every meal, as you will need to make sure you follow your orthodontist's advice to the letter. Doing this is in your own best interests as it prevents food getting stuck in your braces and also means that when your brace is removed your teeth are not horribly stained.



# I'm an adult What can you do for me?











# In recent years orthodontic treatment of adults has become more common. So what are the reasons for this trend:

- 1) An increased availability of dentistry and orthodontics to all segments of the population has improved public awareness. Age should not deter anyone from having a beautiful smile and a correctly functioning bite gone are the days when your dentist would say you are too old to have braces! Many adults make their own orthodontic enquiries and appointments directly.
- 2) In some cases where adults experience dental problems the comprehensive and conservative solution usually involves a combination of general dentistry and orthodontics.
- 3) The increased financial independence of adults enables them to receive orthodontic treatment which may not have been available to them as children.
- 4) Technological advances in orthodontics have made braces more acceptable to adults because they are less obtrusive, easier to wear and treatment time is considerably shorter.
- 5) Improvements in dental health mean that more adults are keeping their teeth for life. If you are going to keep your teeth for the rest of your life, why not make them look good?

# Do I need orthodontic treatment?

Regardless of your age, orthodontic treatment will provide you with straight teeth and a distinguished smile. Whilst treatment results in improved self-confidence and satisfaction, the goals of orthodontics are not just the cosmetic enhancement of your smile – there are always significant improvements in the health of your teeth and gums.

Orthodontic problems, like crowding, gaps or a bad bite can worsen over time, if not appropriately addressed. For instance a 'bad bite' can end up causing chewing problems, uncharacteristic wearing of tooth surfaces and injury to the supporting bone and gum tissue. Poor tooth alignment can contribute to pain in your jaw joints and crowded teeth can be hard to clean or maintain, which may eventually lead to gum disease, tooth decay and even tooth loss.

Another example is when a tooth has been missing for a period of time and the adjacent teeth have tipped into the space, restricting the placement of a bridge or an implant. Orthodontic movement of the adjacent teeth would be the ideal way to recreate the desired space.

# Will braces make my life a misery?

Fortunately, braces fit in with almost any lifestyle and you can do virtually anything while you are undergoing treatment – dine out, sing, play wind instruments, have your picture taken and even kiss. Before commencing treatment you should be under no illusions that to reap the benefits, you might have to make a few compromises such as avoiding some hard foods and reducing sugary treats, brushing your teeth after every meal, flossing as often as possible and making regular visits for brace adjustments.

ne orthodontist points out that, "In most cases, adult patients adjust very rapidly and adapt sufficiently enough to enjoy their lives. I've had many patients tell me that after a while, they don't notice that they have them on!"

Modern technology now allows the wearer to feel more confident with the look and feel of their braces. Some of the appliances available include ceramic (tooth coloured) fixed braces, clear plastic removable moulds that fit to your teeth and lingual fixed braces, which are attached behind the teeth. All of these options al low you to minimise the visibility of the brace.

For you as an individual the orthodontic treatment process is a journey of self-improvement, during which you should always remember to keep your eyes on the end result.

# What's my first step?

In order to clarify if you can benefit from orthodontic treatment, a consultation with a specialist orthodontist is necessary. After observing the condition of your teeth, gums and supporting bones to determine the potential for improving your smile and dental health, the orthodontist will make a decision, and inform you of what your treatment will involve and its approximate cost. After you have decided to go ahead, your orthodontist will then make diagnostic records of your mouth, including taking moulds of your teeth, special x-rays and photographs.

Because everyone's teeth are distinct to them, it is only after a thorough examination of you and your orthodontic requirements, that your orthodontist will recommend the optimum course of treatment for improving your smile.

# Can I afford it?

The cost of orthodontic treatment varies, taking into account possible factors including the severity of the problem, brace type & appointment requirements. Before treatment begins, your orthodontist will be happy to discuss the cost with you. To ensure it is affordable there are a variety of convenient payment plans, where the cost of treatment can often be spread over a period of time.

Braces are more affordable now than at any time before, and when you consider the longlasting benefits of braces, they are definitely worth it!



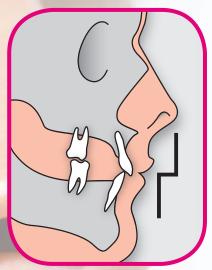
# Orthodontics and Maxillo-facial Surgery

f you have a problem with the position or shape of the jaws, your bite will be affected.

Jaws can be short or long, too wide or too narrow depending on your genetic makeup or growth. It may not be possible to correct a bad bite using braces alone, because the reason for the bad bite may be the bone structure. If you have a bad bite it is not just your appearance that will be affected but it may also cause other problems including abnormal tooth wear, periodontal disease, and possible joint pain.

One of the most common things patients complain about is their profile or how they look when viewed from the side. Profile problems can originate from an imbalance between the position and shapes of the upper and lower jaws.

1: CLASS I PROFILE





# The inclination of the teeth can significantly affect your profile.

An orthodontist corrects crooked teeth and bad bites, while an oral & maxillo-facial surgeon solves problems related to jaw formation and misalignment (skeletal problems). In situations where both conditions are present, it's common for the two specialists to work together, merging orthodontics and maxillo-facial surgery in a combined treatment plan, commonly known as orthognathic surgery. In other complex cases, input from additional dental specialists might also be required. The expected end results of this combined approach to treatment are to improve your facial appearance, the alignment of your teeth, and the upper and lower jaw relationship.

There are many different jaw development and alignment problems that can be solved by orthognathic surgery. These problems may arise from abnormal growth; they may be genetic or even could be caused by an accident or other trauma.

# The most commonly corrected problems include:

2: AN UNSIGHTLY DISPLAY OF GUM TISSUE ABOVE THE UPPER FRONT TEETH



Each patient's treatment is planned individually to make sure that the treatment approach is right for them. A full examination of the face and mouth is carried out, which includes impressions of the teeth for models or casts, special x-rays and photographs of the face and teeth. Over a series of appointments with the various specialists, discussions with you will eventually lead to a final treatment plan and the exact course of your treatment will be explained.

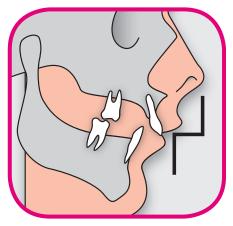
In cases where orthognathic surgery is indicated, you may require 12 to 18 months of orthodontic treatment, usually involving braces in order to get your teeth into the best position for optimal surgical results. Surgery is then scheduled when your teeth have been properly aligned. The orthodontic appliances used to align the teeth will usually be left in place during and after the surgical phase to help stabilise the teeth and jaws.

After surgery, most patients are able to return to work or social activities within 2 weeks. Advice on your engagement in sporting activities and foreign travel will be based on your predicted postsurgical recovery rate.

The refinements required to bring your teeth into their final desired position may mean you will have a few months of orthodontic treatment after the surgery.

Whilst it might seem daunting, it is important to understand that if you require surgical treatment it will achieve the best results. Orthognathic surgery is carried out on a much more frequent basis than most people realise and is considered to be a safe way to achieve a total makeover. After combined treatment most patients get the pleasure of benefiting from improved facial appearance, aesthetic profile, dental health and revitalised confidence.

3: A PROTRUDING UPPER JAW (STICKS OUT TOO FAR) AND RETRUSIVE LOWER JAW (SET BACK TOO FAR) - CLASS 2 PROFILE





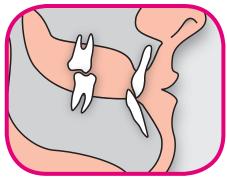
4: A PROTRUDING LOWER JAW (STICKS OUT TOO FAR) AND RETRUSIVE UPPER JAW (SET BACK TOO FAR) - CLASS 3 PROFILE

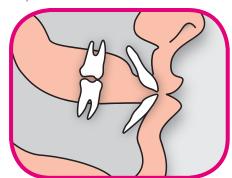




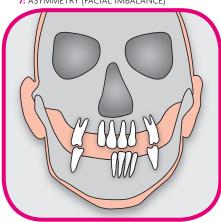
5: TEETH AND JAWS THAT POINT BACKWARDS CAN CAUSE THE LIP PROFILE TO BECOME MORE RETROCLINED (LESS PROMINENT).

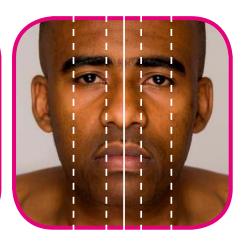
6: TEETH AND JAWS CAN STICK FORWARDS CAUSING THE LIP PROFILE TO BECOME MORE PROTRUSIVE (PROMINENT)

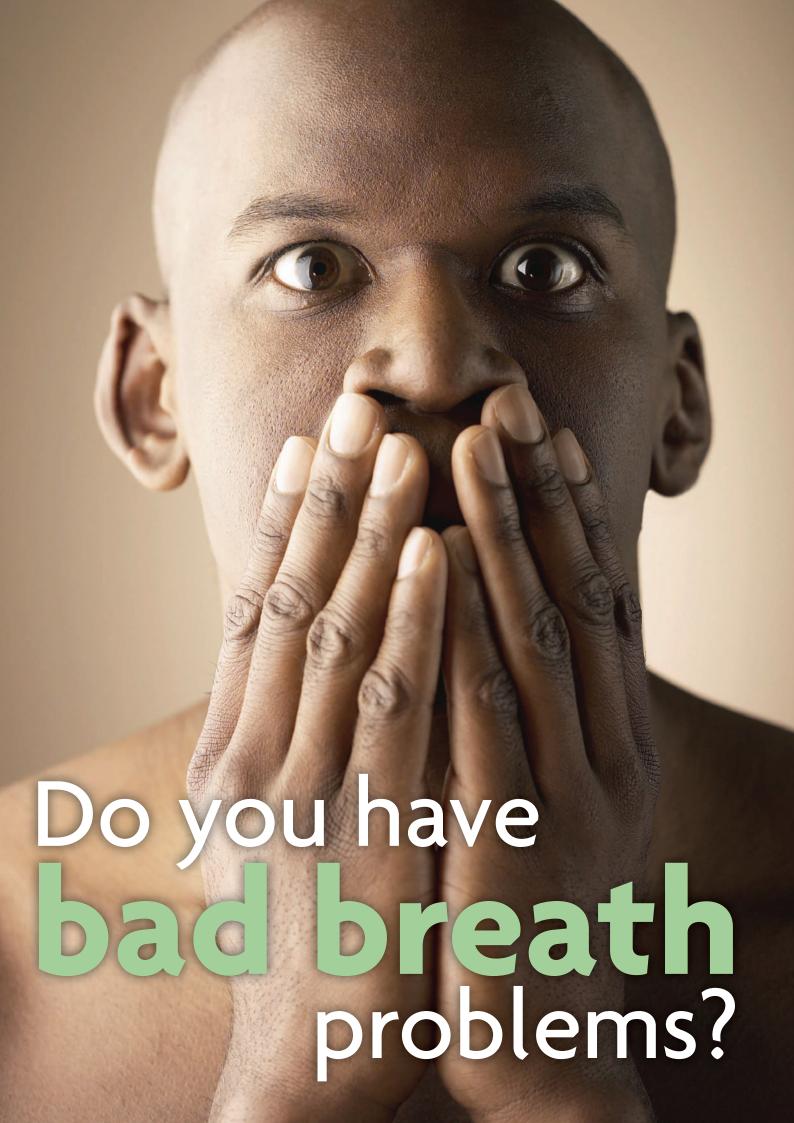




7: ASYMMETRY (FACIAL IMBALANCE)







# Fresh Breath Clinic

here is much more to the perfect pout than just fantastic teeth. Your lips and tongue are equally important in ensuring complete oral health. We use them to do the things we enjoy most such as speaking, eating and smiling, so it is important to know how to take care of them!

Bad breath is an antisocial and unwanted problem not for those who have it but

for those who are on the receiving end of it. It can be caused by medical conditions such as stomach problems or even prescribed medication, most of the time it's due to poor oral hygiene or what we ate at lunch or dinner.

It can be very difficult to detect your own bad breath. The reason for this is because the oral cavity (the first space in the mouth) is connected to our nose by an opening which lies in the back of our mouth. Our noses filter out and ignore background odours therefore filtering out and ignoring the quality of our own breath. This is why it is quite possible for a person to have bad breath and yet not be aware of it themselves.

# **Common Causes of Bad Breath**

### Spices

Certain spices produce compounds which eventually contribute to smelly breath and sweat.

### Garlic and onions

They create volatile sulphide compounds which give off a rottenegg odour.

### Coffee

It contains acids that decrease oxygenation of the mouth, which, in turn, increases bacteria production.

# Smoking

Smoking deteriorates the gums causing a disease called periodontitis which causes very bad breath. Also the smoke itself smells bad so when you inhale it in your body your mouth holds the smell giving you bad breath.

### Alcohol

Alcohol dries the mouth decreasing saliva allowing bacteria to spread in your mouth.

# Dairy and milk products

Protein is a source for bad breath bacteria but also it thickens nasal mucous making it harder to clear away.

### Sugar

Bacteria feed off sugar in your mouth and produce strong acids leading to tooth decay resulting in a build up of food debris and bad odour.

## Fizzy drinks

The carbon dioxide in fizzy drinks is acidic and strong enough to damage the surface layers of teeth causing tooth decay and a foul smell in the oral cavity.

# Poor oral hygiene

Poor tooth brushing technique, irregular tooth brushing and dental neglect will allow bacteria to fester in your mouth causing malodour.

# Medications and medical conditions

If you think your medication or a medical condition (e.g. diabetes) could be causing your bad breath contact your doctor or dentist for an examination.

# Mouth breathing

Some people breathe continuously through their mouths causing dryness and a unique poor smell which can be attributed to a substance called mercaptans.

# How to keep your breath fresh

- THE TONGUE IS THE MOST LIKELY CULPRIT OF BAD BREATH DUE TO SUBSTANCES CALLED MERCAPTANS, WHICH CAN BE FOUND IN FOODS SUCH AS GARLIC, ONIONS AND BEER. UNFORTUNATELY THEY HAVE THE DISTINCTIVE SMELL OF ROTTEN CABBAGE, BUT REGULAR CLEANING OF THE TONGUE WILL HELP TO KEEP THIS UNDER CONTROL.
- AS WELL AS BRUSHING YOUR TEETH, YOU NEED TO ENSURE THAT YOU ALSO CLEAN YOUR TONGUE THOROUGHLY AND OFTEN.
  THIS CAN BE DONE WITH A REGULAR TOOTHBRUSH OR A TONGUE SCRAPER.
- IN THE MAJORITY OF CASES BAD BREATH ORIGINATES FROM THE REAR OF THE TONGUE, AND CLEANING THIS AREA WITH AN ERGONOMICALLY DESIGNED TONGUE CLEANER CAN USUALLY PREVENT THIS.
- USING A MOUTHWASH IS AN IMPORTANT PART OF MAINTAINING ORAL HYGIENE, AND IF YOU SUFFER FROM BAD BREATH IT MAY BE ADVISABLE TO USE A PRESCRIBED MOUTHWASH TO REDUCE THE BACTERIA RESPONSIBLE.



IF YOU THINK YOU SUFFER FROM BAD BREATH, START BY INSTITUTING GOOD ORAL HYGIENE MEASURES AND VISIT US AT PLATINUM DENTAL WHERE WE WILL EVALUATE YOUR DENTAL CONDITION DETERMINE THE CAUSE AND TREAT IT APPROPRIATELY HELPING YOU TO REGAIN YOUR CONFIDENCE.

Visit our website for more information: **www.platinum-dental.com** or telephone the practice on: **+233 302 998750** or **+233 508 923041** 

# ORAL HYGIENE: KEEPING YOUR TEETH CLEAN

# WHAT IS ORAL AND DENTAL HYGIENE?

Oral and dental hygiene refers to the practice of keeping your mouth healthy and clean by following regular and correct brushing and flossing routines. This helps to prevent the formation of plaque, which is the sticky film of bacteria that forms on the hard surfaces of teeth, leading to dental decay and gum disease.

# WHAT ARE THE RESULTS OF GOOD DENTAL HYGIENE?

A healthy-looking and odourless mouth, which comprises of:

- Clean and debris-free teeth.
- Pink gums that do not hurt or bleed while brushing or flossing.
- A mouth free from regular episodes of bad breath.

# WHAT IS THE PURPOSE OF DENTAL HYGIENE?

Good dental and oral hygiene helps to:

- Prevent the formation of plaque, which is the sticky film of bacteria that forms on the hard surfaces of teeth. This can lead to further dental and oral problems, such as tooth decay, tartar, gingivitis and periodontitis or gum disease.
- Improve quality of life by preserving speech and eating functions, as teeth will last longer and one can avoid the embarrassment of bad breath or missing or unsightly teeth.

# WHAT ARE THE SYMPTOMS OF IMPROPER DENTAL HYGIENE?

- Bleeding or painful gums.
- Persistent bad breath.
- Yellow or brown deposits on teeth.
- Loose teeth and widening gaps between teeth.



# WHAT ARE THE POTENTIAL CONSEQUENCES OF IMPROPER ORAL HYGIENE?

# TOOTH DECAY, DENTAL CARIES, CAVITIES, GUM IRRITATION AND FOUL BREATH

As a result of improper oral hygiene, plaque accumulates on the hard surfaces of teeth; when you eat, the bacteria use the sugar and starch from your food to release acid. This acid:

- Corrodes the tooth enamel over time and results in holes or cavities in the tooth.
- Irritates the gums, resulting in bleeding, which leads to foul breath.

The cavities are usually cleaned and refilled with an inert material by one of our dentists to retain and restore the teeth as well as protect them from further tooth decay. If left untreated, it can result in loss of entire teeth.

### TARTAR OR CALCULUS

Constant accumulation of plaque as a result of irregular brushing and flossing results in the hardening of plaque into a yellow or brown mineral deposit called tartar or calculus. As a result of its crusty and rough surface, teeth then become ideal locations for further plaque growth. Tartar leads to gum disease when it is formed below the gumline.

### **GINGIVITIS**

This is the initial stage of gum disease and is characterized by:

- Inflammation of the gums.
- Painless bleeding during brushing and flossing

If treated with adequate dental care, it is reversible. If ignored, it can lead to a more serious and advanced form of gum disease called periodontitis.

### **PERIODONTITIS**

This is advanced gum disease, which leads to the destruction of structures supporting the teeth, including the bone; this causes the loosening of teeth, requiring their removal as a result. The signs of the condition are red, swollen, bleeding gums that shrink away from the teeth. The resulting widening spaces between the teeth and exposed root surfaces are highly vulnerable to decay.

PERIODONTAL DISEASES CAN CAUSE INFLAMED, BLEEDING, SENSITIVE GUMS. IN MORE SEVERE CASES IT CAN LEAD TO GUM RECESSION, BONE AND TOOTH LOSS.

# HOW CAN ONE MAINTAIN GOOD DENTAL HYGIENE?

Proper dental and oral hygiene will prevent the formation of plaque, which, as explained above, is the main factor that leads to gum disease and tooth decay. Parents must guide children as to the proper dental hygiene methods they should practise daily. You can also seek our advice about the proper oral and dental hygiene practices to be followed.

# ANTISEPTIC MOUTHWASHES

Use regularly after brushing and/or flossing to kill plaqueforming bacteria, and especially if you have bad breath.

### **FLUORIDE USE**

Flouride protects and strengthens your teeth by binding with enamel. Use fluoride in toothpaste, fluoridated drinking water or dental treatments, or use a fluoride mouthwash.

# PRECAUTIONS TO BE TAKEN IN YOUR ORAL HYGIENE PROGRAM

Taking care of your teeth begins in infancy and will be a lifelong concern. There are some precautions that must be taken at various life-stages and under various conditions.

- Infants use a moist cloth or a soft toothbrush to wipe the tooth clean. Only use a recommended infant toothpaste, because it contains an adequate amount of fluoride. Too much fluoride can be toxic to infants.
- Adults with partial or full dentures or bridges you must maintain proper dental and oral hygiene as instructed by our dental hygienist or our dentist in order to prevent gum disease.

  Denture users must regularly visit our dentist to realign and adjust the dentures as required to prevent red and swollen gums.



### **BRUSHING AND FLOSSING PRECAUTIONS:**

- Must be done thoroughly but not too vigorously, as rough movements can irritate or damage sensitive oral tissues.
- Sore or bleeding gums in the first few days after flossing are normal. However, any bleeding, sore or abnormal condition that last beyond one week should be reported to one of our dentist.

### **PREVENTION**

- Regular visits to the dentist at least every six months to monitor dental and oral health.
- Regular professional dental cleaning fluoride treatments, sealant application and scaling to help to scrape off the hardened plaque (tartar).
- **Diagnostic services –** go for X-ray imaging and oral cancer screening.
- Treatment services fillings, crowns and bridges to restore and retain teeth.



### HEALTHY EATING FOR HEALTHY TEETH

Eating a balanced diet plays an important role in dental health. A balanced diet includes all the main food groups: fruits and vegetables, milk products, meat, fish, etc.

### FOODS THAT CAUSE TOOTH DECAY:

- Foods with a high concentration of sugar cakes, ice cream, honey,
- Acidic drinks with a low pH valuecan damage the tooth enamel.
- Sticky foods these do not get washed away from the tooth surface easily by the saliva, hence increasing the exposure of teeth to sugar and acids and, consequently, tooth decay.

# FOODS THAT ARE GOOD FOR ORAL HEALTH:

- Foods high in fibre, such as fresh fruits and vegetables they increase the saliva flow, which neutralises acids, helping to clean the teeth of food particles and sugars during chewing.
- **Rich foods without sugar -** milk, yoghurt, rice, meat, fish, fruits, etc.
- Fruits and vegetables that contain a high volume of water pears, melons, celery, and cucumbers.



# DECAYED

eeth are very strong, but they can break, fracture, or chip. This usually occurs from getting hit in your mouth, eating something hard, or weakening of your teeth due to decay. A tooth does not necessarily have to hurt when it breaks, and may even go unnoticed. This usually depends upon the size of the break and the location on the tooth. If the underlying tooth surface, the dentine, or the pulp is injured and the tooth is exposed to saliva, air, chewing pressure, cold or hot beverages and foods, then pain may occur.

- 1 Plaque builds up on the teeth. Bacteria, which live in plaque, multiply.
- $oldsymbol{2}$  The bacteria produce acids, which soften the enamel. Over time, a small hole known as a cavity can develop on the surface of the tooth. (Requires a filling)
- 3 Once cavities have formed in the enamel, the plaque and bacteria can reach the dentine. As the dentine is softer than the enamel, the process of tooth decay speeds up. (Requires a filling)
- and bacteria will enter the pulp. tooth very painful. The bacteria can also infect tissue within the pulp, causing a dental abscess. (Requires Root Canal Treatment

# HOW TOOTH **DECAY OCCURS**

# STAGE 1 STAGE 2





4 Without treatment, plaque At this stage, your nerves will be exposed to bacteria, making your or Extraction)

STAGE 3



STAGE 4



# Solution WHITE FILLINGS

# COMPOSITE

odern white fillings are a combination of a resin and nano-particles of glass. This combination gives white fillings their dental name: composite resins.

White fillings can be used to replace decay, or replace old silver fillings for cosmetic reasons.

The enhanced cosmetics are the main benefit of white fillings - they can look just like natural teeth. Many people are also concerned about the potential risks of mercury containing silver fillings.

On average White Fillings should last for 7-10 years. White fillings are generally used when the cavity/ filling to be replaced is small to medium in size. When a larger filling is required a porcelain inlay or porcelain onlay is a better option.

# PORCELAIN FILLINGS

orcelain inlays or porcelain onlays are fillings made of porcelain that fit into or onto the tooth. They are indicated when there is too little tooth structure to predictably support a white filling but there is enough tooth to avoid placing a crown, which is more destructive to the tooth.

Porcelain inlays / porcelain onlays take 2 visits to complete. The first session is when the decay or old filling is painlessly removed, a detailed impression is taken and a type of white filling is placed in the tooth as a temporary restoration. The ceramist then creates the custom made porcelain inlay or porcelain onlay in the lab. The second session is 1-2 weeks later when the porcelain inlay or porcelain onlay is bonded to the tooth.

The big advantage of porcelain inlays / porcelain onlays is that they are more durable than white fillings. Fillings often reduce the strength of a tooth but porcelain inlays / porcelain onlays can actually increase a tooth's strength.

# THE PROCESS

1 A drill, air abrasion instrument or laser will be used to remove the decayed areas of the tooth.

2 Our dentist will prepare the space for the filling by cleaning the cavity of bacteria and debris.

3 The cavity will be filled with either a porcelain filling, or a tooth-coloured, plastic and glass materials called a composite resin filling (see details above). A silver amalgam filling may be used, which consists of mercury mixed with silver, tin, zinc, and copper. Silver fillings don't match the colour of your natural teeth (see example below).

# **SILVER FILLINGS**



# WHITE FILLINGS



A composite filling is cured (hardened)

with a UV (ultraviolet) light. The filling may be placed in layers, depending on the size of the cavity.

# Solution ROOT-CANAL-TREATMENT

The aim of root canal treatment is to get rid of the damaged pulp and the bacteria that are causing the infection. It involves removing inflamed or dead nerves and blood vessels from the centre of your tooth. This is done by drilling a hole through the top of your tooth to the root canal and removing the dead tissue. The empty root canal system is then cleaned, filled and a permanent seal put over the top of your tooth. The procedure may be carried out over one or two visits.

# WHY HAVE ROOT CANAL TREATMENT?

Your teeth have a core of blood vessels and nerves at their centre. This living tissue is called the pulp and is in a space called the root canal. The number of root canals varies depending on how far back the tooth is in your mouth. Front teeth often have just one root canal, while back teeth may have three or more.

If your tooth is injured or has severe decay, the pulp can be damaged and the blood vessels may die. This results in a "dead" tooth which is likely to get infected because it's no longer protected by your immune system.

There are a number of ways that a tooth's pulp can be damaged. These include:

- Decay
- Gum disease
- Injury

All of these conditions can lead to bacteria getting trapped in your teeth. There is then the possibility that the tooth pulp will become infected, causing blood vessels and nerves to die.

Without treatment, a collection of pus (abscess) can form at the root tip. This can lead to pain and swelling and may cause damage to the bone around your tooth. If you don't have treatment to remove the infected tissue, you may have to have the whole tooth taken out (extracted).

### WHAT ARE THE ALTERNATIVES?

It may not always be able to repair your tooth with root canal treatment. This may be the case if your tooth is very seriously damaged by decay or injury, or if you have gum disease meaning that your tooth isn't well supported. Extraction of the tooth may be recommended instead.

# WHAT IS INVOLVED?

An X-ray image of your tooth will be taken to check whether or not you need root canal treatment. This can help to show how far any decay has spread, if there is an abscess and how many root canals your tooth has.

If you have a dead tooth or one with severely damaged pulp, root canal treatment may be the only way to repair it. However, it's important to discuss with us what is involved in this treatment before deciding to go ahead with it.

If you do need to have root canal therapy, a local anaesthetic will be administered. This completely blocks feeling from the area and you will stay awake during the procedure. It may not be necessary to have an anaesthetic if your tooth is dead but that option will be discussed with you.

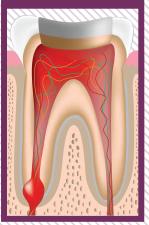
Your tooth will then be separated from the rest of your mouth using a thin sheet of rubber called a dam. This keeps your tooth dry and protects your airway. It also allows effective cleaning of the root canal system and prevents it from becoming contaminated again, which can cause infection later.

A hole in the top of your tooth is then made through which the dead or diseased pulp is removed. The empty pulp cavity is then cleaned and some

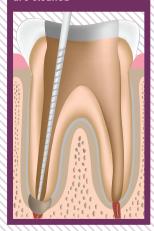
Advanced tooth decay with infected pulp and abscess on the tooth root



An opening is made in the enamel and dentine to expose the infected tissue



The infected tissue is removed and the canals are cleaned



Canals are filled with a permanent material (gutta - percha)



Opening is sealed with filling. A post may be inserted for extra support



In some cases, a crown may be required to strengthen the tooth





# Solution EXTRACTION

medication to help get rid of bacteria may be placed within the canal/s.

It may be that this is all that is done at your first visit, after which a temporary filling will be placed on your tooth to keep it sealed until you come back for further treatment. However, we may decide to fill the cavity immediately if the root canal infection hasn't caused you any serious problems.

If you have had a temporary filling, when you come back, it will be removed and then the root canals will be filled with a suitable material. This is likely to be a putty-like substance called gutta percha. A permanent filling or crown is then placed over the top of the tooth to protect your filled root canal and the vulnerable tooth structure. You will often be recommended a crown made from gold or porcelain. A metal or plastic rod inside the canal to help support the crown may be placed, if necessary.

### AFTER THE PROCEDURE

You may find that you have some discolouring in the tooth that has been treated, although this is less common now as techniques have advanced. However, if your tooth does discolour, you may be able to have treatment to correct it.

After treatment it's important that you take care of your repaired tooth as you would any other. Brush your teeth at least twice a day and visit us regularly.

### WHAT ARE THE RISKS?

It's unlikely that you will have any further problems following root canal treatment. However, if your tooth does become infected again, we can repeat the procedure, although the rate of success is reduced with subsequent treatments.

Very occasionally after root canal treatment, you will still have inflammation at the tip of your tooth. You may need to have a procedure called an apicoectomy to remove the root tip.

tooth that is severely damaged may need to be removed. Before removing your tooth, we will give you a local anesthetic to numb the area where the tooth is to be removed. Where several or all of your teeth need to be removed, intravenous sedation may be used in addition to the local anaesthetic. General anesthetic, which prevents pain in the whole body and will make you sleep through the procedure, is very rarely used.

After the tooth is removed, you may need stitches. You can gently bite down on a cotton gauze pad placed over the wound to help stop the bleeding. The removed tooth can be replaced with an implant, a denture, or a bridge.

### WHAT TO EXPECT AFTER SURGERY

In most cases, the recovery period lasts only a few days. The following will help speed recovery:

- Take painkillers as prescribed by us.
- After 24 hours, rinse your mouth gently with warm salt water several times a day to reduce swelling and relieve pain. Make your own salt water by mixing 1 tsp (5 g) of salt in a medium-sized glass [8 fl oz (237 mL)] of warm water.
- Bite firmly on gauze pads in the area to stop any bleeding that may occur.
- Relax after surgery. Physical activity may increase bleeding.

- Avoid smoking.
- Eat soft foods, such as mash potato, pudding, or a thin soup. Gradually add solid foods to your diet as healing progresses.
- Do not lie flat. This may prolong bleeding. Prop up your head with pillows.
- Avoid rubbing the area with your tongue.
- Continue to carefully brush your teeth and tongue.

After the tooth is removed, you may need stitches. Some stitches dissolve over time, and some have to be removed after a few days. We will tell you whether your stitches need to be removed.

### WHY IT IS DONE

Removing a tooth is necessary when decay or an abscessed tooth is so severe that no other treatment will cure the infection.



### **HOW WELL IT WORKS**

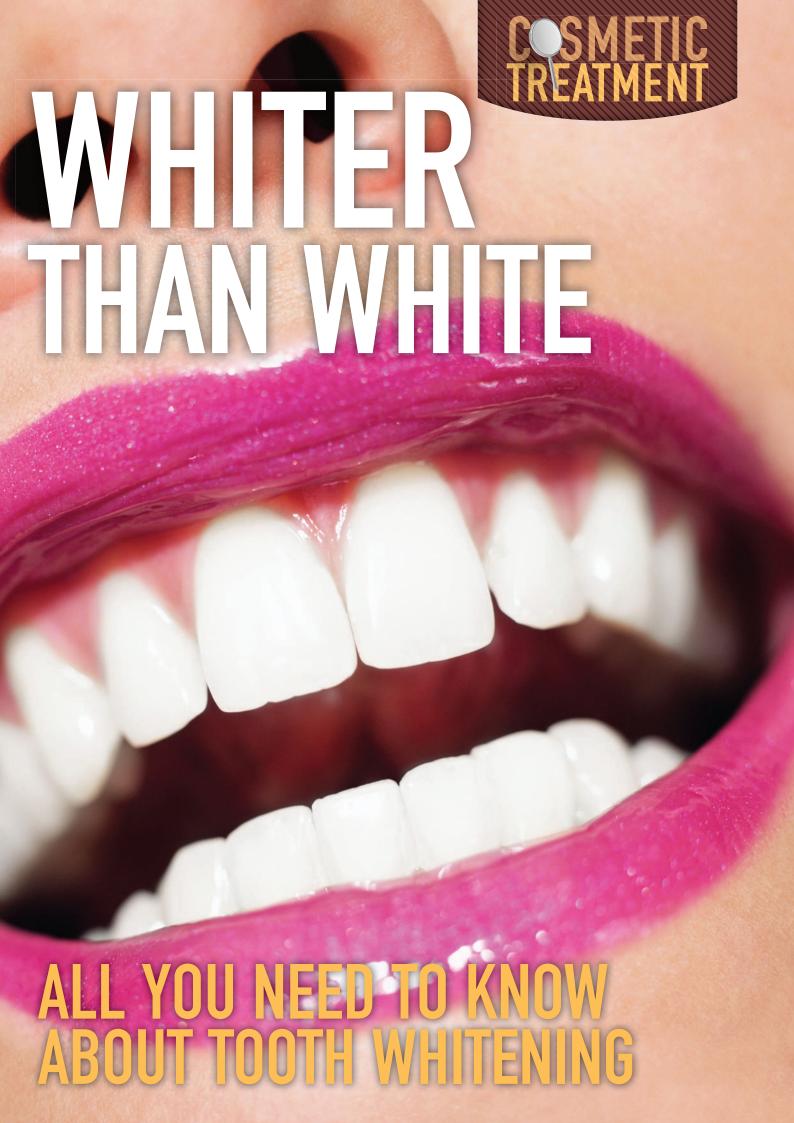
Removing the tooth can help keep infection from spreading to other areas of your mouth.

### RISKS

Some dental work can cause bacteria in the mouth to enter the bloodstream and cause infections in other parts of the body. People who have a hard time fighting off infections may need to take antibiotics before and after dental surgery. Such people include those who have artificial heart valves and those who were born with heart defects.

### WHAT TO THINK ABOUT

A tooth extraction should be done as soon as possible to avoid the spread of infection and more serious problems. In cases in which a root canal treatment might not save the tooth, we, here at Platinum Dental, usually recommend that the tooth be removed and a bridge or implant installed.



ooth whitening treatment that is popular in these image conscious times. White teeth project a sharp, clean, inviting image and are a bold signature of social confidence. In the business world it would be bad form to arrive at an interview or meeting brandishing a tobacco or coffee stained set of teeth. With the advent of better dentistry, fluoride containing toothpastes and an increased hygiene awareness, people are more likely to keep their teeth until they are 100 years old! Many of us are looking for ways to improve the appearance of our smiles as well as portraying a healthy, younger image - tooth whitening is essentially an anti-ageing treatment.

There is no point having a set of brilliantly white teeth that are crooked (case in point - Dracula was never all that attractive in spite of his bright white fangs). An ideal situation is that you straighten and whiten your teeth for the most potent effect. A consultation with a qualified registered dental practitioner (not beautician) will determine whether you are suitable for tooth whitening. Here are some answers to some regularly asked questions.

## WHAT IS TOOTH WHITENING?

Tooth whitening is a method of lightening the colour of your teeth without the need to remove any surface tooth material. Very few people have "pearly white" teeth but the whitening process can change the shade of your teeth significantly enough to give a good contrast against your skin complexion.

# DO I NEED TOOTH WHITENING?

The surfaces of your teeth gradually stain over the years through the consumption of foods which may contain certain natural or artificial dyes, smoking, poor tooth brushing technique and drinks such as tea, coffee, red wine, fizzy drinks etc. In some cases the porosity of the enamel is quite high making the teeth more likely to absorb stains. If you are

# WHITE TEETH PROJECT A SHARP, CLEAN, INVITING IMAGE 99

unfortunate enough to have suffered from enamel erosion or wear your teeth will take on a darker appearance. In any case we all require a degree of stain removal and tooth whitening to improve the overall radiance of our smiles.

Existing discoloured fillings, crowns, bridges, veneers and dentures will not lighten with this procedure. Tooth whitening is not recommended if you are pregnant, breast feeding or allergic to any components in the whitening material.

# WHAT DOES TOOTH WHITENING INVOLVE?

During the consultation process you will be given advice on the best approach to achieving your goals. There are two different methods available which can be used individually or in combination with one another. Home whitening involves the use of carbamide or hydrogen peroxide gel which is applied to the teeth through custom-made trays (like gum shields). The trays should be worn for 2-5 hours per day over a period of 2-3 weeks for effective whitening.

Laser power whitening or in-surgery whitening utilises a more potent gel applied directly to the surface of the teeth which is activated by a special (laser) light. The procedure is repeated up to three times to obtain maximum tooth lightening. This method can give a dramatic colour improvement at the first visit although a follow up visit may be required for stubborn stains. The laser power whitening appointment takes about one hour.

# HOW LONG DO MY TEETH STAY WHITE?

The lightened effect can last two to three years depending on whether you smoke and how often you ingest products that stain your teeth such as tea, coffee, etc. The key is avoidance of staining foods and drinks.

# ARE THERE ANY SIDE EFFECTS?

Occasionally during or after the treatment there might be some tooth sensitivity. If the gel spills onto the gums little white spots might be seen but these disappear within a few hours. At the consultation appointment it is important for you to mention if you have ever suffered from sensitive teeth so that the appropriate steps can be taken to avoid any further sensitivity.

# DOES TOOTH WHITENING ALWAYS WORK?

Heavy staining from tetracycline, fluorosis and discoloured teeth due to weakened enamel (hypoplasia) are very difficult to lighten. Dead teeth (where the nerves have been removed) discolour internally and will not lighten with surface whitening. However if these dead teeth have been root filled by your dentist they can be whitened.



# VENEERS

ental veneers have long been used to create the ultimate smile makeover. With this treatment, it's possible to transform crooked, stained, damaged or badly worn teeth into a brand new, straight, white smile.

# SO WHAT EXACTLY ARE DENTAL VENEERS?

Veneers are wafer-thin laminates or shells of tooth-coloured material (which can be either porcelain, ceramic or composite bonding material). They are "cemented" to the front surface of teeth to improve their cosmetic appearance. Here at Platinum Dental we use the analogy that dental veneers are for your teeth what false fingernails are for your hands.

# WHAT TREATMENTS OR PROBLEMS ARE VENEERS USED FOR?

There are a wide variety of reasons why patients opt for treatment with dental veneers:

**Stained teeth** - badly stained teeth that cannot be improved by teeth whitening or prophyflex treatments can be greatly improved by dental veneers, which function to cover any existing stains on your teeth.

Damaged teeth - teeth that have become badly worn through excessive grinding or by carbonated drinks, as well as those that have been chipped or broken, can benefit from veneers. A small chip on a tooth can quickly be repaired with composite bonding, also knows as "composite veneers". A single damaged tooth can easily be repaired with a porcelain veneer that has the same characteristics and colour as you natural teeth.

**Gaps** - spaces or gaps (diastemas) between your teeth can easily be closed using dental veneers, giving you a more uniform-looking smile.

Crooked teeth - Veneers are not the ideal treatment for crooked teeth, and from the point of view of preserving your natural teeth structure, orthodontics or Invisalign braces would probably a better solution. However, such treatments can take up to a year or longer. For teeth that are not severely crooked, veneers placed over their front surface will give a straight and perfectly aligned-looking smile. For this type of treatment, many people refer to veneers as "instant orthodontics", as you get a similar end result in a fraction of the time.

# SO WHICH ARE BETTER: COMPOSITE VENEERS OR PORCELAIN VENEERS?

The most popular type of veneers is porcelain, which offers a stronger and more durable alternative to its composite counterpart. Composite veneers are also more prone to staining and do not last as long as porcelain veneers. Porcelain veneers also offer a more natural looking, translucent appearance. Composite veneers are much cheaper than porcelain veneers in general, but considering that they do not last as long and need replacing more often, they could end up costing more in the long run. Composite work is ideal for small chips, as this treatment preserves more of your natural tooth structure.

# **HOW LONG DO DENTAL VENEERS LAST?**

Porcelain veneers will typically last between five and ten years, while composite veneers last a year or two at most. The bottom line is that your veneers will eventually need to be replaced.

Although veneers are strongly cemented into place, there have been cases where they come loose and fall off. In such situations, it is important that you keep hold of your veneer and contact us immediately. To make your veneers last longer, follow a good oral hygiene program and visit your us for check-ups on a regular basis.



A SINGLE VENEER CAN AN BE PLACED TO COVER AN INDIVIDUAL TOOTH AND MATCH THE COLOUR OF THE SURROUNDING TEETH

# WHAT IS THE PROCEDURE OF HAVING DENTAL VENEERS FITTED?

The first part of any dental procedure is the initial consultation and examination, so that we can get a feel for what you want and understand your needs and concerns. We will explain the treatment procedure to you and give you an accurate guide to the likely costs of your treatment.

Before your veneers are designed, we will need to reshape and prepare the front surfaces of your teeth so that they can accommodate the veneers. The first stage is to numb the teeth and gums with a local anaesthetic so that you do not feel anything during the procedure.

Using a special tool called a bur (a dental drill or file), a tiny part of the front surface of your teeth will be shaved off. The amount removed should be equivalent to the thickness of the veneer that will sit over the top of the tooth.

Next, an impression or mould (copy) of your teeth is taken. A special dental "putty" is placed into your mouth on a tray and pushed into your teeth so that it takes an imprint of your teeth.

This "impression" or mould of your teeth is then sent to a dental laboratory. The laboratory uses the impression to cast an accurate model of your teeth, which is used as a guide to fabricate your new veneers. This process can take between one and three weeks.

While you're waiting for your veneers to be fabricated, we will fit temporary veneers to protect your prepared teeth. Not all dentists will offer temporary veneers.

During your next appointment, we will fit your new veneers to your teeth. First, we may just sit the veneers over your teeth to see how they look with your smile, as we may need to trim or adjust the veneer.

Next, your teeth will be thoroughly cleaned and the front surfaces etched (roughened) with a special gel so that they provide a good surface for the dental cement to stick to.

The veneers are then cemented into place, and a special curing light is used to activate the dental cement so that it permanently bonds the veneer to the front surface of your prepared tooth. If there is any excess cement, it is usually trimmed away and polished to leave a beautiful and natural-looking restoration.









# COSMETIC TREATMENT

# DENTAL CROWNS



**GOLD CROWN** 



SILVER CROWN

ental crowns are restorations that protect damaged, cracked or broken down teeth. A crown strengthens your existing, damaged tooth so as to preserve its functionality. Dental crowns are also commonly known as caps (because a crown sits over your existing tooth, covering the entire outer surface).

# WHY MIGHT I NEED CROWNS?

- If your tooth has undergone significant decay and there is not enough tooth structure remaining to support a filling or an inlay and maintain functionality.
- If a large portion of your tooth has fractured and it cannot be built up using traditional composite bonding techniques.
- If you have a large cavity and opt for the additional protection a crown offers to your tooth over a large composite filling or an inlay.
- If you have had a dental implant to replace a missing tooth, a crown will be fitted to the abutment of the titanium implant.
- Following root canal treatment, a crown is often needed to strengthen the tooth.
- If you grind your teeth and have a poor diet, acid erosion may reduce your teeth to a point where the only option available is to crown them.
- For cosmetic reasons, to improve the aesthetics of your smile, you may opt for all porcelain cosmetic crowns.

# ARE DENTAL CROWNS ALWAYS THE BEST OPTION?

Crowns should not be the first choice just to improve the aesthetics of your teeth, because we need to grind a significant portion of the original tooth away. Less invasive alternatives include veneers or dental bonding. Crowns are required when the strength of the tooth supporting the restoration is compromised, since veneers and dental bonding restorations are only as strong as the supporting tooth.

# WHAT MATERIALS ARE CROWNS MADE FROM?

In modern-day dentistry, there is a wide variety of dental materials to choose from. Some crowns are made from full gold, where as others are made from an alloy of metals fused to a porcelain outer shell. After time, crowns that are made from a combination of metal fused to porcelain can begin to show dark gum lines that are not aesthetically attractive. All-porcelain or all-ceramic crowns are the best choice for a natural cosmetic look. There are many different brands and types of porcelain crowns, and the variation between the costs of dental crowns reflect the quality of the materials used.

# WHAT DOES THE PROCEDURE OF HAVING DENTAL CROWNS FITTED INVOLVE?

Once you have had a consultation and discussed all the treatment options, the tooth is prepared for crowning. The first stage is to clean the tooth, remove any decay and reshape it using a burr (a special dental drill for shaping teeth) under local anaesthesia. The shape of the prepared tooth is usually tapered to allow the crown sit comfortably over the top of it. Once the tooth is prepared, an impression (mould) of your teeth will be taken using a special "dental putty". This impression is sent to a dental laboratory, which will use the impression of the prepared tooth as a guide to fabricate the new crown. It usually takes between two



THE ORIGINAL TOOTH IS TAPERED TO ALLOW THE CROWN SIT COMFORTABLY OVER THE TOP

to three weeks for a laboratory technician to custom-fabricate your new crown. During this time, you will have a temporary crown to cover and protect your prepared tooth.

On your second visit, we will remove the temporary crown and roughen the outer surface of your prepared tooth with a special etching acid to give the dental cement a good surface to bond to. The crown will be placed over your tooth. Once everyone is happy with the restoration, we will cement the crown firmly into place.

# **HOW LONG DO CROWNS LAST?**

This will depend largely on how well you look after your teeth. Dental crowns require the same level of care and attention as your natural teeth. Provided you have a good oral hygiene program, attend regular checkups, don't grind your teeth, maintain a tooth-kind diet and don't do things like open beer bottles with your teeth, a high-quality dental crown can last up to 15 years.

# PREGNANCY AND DENTISTRY

regnancy can be a wonderful stage of life for expectant mothers and an essential time to maintain a healthy lifestyle and good oral health. It is essential to be aware that pregnant women can become more prone to dental problems due to the change in hormones, one of the most common problems being gingivitis (bleeding gums).

Pregnancy makes the gum more susceptible to bleeding and swelling. This is due to the increase in progesterone and oestrogen levels, making them more sensitive to the bacteria in plaque and also from an increased blood supply to the mouth. The importance of regular cleaning and visits to a dental hygienist are therefore a priority. Ensuring a good routine – brushing at least twice a day and where possible after every meal – and regular cleaning from a hygienist will help to control gingivitis and prevent caries (tooth decay).

If a filling is required during pregnancy, it should ideally be avoided until after birth, but if it is essential you should be aware that we here at Platinum Dental will not give you amalgam fillings (more commonly known as silver fillings) whilst you are pregnant. These fillings contain a mixture of mercury with at least one other metal such as silver or tin. Amalgam has been the restorative method of choice for many years due to its ease of application, strength, durability, and its invaluable property of preventing bacteria growth. However, it has been proven to give off a neuro-toxin and for this reason its use in pregnancy is prohibited in several countries. Other types of fillings can be used such as a composite resin, which is made of plastic and fine glass particles, cast gold fillings made of gold alloy (gold mixed with other metals), gold foil made of gold, or ceramic fillings most commonly made of porcelain with a glass and acrylic component.

There are other dental problems which can occur in an expectant mother, such as benign nodules appearing on the gums which bleed when brushed, but this is luckily quite rare. They are usually both harmless and painless

and can actually appear anywhere on your body during pregnancy. This problem will usually surface when you are suffering from gingivitis and should disappear after your baby is born. If necessary the nodules can be removed during pregnancy, however, any dental procedure during pregnancy should only be performed under caution. Pregnant women should also be advised not to lie back in the dental chair. This will cause blood to rush away from the placenta which in turn will decrease the oxygen to your baby.

The risks with x-rays during pregnancy are much less nowadays because of the advances in science and technology. A lead apron can be worn if an x-ray is required to protect yourself and your baby from radiation.

However, at Platinum Dental, we do not recommend dental x-rays during pregnancy. Only in extreme circumstances, where dental treatment requiring an x-ray is needed, will you be advised to undergo one by us.

It is sensible to consult us upon discovering you are pregnant so that regular cleaning can be performed and advice can be given. We can also monitor your oral health during pregnancy to ensure your mouth is as healthy as possible, giving you one less thing to worry about!





# GINGIVITIS AND PERIODONTAL DISEASE (GUM DISEASE)

ingivitis, also generally called gum disease or periodontal disease, begins with bacterial growth in your mouth and may end -- if not properly treated -- with tooth loss due to destruction of the tissue that surrounds your teeth.

## WHAT'S THE DIFFERENCE BETWEEN GINGIVITIS AND PERIODONTITIS?

Gingivitis (gum inflammation) usually precedes periodontitis (gum disease). However, it is important to know that not all gingivitis progresses to periodontitis.

In the early stage of gingivitis, bacteria in plaque build up, causing the gums to become inflamed and to easily bleed during tooth brushing. Although the gums may be irritated, the teeth are still firmly planted in their sockets. No irreversible bone or other tissue damage has occurred at this stage.

When gingivitis is left untreated, it can advance to periodontitis. In a person with periodontitis, the inner layer of the gum and bone pull away from the teeth and form pockets. These small spaces between teeth and gums collect debris and can become infected. The body's immune system fights the bacteria as the plaque spreads and grows below the gum line.

Toxins or poisons -- produced by the bacteria in plaque as well as the body's "good" enzymes involved in fighting infections -- start to break down the bone and connective tissue that hold teeth in place. As the disease progresses, the pockets deepen and more gum tissue and bone are destroyed. When this happens, teeth are no longer anchored in place, they become loose, and tooth loss occurs. Gum disease is the leading cause of tooth loss in adults.

# WHAT CAUSES GUM DISEASE?

Plaque is the primary cause of gum disease. However, other factors can contribute to periodontal disease. These include:

Hormonal changes, such as those occurring during pregnancy, puberty, menopause, and monthly menstruation, make gums more sensitive, which makes it easier for qingivitis to develop.

Illnesses may affect the condition of your gums. This includes diseases such as cancer or HIV that interfere with the immune system. Because diabetes affects the body's ability to use blood sugar, patients with this disease are at higher risk of developing infections, including periodontal disease and cavities.

Medications can affect oral health, because some lessen the flow of saliva, which has a protective effect on teeth and gums. Some drugs, such as anticonvulsant and anti-angina medication can cause abnormal growth of gum tissue.

Bad habits such as smoking make it harder for gum tissue torepair itself.

Poor oral hygiene habits such as not brushing and flossing on a daily basis, make it easier for gingivitis to develop.

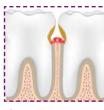
Family history of dental disease can be a contributing factor for the development of gingivitis.

# STAGES OF GUM DISEASE



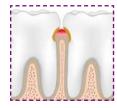
1 HEALTHY TEETH

No problems, plaque or damage to the gums.



3 PERIODONTAL POCKETS

An increased space in the gums around a tooth.



2 GINGIVITIS INFLAMMATION

Inflammation to the gums around the teeth.



4 PERIODONTITIS
GUM DISEASE

Gum infection and damaged soft tissue.

### PERIODONTITIS



**What it looks like:** Severe inflammation around the teeth and bleeding gums.



**Results:** Loose teeth, receding gums, loss and damage to supporting bone.

# WHAT ARE THE SYMPTOMS OF GUM DISEASE?

Gum disease may progress painlessly, producing few obvious signs, even in the late stages of the disease. Although the symptoms of periodontal disease often are subtle, the condition is not entirely without warning signs.

# Certain symptoms may point to some form of the disease. The symptoms of gum disease include:

- Gums that bleed during and after tooth brushing
- Red, swollen, or tender gums
- Persistent bad breath or bad taste in the mouth
- Receding gums
- Formation of deep pockets between teeth and gums
- Loose or shifting teeth
- Changes in the way teeth fit together upon biting down, or in the fit of partial dentures.

Even if you don't notice any symptoms, you may still have some degree of gum disease. In some people, gum disease may affect only certain teeth, such as the molars. Here at Platinum Dental, we can recognize and determine the progression of gum disease.

## **HOW IS GUM DISEASE TREATED?**

The goals of gum disease treatment are to promote reattachment of healthy gums to teeth by reducing swelling, reducing the depth of the pockets, reduce the risk of infection, and to stop disease progression. Treatment options depend on the stage of disease, how you may have responded to earlier treatments, and your overall health. Options range from nonsurgical therapies that control bacterial growth to surgery to restore supportive tissues.

# HOW CAN GUM DISEASE BE PREVENTED?

Gum disease can be reversed in nearly all cases when proper plaque control is practiced. Proper plaque control consists of professional cleanings here at Platinum Dental at least twice a year and daily brushing and flossing. Brushing eliminates plaque from the surfaces of the teeth, flossing removes food particles and plaque from in between the teeth and under the gum line. Antibacterial mouth rinses can also help reduce bacteria that cause plaque and gum disease.

Other health and lifestyle changes that will decrease the risk, severity, and speed of gum disease development include:

- Stop smoking. Tobacco use is a significant risk factor for development of periodontitis. Smokers are seven times more likely to get gum disease than nonsmokers, and smoking can lower the chances of success of some treatments.
- Reduce stress. Stress may make it difficult for your body's immune system to fight off infection.
- Maintain a well-balanced diet. Proper nutrition helps your immune system fight infection. Eating foods with antioxidant properties -- for example, those containing vitamin E (vegetable oils, nuts, green leafy vegetables) and vitamin C (citrus fruits, broccoli, potatoes) -- can help your body repair damaged tissue.
- Avoid clenching and grinding your teeth. These actions may put excess force on the supporting tissues of the teeth and could increase the rate at which these tissues are destroyed.



# HESSING B TETHNETT

# MIND THE GAP!

here is more than one reason for tooth loss. Tooth decay accounts for the majority of missing teeth but there are other factors which define tooth loss. These include a physical injury which results in a tooth being knocked out of the jaw, periodontal gum disease and even old age. One of the defining characteristics of losing your teeth in old age is due to shrinking gums.

When teeth are missing, it can affect the way the rest of your teeth bite together. Your remaining teeth may tilt and drift into the gaps and food can get trapped in the spaces, increasing your risk of tooth decay and gum disease. When many teeth are missing, your facial muscles can become saggy, affecting your speech and appearance.

### TREATMENT OPTIONS

If you have missing teeth, you may choose to do nothing and leave the space empty. Alternatively, you may want to have your missing teeth replaced. There are several different treatment options available.

### **DENTURES**

(false teeth). These are removable plastic or metal frameworks carrying false teeth.

## **BRIDGES**

These are false teeth fixed onto adjacent natural teeth.

### **IMPLANTS**

These are metal 'pegs' placed in your jawbone. Dentures or bridges are clipped or screwed on top of dental implants.



entures are prosthetic devices use replace missing teeth and are desto look like natural teeth and gut They have been around and in use as far back as 700 BC, when people used to make them from animal or human teeth and gut then! They are now made from laborator and manmade materials such as acrylic. entures are prosthetic devices used to replace missing teeth and are designed to look like natural teeth and gums. They have been around and in use as far back as 700 BC, when people used to make them from animal or human teeth luckily things have progressed a lot since then! They are now made from laboratory and manmade materials such as acrylic.



The denture works by giving the patient synthetic teeth, which enables them to eat and talk as they did before they lost their own teeth. The dentures also provide support for the lips, chin and cheeks, as without them the patient's face can often look aged and sunken. They also act to improve speech and more generally a patient's self esteem.

## WHEN WOULD I **REQUIRE DENTURES?**

Dentures are usually associated with the elderly who have lost their teeth over the years, most commonly due to decay and dental disease. However, dentures can be used for many other generations of patients and are not only for total loss of teeth, but also for the loss of just one or more teeth.

## WHAT TYPES OF DENTURES ARE AVAILABLE?

There are three types of denture which are 'complete', 'partial' and 'over'. 'Complete' dentures replace the full upper or full lower jaw, or both, and fit over the existing gum or jaw. 'Partial' dentures are used for partial replacement of the teeth and are made to fit between the existing teeth, even if they are broken, using clasps to hold them in place. 'Over' dentures utilise attachments which hold the dentures down; these attachments are often placed in the tooth roots or implants.

### WHAT ARE **DENTURES** MADE OF?

Most dentures are made of a plastic material called acrylic. This is the pink bit that you see on most dentures. To make the dentures fit more comfortably in the mouth, by making them less bulky, most of the acrylic bits of the denture can be replaced with Chrome-Cobalt. These Chrome-Cobalt dentures are also stronger than their acrylic counterparts.

## HOW DO I EAT WITH **DENTURES?**

It is advisable to take your time initially, as it can take a while to get used to wearing the dentures, just as it can with any unfamiliar object in the mouth e.g. braces. A good tip at the beginning is to try eating small chunks of food whilst you adapt to them. Also, using denture adhesive can help to keep the denture in place, making it easier to chew food.

### HOW DO I LOOK AFTER MY DENTURES?

You should clean your dentures using a toothbrush and toothpaste; brushing and soaking them in a bowl of cold water. Do this over a towel just in case you drop them! Fizzy cleaning tablets are available to use with the dentures. However, they should only be used in line with the manufacturer's guidelines.



The longevity of dentures depends upon different aspects. You must keep them clean and look after them properly as staining can occur as it does on natural teeth that are not well looked after. Your gums can also shrink and therefore your bite changes, so the denture may no longer fit the shape of the jaw. However, the denture does not always need to be replaced, as cleaning by one of our dentists can remove stains and they can sometimes be adjusted to accommodate movements in the mouth.

# WHAT ARE DENTAL BRIDGES?

ental bridges are false teeth, which are anchored onto neighbouring teeth in order to replace one or more missing teeth. The false tooth is known as a pontic and is fused in between two crowns on either side. The crowns serve as anchors which sit on the natural teeth on either side of the gap, thereby bridging the teeth together.



The two adjacent teeth of the gap are prepared, as they will hold the bridge in place.



2. The 'wings' of the bridge are also prepared. A strong composite resin cement is used to bond the wings to the back of the teeth.

# WHAT ARE THE PARTS OF A TYPICAL DENTAL BRIDGE (FIXED)?

A dental bridge essentially consists of:

- A pontic or false tooth used to replace the missing tooth, which is made from gold, alloys, porcelain or a combination of these materials.
- Two crowns serving to anchor the false tooth in place.

# **K** TRADITIONAL FIXED BRIDGE



MARYLAND-BONDED BRIDGE

3. The wings of the bridge are not visible from

### WHEN ARE DENTAL **BRIDGES NEEDED?**

Bridges are recommended when there are one or more teeth missing that affect:

- Your smile and appearance.
- Your bite, as a result of adjacent teeth leaning into the space and altering the way the upper and lower teeth bite together.
- Your speech.
- The shape of your face.
- The rates of gum disease and tooth decay as a result of food accumulated in the gap.

## **MUST MISSING TEETH** BE REPLACED?

Yes, missing teeth must be replaced for many reasons:

- To improve your appearance.
- To reduce the strain on the teeth at either side of the missing tooth.
- To prevent the neighbouring teeth from leaning into the resulting gap and altering
- To prevent gum disease and tooth decay due to accumulation of food in the gap.

# THERE ARE THREE MAIN TYPES OF DENTAL BRIDGES:

### 1. TRADITIONAL FIXED BRIDGE

This is the most commonly used type of bridge and consists of a pontic fused between two porcelain crowns that are anchored on neighbouring teeth or implants. The pontic is usually made of either porcelain fused to metal or ceramics. These are fixed and cannot be removed.

### 2. RESIN-BONDED BRIDGES OR MARYLAND-BONDED BRIDGES

These are chosen when the gap to be filled is in between the front teeth, or when the teeth on either side of the missing tooth are strong and healthy without large fillings. The false tooth is made of plastic and is fused to metal bands that are bonded to the adjacent teeth using resin that is hidden from view.

### 3. CANTILEVER BRIDGES

These are opted for in areas such as the front teeth that are susceptible to lower biting stress. Cantilever bridges are used when there are teeth present on only one side of the space, where the false tooth is anchored to one or more adjacent teeth on one side.

### WHAT ARE BRIDGES MADE OF?

Bridges may be made of:

- Porcelain.
- Porcelain bonded to precious metal.
- All-metal dental bridges (gold).





# IMPLANTS KNOW THE FACTS

ife leaves traces — including on the teeth. An accident playing sport, or a fall, can leave a gap in your smile at ■any stage of life. Caries (cavities) and periodontitis (bleeding gums), can cost you whole rows of teeth over the years.



# THE IMPLANT PROCESS



Whether you're missing one or all of your teeth, there's now an exciting option that will help you smile with confidence again. Thousands of people have beautiful smiles that have been enhanced by implants, which is essentially a tooth replacement technique.

Implants are made of special biomaterials that are surgically placed in the jawbone under your gumline. After a few months the implant becomes anchored to the surrounding bone. A natural-looking replacement tooth - called an implant crown - is then permanently attached to the implant to replace the form and function of a real tooth. The finished result?... A restoration that looks so natural. No one will know it's there except you! Implants can be used to stabilise dentures and bridges, and to

replace just one tooth, or to rebuild an entire jaw of missing teeth. The best part is that they look and feel just like natural teeth.

Dental implants are very reliable. Patients have retained them for more than twenty years with a greater than 90% success rate. Dental implants have helped thousands of people to eat, smile and speak with renewed self confidence. Patients who practice good oral home care and regular dental checkups can enjoy implants that last a lifetime. We, here at Platinum Dental, can help you decide if a dental implant is right for you. The investment in your smile is well worthwhile.



1. Consultation and assessment.



2. The implant is screwed into the jaw bone and allowed time to fully bond with the bone.



3. Once the implant has healed and is secure, the implant peg is inserted to hold the crown.



4. The new crown is secured onto the implant.



5. Implants require regular checkups and good oral hygiene, just like normal teeth.



arious oral surgery procedures may be indicated to facilitate function of an oral appliance (partial or full denture), enhance the bony anatomy for improved aesthetics, improve periodontal health, and promote ideal healing after dental extractions or in preparation for dental implants.

Arious oral surgery procedures may be interplance (partial or full denture), enhance aesthetics, improve periodontal health, are extractions or in preparation for dental implant SOME OF THE ORAL SURGERY PROCEDURES CARRIED OUT AT PLATINUM DENTAL ARE EXPLAINED BELOW:

ALVEOLECTOMY

An alveolectomy is a reduction of maxillary or mandibular (jaw) bone that may be necessary during removal of teeth or to create an anatomy more conducive to a removable or fixed oral appliance, such as a denture. A moderate recontouring of the bone is often referred to as an alveoloplasty.

FRENECTOMY

A frenectomy is a surgical procedure that removes or loosens a band of muscle tissue that is connected to the lip, cheek or floor of the mouth. It is indicated if the tissue restricts lip or tongue movement, or in conjunction with orthodontics.

APICECTOMY

An apicectomy is a dental procedure in which the end of a tooth root is removed. It is often indicated in select teeth after a conventional root canal procedure fails or the anatomy of the root prohibits an adequate seal by conventional procedures.

# CROWN LENGTHENING

Crown lengthening is a periodontal surgical procedure to expose the clinical portion of a tooth or teeth. It may be indicated for improved aesthetics (gingivoplasty) or to facilitate a dental restoration on a fractured or decayed tooth.

# **INCISION & DRAINAGE**

Incision and drainage (I & D) is a procedure performed to relieve pressure from a dental abscess. In select cases, a rubber drain is sutured in place to maintain an opening if additional suppuration (pus) or tissue exudates (fluid) is anticipated.

# **EXPOSURE**

When a tooth is impacted, it usually needs to be exposed before an appliance can be attached to it by the orthodontist. This appliance will help move the tooth into its correct position.

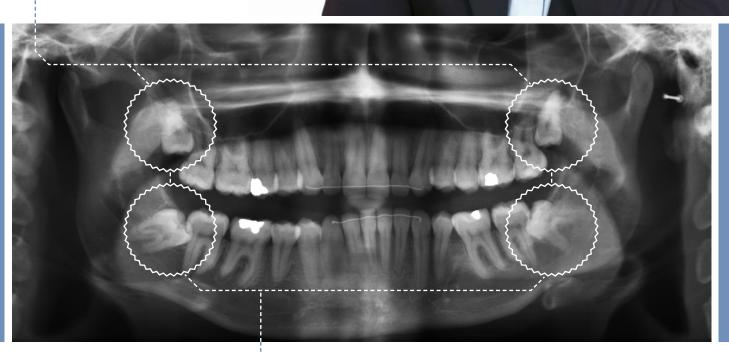
# WISDOM Electrical states and the states are already as a second state and the states are already as a second state and the states are already as a second state are already as a second s

WISDOM TEETH COULD POTENTIALLY BECOME PROBLEMATIC IF NOT EXTRACTED



WISDOM TEETH USUALLY PRESENT WITH NO PROBLEMS

MOST ADULTS HAVE FOUR WISDOM TEETH



wisdom tooth, in humans, is any of the usual four third molars. Wisdom teeth usually appear between the ages of 16 and 25. Most adults have four wisdom teeth, but it is possible to have fewer (hypodontia), or more, in which case they are called supernumerary teeth.

Wisdom teeth usually present with no problems, but they can become stuck (impacted) or "come in sideways" as they develop. When this happens they

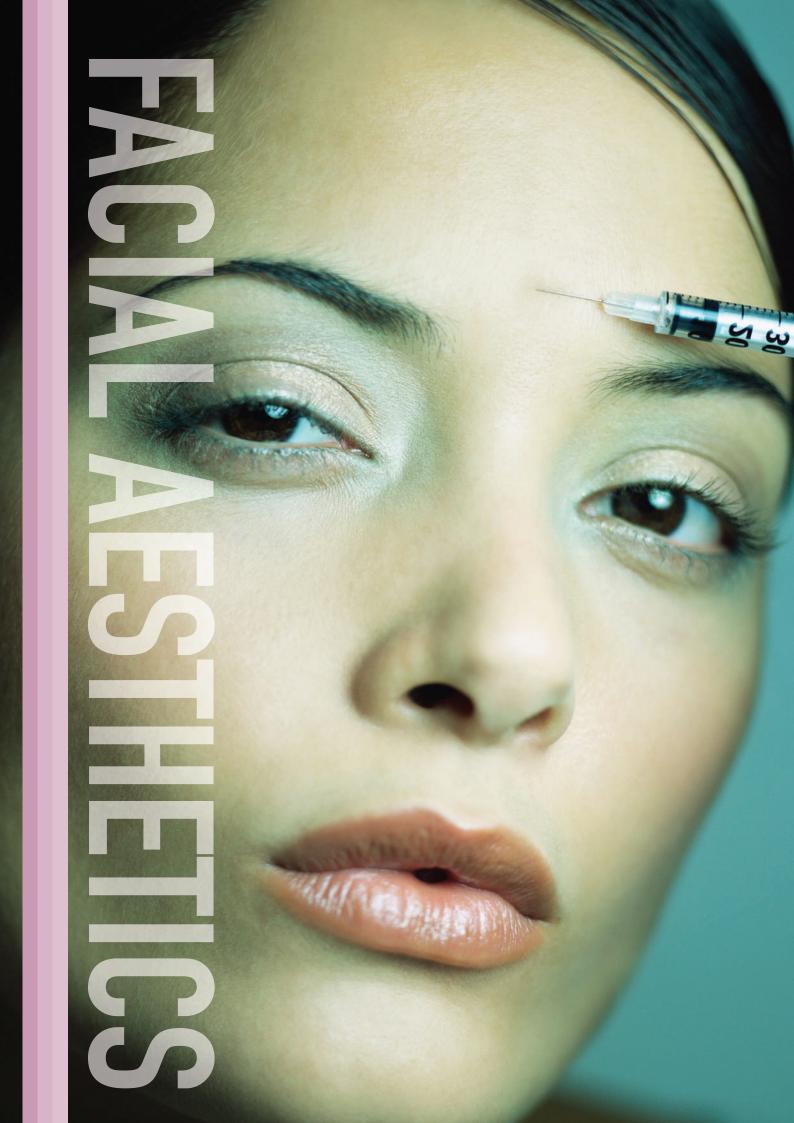
# WISDOM TEETH ARE EXTRACTED FOR TWO GENERAL REASONS:

can cause infections as food particles are easily trapped in the jaw area behind the wisdom teeth where regular brushing and flossing is difficult and ineffective. In addition to this stuck food can cause the tooth in front of

the wisdom tooth to decay. They can also rub against the tongue or cheek causing significant discomfort.

When infections and / or pain are repeatedly experienced, or when the adjacent tooth is at risk, the wisdom tooth is often extracted.

There are risks associated with the removal of wisdom teeth in the bottom jaw which your dentist will discuss with you.





## WHY BOTOX?

rinkles and lines on our faces usually appear as we age, due to repeated muscle movements and our natural genetic make-up. In some cases, one might be unfortunate to come from a family where wrinkling is a common feature (some cruel friends might have commented that you are looking more and more like your grandparents!).

Other extrinsic factors can increase the likelihood of wrinkles, such as over exposure to sun rays/sun beds, excessive alcohol intake, unhealthy diet, over-stimulated hormones and smoking. Some of these can be avoided or counteracted by undertaking carefully crafted skin care regimes and a lifestyle of monastic abstinence. However, most of us cannot stop the internal ageing process and we will ultimately seek solutions to the wrinkling problem.

The bunching of skin from facial muscle contractions induces frown lines. When we frown, the skin between our eyebrows is gathered into a fold, which eventually causes a chronic furrow. This gives one's face a frustrated, discouraged, angry or unapproachable look, which can be distracting to others and a bother to us (when your friends or children start considering you 'mean faced' it might be a call to action!).

It is the quality of delivery not the quantity which determines the desirable end result when using muscle relaxing products. An experienced practitioner will inject minimal amounts and follow this with a review (around two weeks later) when the effect of the initial treatment can be judged. A top-up dose can be administered if the furrow or wrinkle is still present. In certain instances, areas of the face might need to be symmetrically balanced in relation to one another, e.g. the right and left sides should appear to be the same. The overall aim of this treatment is to achieve a natural effect - nobody wants to look frozen, rigid or artificial - the intention is usually to make the most of one's good looks.

### WHAT IS IT?

Botulinum toxin (Botox®) is a substance produced from engineered bacteria which, when injected in small doses, will cause relaxation of targeted muscles. Facial furrows and wrinkles can be reduced by the judicious use of muscle relaxing products such as Botox®.

## AM I AN IDEAL CANDIDATE?

Treatment can be effective for both males and females. It is important to attend a prior consultation before treatment to determine if you may have any contra-indication. There are certain cases where it is definitely not advisable, such as if you are pregnant, breastfeeding, have a neurological disease or know of a hypersensitivity to this treatment.

# IS THE TREATMENT COMFORTABLE?

Although Botox® is administered through injection the needles are small and only small amounts are administered at any one time. The injections are few and frequent so any discomfort is short-lived. If however, you are needle phobic a numbing cream can be applied to the area prior to treatment to make the experience more comfortable.

# HOW LONG DOES TREATMENT TAKE?

Treatment usually takes between 15 – 30 minutes. The full effects of treatment can be noticed in two weeks and depending on muscle tone, some individuals may need an extra dose to achieve an enhanced result.

# WHAT IS THE DIFFERENCE BETWEEN VISTABEL AND BOTOX?

None! They both have the same pharmaceutical constitution but are packaged differently. Botox® can also be used for the treatment of neuromuscular diseases, e.g. blepharospasm associated with dystonia, migraines, persistent headaches, chronic lower back pain, stroke, traumatic brain injury, cerebral palsy, achalasia and excessive sweating. Needless to say it's not applied just on the face. This drug is well accepted in the medical arena.

# HOW LONG WILL THE EFFECTS OF THIS TREATMENT LAST?

On average a single Botox® treatment can last up to 4 months. Towards the end of this period you may notice a gradual return of the furrow or wrinkle. At this point another treatment cycle can be administered. Some clients have regular quarterly treatments which can maintain the desired results.

## WHY DERMAL FILLERS?

Along with a trend towards living a longer, healthier life, more and more patients are looking to physicians to help them achieve a more youthful appearance. The skin's natural ageing process manifests as facial contour changes and wrinkles with the loss of dermal collagen.

Traditionally, rejuvenation has been achieved with a face-lift by surgically tightening the skin. Today, a multitude of minimally invasive procedures are aimed at rejuvenation without the risk, recovery time, and expense of major surgery.

Dermal fillers have become a popular means of addressing concerns that result from ageing, photo damage, trauma or disease. Dermal fillers are chosen for their safety and results.

## WHAT IS IT?

The basic content is usually hyaluronic acid which is a naturally occurring substance in our bodies. There are many dermal fillers available and all can give different results, therefore it is important to consult with a physician prior to treatment to decide what is most suitable for you.

Dermal fillers can be broken down into three categories – bio-degradable, semi-permanent and permanent. Semi-permanent and permanent products, while they produce longer lasting results, are associated with higher risks. The safest products are bio-degradable products because their effects are reversible. For this reason many clinicians prefer to use bio-degradable products for their safety history and because they consider that permanent solutions might be rendered inappropriate when inevitable ageing takes place after treatment.

Examples of bio-degradable products are Restylane®, Perlane®, Hydrafill® and Laresse®, which are formulated to provide smooth, natural results with minimal swelling. These products have been on the market for a number of years and patients have shown very little adverse responses.

# IS THE PROCESS COMFORTABLE?

Small amounts of dermal fillers are delivered by injection beneath the surface layer of the skin. Some clinicians use a topical or local anaesthetic to numb the treatment area prior to injecting if pain threshold or needle phobia are a concern.

This procedure is non-surgical and minimally invasive, therefore most patients can return to work or leisure activities after treatment without any noticeable difference.

# HOW LONG DO RESULTS LAST?

Depending on age and the area treated, results might last 6-8 months. In the lip area results might last about 5-6 months as greater mechanical stress in this area tends to cause more rapid breakdown of the injected product.

SOFT TISSUE AUGMENTATION:

PLACEMENT OF A NATURAL OR SYNTHETIC

SUBSTANCE INTO OR UNDER THE SKIN TO

SMOOTH FOLDS, LINE, WRINKLES, DEPRESSION

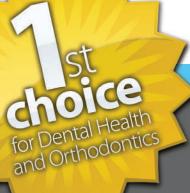
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- **# GUM PROBLEMS**
- **\*** TOOTH WHITENING
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- NERVOUS PATIENTS (SEDATION SERVICES)
- **\* DERMAL FILLERS AND BOTOX**

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