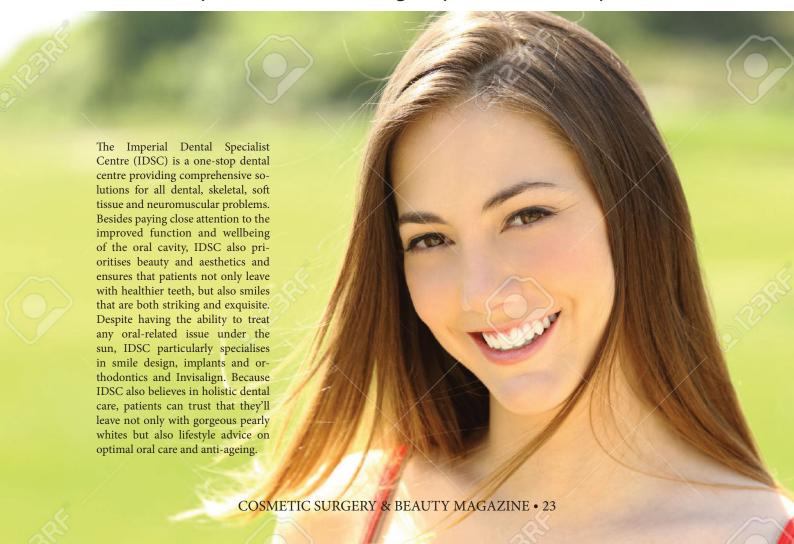
# The Imperial Dental Specialist Centre Recognised for Superb Service.

Only the best will do at the Klang Valley's finest dental facility.





# Veneers and Invisalign with Dato Dr. How Kim Chuan

Based on the attached photos, you will see that this patient has undergone veneer treatments overseas but was not satisfied with the results. To mend such issues, the patient, who's from Dubai specifically flew in to consult with the Imperial Dental Specialist Centre. We were able to address his issues and concerns which included artificial-looking teeth and oddly sized veneers that didn't respect proportions.

Great outcomes have to be based on the patient's gender. Although many may assume that teeth are similar across both sexes, there are dental anatomies or features that are considered more masculine or feminine. Very simply, even if one is provided with beautiful veneers, outcomes may occasionally be unsuited to the patient's unique character or personality. Last but not least, and apart from choosing the right prosthetic material, margins are of upmost importance, as dentists must ensure that veneers fit well to guarantee minimal plaque build up and gingivitis. In short, while veneers are thought to be simple aesthetic procedures, optimal outcomes will depend on ideal proportions and margins, gender and physical attributes and of course, the prosthetics' colour and material.

# Invisalign before veneers

Although veneers may provide immediate aesthetic results, they cannot fix major dental discrepancies, terribly overlapped or angulated teeth and malocclusion. If patients desire the best possible result, they may have to undergo orthodontic treatment or Invisalign before veneers are even an option. Patients with crowded or angulated teeth may not be the best veneer candidates because teeth will require excessive shaving so they're even enough for veneer application. The problem with this however, is possible tooth damage, which may affect in tooth sensitivity and reduced longterm stability. In addition, dentists must also ensure appropriate space distribution in order to achieve golden proportions. To address such issues, we must first achieve the most symmetrical teeth possible and once this has been attained with Invisalign, stunning veneers can be applied. This form of combination treatment remains the golden standard in dental aesthetics and patients can rest assured they not only secure exquisitely natural-looking teeth but also a smile that is both balanced and proportionate.





Before and after Invisalign treatment: Instanding lateral incisors. Along with bucally erupted canines, the upper midline is a little off and not central to the facial midline. With Invisalign, the midline was not only corrected and centralised, but the lateral and canine relationship is now in Golden Proportions.





Metal free crowns have wonderful translucencies that rival natural teeth. The multi layer construction mimics the tooth's dentine/enamel interphase hence, produces enamel crystals that exhibit lively, natural glows. The zirconium material also possesses "Bio-affinity" that's 'friendlier' to gingival tissue so patient's can enjoy healthier, plaque-free gums.





EMAX crowns have the ability to enhancing the patient's facial aesthetics by increasing the prominence of the top incisors. EMAX Crowns also eliminate dark buccal corridors and creates a fuller smile







Aesthetic veneers, crowns and bridges.



# Retainers with Dr. Kong Sheng Earn

Retainers are dental appliances that have the ability to hold teeth in position after orthodontic treatment. To put it quite simply, think of your retainers as insurance after investing time and money on your perfectly aligned pearly whites. While retainer applications are most crucial during the first few months following treatment, dental specialists recommend that patients remain committed to their retainers every day for the rest of their life. Failure to do so – as prescribed by your doctor – will often lead to orthodontic relapse or teeth moving away from optimal positions affecting in unaesthetic results.

There are multiple retainer types, which are further, divided into fixed or removable appliances with some indicating 24-hour wear while others only requiring nightly use. This will of course be dependent on your dental practitioner's prescription or recommendations.

### **Fixed retainers**

A fixed retainer is basically a wire that's cemented on the inner surface of one's bottom incisors. Although fixed retainers are wonderfully convenient due to the fact they don't necessitate removal, debris accumulation may affect in impeded oral hygiene. Furthermore, should wire detachment go unnoticed, the teeth – which are held together by the wire – may move out of optimal positions.



Fixed lingual retainer extending from the lingual surface from lower canine to canine.

# Clear removable retainers

The most current and common form of removable retainers is a clear removable retainer. A favourite among many patients, this retainer type is not only comfortable but discreet as well. In addition, oral hygiene will not be compromised, as patients are allowed to remove appliances during meals and tooth brushing. Despite a popular option, freedom of choice is its main advantage. Therefore, dentists do recommend that patients remain disciplined and adhere to daily use because failure to do so may lead to painful reapplications and possible misalignments.



Clear plastic retainers.



A clear retainer worn on the upper arch.

# Hawley's retainers

The other form of removable retainers is the Hawley's retainer. These dental applicators come with a wire that extends across the front teeth, with hooks that hold on to the back molars and an acrylic plate, which rests on the soft tissues. Although very durable, they are visible and thus, unattractive to the naked eye – especially if you have to wear them during the day. Nevertheless, the Hawley's retainer has many advantages and can be applauded for its sturdiness and its ability to close small spaces between the teeth when wires are tightened.



Hawley's retainer.



Hawley's retainer when worn.

Ultimately, each prescribed retainer serves a common purpose – to prevent or at least minimise orthodontic relapse. In my professional opinion, do not let years of orthodontic pain, money and effort go to waste. Put on your retainers and suffer no regrets!



Pho



# Non-surgical approaches to adult anterior open bites with Dr. Yew Kai Shang

An anterior open bite is defined as a 'non-vertical overlap of the incisors' where the patients often sport long and narrow faces plus difficulties occluding the lips. It's a type of malocclusion where the back teeth occlude while the front bottom and top incisors don't touch or close. The open bite malocclusion remains one of the most difficult dentofacial deformities to treat because its complexities are normally attributed to a combination of skeletal, dental and habit-related factors.

Vertical jaw growth continues throughout puberty and since this happens, it's imperative that patients identify related problems at an early stage as delayed treatment may affect in invasive procedures like jaw surgery. The treatment of open bites remains challenging. Due to this, careful diagnosis and timely intervention is key as early treatment improves procedural successes.

# **Causes**

Open bites are a multifactorial phenomenon and are caused by both genetic and environmental factors. Such factors include, finger sucking, 'tongue thrust' swallowing, nasal obstruction during pubertal growth and chronic mouth breathing plus trauma to one or both of the condyles. Along with unaesthetic front teeth, patients further suffer functional problems including temporomandibular joint disorders and difficulties eating and speaking.

## **Treatment**

Treatments for anterior open bites range from observational care and simple habit control up to invasive surgery. If problems are caught at a late stage where adult patients do not have any more growth potential, a combination of fixed-appliance orthodontics and orthognathic surgery may be necessary. Jaw surgery in combination with orthodontics can produce ideal skeletal outcomes. However, there are significant disadvantages to invasive procedures. This not only includes post-operative complications but also high costs, surgical risks, infection and complex surgical planning. In short, very few patients opt for this treatment plan.





Before and during braces treatment.

The second treatment form is orthodontic camouflage. This treatment form doesn't require orthognatic surgery and is carried out with nothing more than braces with mini screws or Invisalign with mini screws. Although combination treatments do produce optimal results, orthodontic camouflage does not require surgery and produces acceptable outcomes due to intrusion of the molars. Moreover, non-invasive orthodontic treatments offer commendable function improvement plus correction of the anterior open bite where aesthetics are favourably improved.







Invisalign patient one.





Invisalign patient two.

courtesy of Imperial Dental Specalist Centre



# The Treatment and Prevention of Gum Disease with Datin Dr. Alice Wong

Gum disease or gingivitis results in red, swollen gums and bleeding during brushing and flossing. Apart from environmental factors and poor health, gum disease can also be caused by poor oral hygiene, infrequent dental visits and insufficient plaque removal.

## **Indications and causes**

There are multiple signs of gum disease. Apart from puffy, red and bleeding gums, patients may additionally find spaces between the teeth, longer-looking chompers, halitosis, loose teeth and dull aching or itching of the gums. Gum disease is caused by germs found in plague – a thin protein film derived from saliva, which attaches itself on the surface of the teeth. Germs found abundantly in the mouth can contaminate this film and will continually reform even after brushing. Frequent visits to the dentist are important because regular plaque removal can reduce chances of teeth and gum damage. In addition to poor oral care, certain habits and medical conditions can exacerbate gum disease. In terms of habits, studies show that smoking not only increases chances of gum infection but delays gum healing too. In truth, smokers are five times more likely to suffer gum disease. Where medical conditions are concerned, susceptible patients can be expectant or pregnant mothers, stroke, leukemia and HIV or AIDS patients and those who suffer from diabetes.

# Disease progression and treatment

Unfortunately there are zero warning signs during early periodontitis and once discomfort, abscesses and teeth loosening happen, it's too late. In other words, the disease by then would have spread to the deeper areas of gums and bone. When treatments come into play, the main goal is to control the infection. There are many treatment forms and these vary depending on the extent of the disease. The first treatment type is deep cleaning, which is also known as scaling and root planning. Your doctor may also prescribe medications such as antiseptic chips, antibiotic gels, antibiotic microspheres, enzyme suppressants and oral antibiotics. If surgical intervention is necessary, flap surgeries or bone and tissue grafts can be performed. Flap surgery is a procedure that can either remove tartar deposits in deep pockets or reduce periodontal pockets. This common procedure involves lifting the back gums, removing tartar and then suturing the gums back in place. The gums will later heal tightly around the tooth resulting in longer-looking teeth.Bone grafting - in which natural or synthetic bone is placed in areas of bone loss - is a technique where a small piece of mesh-like material is inserted between bone and gum tissue. This stops gums from growing into areas where bone should be, allowing the bone and connective tissue to regenerate.

In any case of treatment, patients must do their part to maintain healthy surgical or non-surgical outcomes. First and most importantly, patients must practice good habits and brush and floss twice daily to remove plaque from tooth surfaces. Next, bi-monthly dental check-ups are vital because follow-ups with your dentist can prevent any further flare-ups. Last but not least, chemical plaque control via antibacterial mouthwashes like chlorhexidine can do wonders as special oral rinses have the ability of controlling and preventing gum disease from infecting deeper areas.



Before treatment - Notice the red and swollen gums.



This periodontal disease's diagnostic evaluation shows six-point pocket depths for each tooth, bleeding points, recession, furcations and mobility. Furthermore, other indications also include poor tissue contours and colours, plaque scores and calculus.



The gums are irritated and swollen due to plaque or calculus (tartar) buildup along the gum line.



Periodontal disease is often silent and normally begins as gingivitis and a small amount of inflammation involving the gums.



BEFORE AFTER
Initial periodontal therapy treatments begins with micro-ultrasonic treatment



Initial periodontal therapy treatments begins with micro-ultrasonic treatment to remove supragingival and subgingival calculus.





The ultimate goal of periodontal therapy is to halt disease progression and to stop, stabilise and improve tooth attachment. We utilised micro-ultrasonics for debridement and irrigation followed with diode lasers for bacterial decontamination and diseased epithelium removal. Immediate results before and after treatment.

Specalist Centre.



# Cracked Tooth Syndrome with Dr. Raymond Su

Cracked tooth syndrome occurs when a tooth suffers a crack so tiny that it doesn't even show up on x-rays. Although challenging to identify, it appears most often on the back molars. Most people who experience cracked tooth syndrome will normally complain of pain or discomfort when biting into food or when teeth are exposed to either hot or cold temperatures. Other indications can also be infrequent pain.

### **Causes**

Like many oral conditions, there's no specific cause for cracked tooth syndrome. However, this indication is very closely linked to those who suffer bruxism – grinding and clenching of the teeth. Grinding and clenching is unhealthy because teeth are meant to bite down and chew. Once too much pressure is applied, the tooth can crack and become damaged. In the long term, the friction can wear away at enamel and may fracture not only teeth but even fillings as well. While minor tooth fractures rarely cause discomfort, chipped or broken teeth can hurt. This is because nerves within the teeth may be damaged where nerve endings in the dentin are exposed to air and hot or cold food and drink.

## **Treatment**

Early diagnosis has been linked with successful restorative management and predictably good prognosis. Although cracks are difficult to identify, treatment options have shown to be efficacious once problems are located.



Cracked teeth.



Cracked line detected after filling was removed.

A dentist can recommend a few things when restoring a cracked tooth. Bonding, for instance, usually involves a composite resin to seal or fill the crack. As opposed to other methods of treatment, bonding is the cheapest and can be carried out in a single visit. The downside however is its impermanent outcomes and therefore this treatment is best suited to teeth that don't take too much biting pressure. If the crack is long and deep but not reaching the roots or gumline, crowns may be the best option. Crowns act as a cover for the damaged tooth and your doctor may recommend it if there isn't enough usable tooth left to bond. Unlike bonding, patients will probably spend more time at the dentist, and additionally may require added visits to the clinic. While this may be, crowns are relatively durable and will last much longer with appropriate home care.

If the crack is deep enough and reaches the tooth's pulp, patients may be recommended root canal procedures to treat the inflamed pulp and save the tooth. Root canals are normally paired with crowns and although the idea may sound scary, the process is similar to that of a filling. If cracks reach beneath gumlines, damaged teeth cannot be saved and will require extractions. This means your dental practitioner will need to replace the empty space with an implant that acts as a prosthetic root. This implant is then capped with a crown so that it looks and feels as similar to one's natural teeth as possible.



Crowning after root canal treatment.



Split teeth.

Photo courtesy of Imperial Dental Specalist Centre.