



Imperial Dental Specialist Centre:

Serving All Your Dental Needs

Going beyond the basics with an
award-winning dental consultancy.

Treating over a hundred patients a day within its brick-and-mortar space, the Imperial Dental Specialist Centre is not only International Organisation for Standardisation system (ISO) certified but remains a medical tourism hotspot. Winning Dental Clinic of The Year 2014 and 2015 at the International medical Travel Journal Awards, Imperial Dental's philosophy is to focus on continuous excellence and top-notch technology with an unparalleled eye for aesthetic results. Providing a plethora of oral treatments from implants and orthodontics to preventive dental care, the Imperial Dental Specialist Centre truly is the one-stop shop for all your dental treatment needs. The *Cosmetic Surgery & Beauty* team speaks to Consultant Orthodontist, Implantologist and Aesthetic Laser Dentist, Dato' Dr. How Kim Chuan as he explains the superior qualities of zirconium implants. Later, Aesthetic Dentists, Datin Dr. Alice Wong, Dr. Joanne Ng and Dr. Ariel Loke share their expertise and insights on crowns and bridges, self-ligating braces and preventive dental treatments.

Zirconium implants

AN AESTHETICALLY PLEASING FIX

When teeth are beyond repair, patients have three treatment options: implants, dentures or a bridge. If patients choose implants and opt for conventional titanium abutments, they may serve their purpose but aesthetics may be compromised. Because of its inner metal layer and a patient's reduced bone and gum density, dark shadows from the titanium will be visible on the tooth's base.

According to Dato' Dr. How, "Although conventional implants are widely available, here at Imperial Dental, we offer zirconium abutments that are as natural-looking as Mother Nature intended." With the zirconium abutment's metal-free material, the white translucent colour is able to reflect light more easily and thus provide patients with that gleaming Hollywood shine many yearn for. "When people use porcelain and metal fused crowns, the tooth will look fake and dull because light is fully absorbed by the titanium. However, if patients were to opt for zirconium abutments, light is more easily reflected and one's smile is not only more natural but more beautiful," he added.



Consultant Orthodontist, Implantologist and Aesthetic Laser Dentist, Dato' Dr. How Kim Chuan from the Imperial Dental Specialist Centre.

Pictures courtesy of Dato' Dr. How Kim Chuan.



Zirconium abutment with zirconium crown yield high standards of aesthetics rivaling Mother Nature.



Porcelain fused to metal crowns show greyish metal shadows and opacity of porcelain due to the metal core within the crown.



Zirconium implants are newly developed implant material with initial promising results. Long term results are still under longitudinal follow up studies.

STRONG AND WITHOUT TOXICITIES

Besides serving incomparable aesthetic purposes, zirconium abutments can eradicate any metal toxicity concerns and are as sturdy and strong as titanium abutments. Although there is no evidence to suggest that titanium contributes to metal toxicity, this concern has continually hovered over some critics. Dato' Dr. How shared, "Many people have asked me if zirconium abutments are as strong as titanium implants and my answer is that they not only provide superior aesthetic results without any toxic concerns, but they have equivalent strength and can last many years if patients practice good oral hygiene."



Zirconium abutments.

Crowns and Bridges

MULTIPLE MATERIALS, FACILITATING BUDGETS

At the Imperial Dental Specialist Centre, there are many options available if one needs to replace a faulty or missing tooth. Says Dr. Alice, “When we talk about crowns, this means that the tooth is still in the oral cavity and needs to be capped with alternative material. Most times, although the tooth has not fallen out, the tooth and its root may already be dead and the patient will need root canal treatment.”

Bridges, on the other hand, are an optional treatment intended to replace missing teeth and fill gaps. The procedure requires two terminals or points in the mouth, which act as supporting anchors for the prosthetic. “If a patient has more than one missing tooth, he or she may need to use more than one healthy tooth to anchor the bridge in position,” Dr. Alice explained.

At the Imperial Dental Specialist Centre, there are three types of prosthesis materials available.

Firstly, there are full metal or titanium crowns and bridges. Despite serving its functional purpose, the material is aesthetically unappealing and very unnatural.

Secondly, there are porcelain-fused metal crowns and bridges, which feature an inner metal layer and a porcelain outer façade. Even though this has an improved aesthetic result, the colour does not quite naturally blend in with the rest of the teeth.

Dr. Alice points out, “Because of the inner metal layer which casts shadows on the base of the tooth, it could stain a patient’s gums and create a perpetual dark tattoo around the margins of the tooth.”



Aesthetic Dentist Datin Dr. Alice Wong

Pictures courtesy of Dato' Dr. How Kam Chuan.



A 56-year-old Middle East male complained of gapped front teeth and difficulty eating.



After four Emax veneers and five units of PFM bridge, the patient is satisfied as aesthetic and normal function has been achieved.



Patient complained of teeth that are both too long and short.



12-22 Emax Veneer were used to close the Median Diastema and to achieve pleasant aesthetics.



Patient has had extractions in the past.



Five units of Porcelain Fused Metal (PFM) bridge were fabricated and placed for better function.



Poor oral hygiene with multiple retained roots.



Ill-fitting bridge unable to support the mastication function and root fracture under the bridge.



Restored the mouth to good function and aesthetic with implant-supported crown and bridge.



OPG X-ray showing implant-supported crown and bridge prostheses.

Lastly, patients can opt for the premium choice, full zirconium or E-Max crowns and bridges. Even though this option is slightly pricier, zirconium or E-Max prosthetics provide optimal aesthetic results with natural and almost perfect outcomes. "In Imperial Dental, all our zirconium and E-Max crowns and bridges are fabricated in Korea. This is far superior to locally-made ones because they are computer-generated and thus, more accurate," she said.

Together with the promise of quality materials, Dr. Alice proclaims that Imperial Dental promises exceptional workmanship and dental prosthetics, which are not only functional but also durable.

READY FOR FITTING

When patients undergo crowns, some will require root canals while others may not. This all depends on the condition of the tooth. Dr. Alice says, "If the tooth is healthy, all we will need to do is trim the tooth. This will take at least half an hour. If the tooth is dead, we will initially need to perform a root canal treatment before any trimming takes place." Later, an impression of the tooth will be taken and sent to the lab for fabrication. In approximately one to two weeks, Imperial Dental will receive the prosthesis and invite the patient back for his or her fitting. "Once crowns are fitted, we will then check for occlusion and biting comfort," adds Dr. Alice.

Procedural steps for bridges are the



Lower occlusal showing before and after treatment results using zirconium metal free aesthetic materials.



Upper occlusal showing before and after treatment comparison. The patient is very pleased with the aesthetic results.



same except temporary or provisional bridges are used to protect root canal-treated or trimmed terminal points. Once the bridge is fabricated, patients are asked to return for the application process. The dentist will check if size and margins are proportionate and once everything is in order, the bridge will be cemented in place with only premium 3M material. Patients are normally encouraged to use the bridge for at least a week before they return for a follow-up.

Self-ligating Braces

STRAIGHT TEETH IN NO TIME

Historically, the only choice for straighter teeth and a more beautiful smile line was conventional braces. Although a perfectly viable option, conventional braces are infamously bulky and require frequent tightening sessions especially when bands break. Despite conventional braces being still widely available, the Imperial Dental Specialist Centre offers only premium orthodontic solutions, which means decreased treatment time, improved aesthetic results and less pain. Known as Damon braces or self-ligating braces, Imperial Dental patients can easily achieve that coveted C-shaped smile in no time without those cumbersome brackets or irritating grievances conventional braces are known for.



**Aesthetic Dentist
Dr. Joanne Ng**

BAND-FREE

While conventional braces and self-ligating braces achieve the same results, Dr. Joanne confirms that the way in which results are achieved is different. Traditional braces use dated technology, which requires patients to return every four weeks to have braces tightened and rubber bands repositioned. Dr. Joanne cautions, “When conventional braces are tightened, patients may experience sore mouths for several days to a week throughout the one- to three-year treatment.”

Self-ligating braces, on the other hand, work by using tiny spring-loaded doors to maintain pressure on the arched wire. “This process applies force to the system to gently



The frontal aspect of teeth before and after treatment.



The Occlusal aspect of lower arch showing before and after treatment.

Pictures courtesy of 'Dato' Dr. How Kim Chuan.

adjust the teeth to their desired position and because of this self-ligating technology, the need for rubber band replacement is eradicated and tightening appointments are reduced from once a month to every six weeks,” she said.

A FULLER SMILE

Despite braces being unattractive, Damon or self-ligating orthodontics feature brackets that are much smaller than those of traditional braces. Likewise, people who undergo traditional braces must have several teeth removed in the process. This is to make room for crowded or impacted teeth to sit perfectly in the oral cavity. Dr. Joanne stated that with Damon braces, extractions are not typically necessary because the self-ligation method can use the body’s natural ability to adapt throughout the treatment. She confirms by adding, “While in some cases extractions are needed, it is less often and additionally, the end result is often a fuller and more natural smile because the process retains as many teeth as possible.”

EASY ORAL HYGIENE

Cleaning teeth around conventional braces can be a tricky process. The elastic bands can be quite the obstacle course and if teeth and brackets are not properly cleaned, they can become the perfect environment for bacteria and cavities. The bands could also trap food and get in the way of proper cleaning. With self-ligating braces sans elastic bands, cleaning is a much easier affair and plaque is significantly reduced. “Those bands in conventional braces are commonly known as plaque attractors. Because bands are eliminated, cavities are greatly reduced,” assured Dr. Joanne.

LESS PAIN, LESS TREATMENT TIME

Braces have always been known to be painful, especially during those ghastly tightening sessions. They also pose higher chances of abrasions and inflammation when hefty brackets rub against the tongue and cheek. Dr. Joanne clarifies, “With self-ligating braces, brackets are smaller and ulcers can be significantly lessened. While there are still chances of abrasions, patients can always purchase ortho wax which can shield the brackets and wires.” Treatment with conventional braces typically lasts six months longer than self-ligating braces and along with fewer scheduled appointments, patients save valuable time and money.



Self-ligating brackets system bonded on upper arch.



Ortho Mini implant to intrude the upper teeth with the help of elastic.



The teeth are well aligned after 18 months of treatment.

Pictures courtesy of 'Dato' Dr. How Kim Chuan.

Preventive Dentistry

PREVENTION BETTER THAN CURE

Preventive dentistry is a sub-genre of oral healthcare. It aims to preserve healthy teeth and gums while averting the risk of occurrence of dental and oral diseases such as caries, gum disease and hypersensitivity. Unknown to many, it is never too early for your dental appointments and everyone should be practising preventive dentistry as soon as that first tooth appears. In fact, the earlier the dental appointment, the better the chances of oral disease prevention.

The Imperial Dental Specialist Centre's goal is to increase the importance of oral health and to empower patients with good dental care and hygiene knowledge.



**Aesthetic Dentist
Dr. Ariel Loke**

CARIES CAUSES CAVITIES

Dental caries begin as speckles or white spot lesions on the tooth's surface. These spots are normally reversible with proper measures but if left untreated, will form cavities. Dr. Ariel advises, "The cavity colour may vary from yellow to black and symptoms and complications may include pain, halitosis, difficulty eating, tooth loss and inflammation of the surrounding tissue. Pit and fissure caries is common among molars and premolars. Because the molars' anatomy features deep and coalesced pits and fissures, this inhibits saliva protection and becomes difficult to clean causing plaque accumulation. Dr. Ariel explains that caries is easily rectifiable with Imperial Dental's fissure sealant preventive dental treatment. She says, "Fissure sealant is a material placed on the pit and fissures of the premolars and molars. The sealant forms a protective barrier that inhibits food and bacteria from entering the tiny grooves which cause decay." Dr. Ariel also stressed that high-risk patients should undergo this treatment as soon as their first molar fully appears in the mouth.

CHILDREN AT RISK

Early childhood caries (ECC) is the presence of one or more decayed or missing teeth in young children between the ages of zero to six years old. Children who are frequently exposed to poor feeding or eating habits such as sugary diets, bottle-feeding or the sharing of utensils, are potentially at risk. "The consequences of ECC could diminish the child's quality of life because of increased chances of lesions, a high number of treatment sessions and possible hospitalisation," she states. Prevention is better than cure and parents are encouraged to bring their little ones for check-ups as soon as possible. For clinical prevention, dentists can identify if your child could be a high-risk patient and thus offer treatments such as fissure sealant and fluoride therapy. Dr. Ariel explains, "With Imperial Dental's fluoride therapy, high concentrations of fluoride will be applied topically on all tooth surfaces. This treatment can be carried out every six months and can aid in caries prevention, the reduction of dentine hypersensitivity and caries lesions.

FALLING TEETH

Gingivitis is the early or mild form of gum disease and its

effects could subsequently cause irreversible damage to the oral cavity's tissue and surrounding bone structure. When gingivitis is left untreated, it will progress into periodontitis. Dr. Ariel warns, "Periodontitis will form deep pockets which will be difficult to brush and hence, accumulate plaque and calculus. Advanced periodontitis could lead to bone loss and eventual tooth loss." Dr. Ariel explains that gingivitis can be prevented with regular dental check-ups and treatment. "At the Imperial Dental Specialist Centre, we can treat periodontitis with scaling and polishing to remove plaque and deep scaling which eradicates calculus in the gum pockets under local anaesthesia," she adds.

SUPER SENSITIVE

Dentin hypersensitivity is a short but sharp pain arising from exposed root surfaces. Triggered by stimuli such as heat, chemicals or movement, it is typically found in patients with exposed dentine or root surfaces. "Hypersensitivity can be caused by gum disease, periodontal therapy, abrasions from brushing and erosions," she explains. Hypersensitivity can be minimised with fluoride therapy, root canal treatment, deep cleaning or scaling, restoration and the use of desensitising toothpaste.



Caries on deciduous premolar and molar.



Early childhood caries.



Exposed root due to toothbrush abrasion causing hypersensitive.



Gingivitis.

Pictures courtesy of Dato' Dr. How Kam Chuan.