



Perfect Smile

Karamani DENTAL CLINIC

Under One Roof All Dental Services

General dentists

Are the primary dental care providers for patients of all ages. They can treat you and your entire family and care for your overall oral health. This is crucial to your total health. Your general dentist takes responsibility for the diagnosis, treatment and overall coordination of services to meet your oral health needs. If you need a specialized dental procedure performed, your general dentist may work with other dentists to make sure you get the care you need.

What does general dentistry include?

General dentistry covers a wide range of procedures. This includes the initial consultation and diagnostics such as x-rays, CAT scans and wax moulds for replacement teeth. He or she will use a variety of methods such as tests, x-rays and the like to determine what is wrong with your teeth before treatment.

In terms of treatments, you will find that your general dentist will offer some or all of the following:

Fillings: teeth can be filled with a variety of materials which include gold, amalgam, mercury, porcelain and composite resin.

- **Crowns:** these are artificial teeth or 'caps' which can be fitted over broken or damaged teeth. These will maintain their structure and protect them from further damage.
- **Bridge:** this is a structure which contains an artificial tooth or 'pontic' which is anchored to a couple of crowns. These crowns fit over the natural teeth on either side of a gap which help to secure the false tooth in place and so ensure a natural looking appearance.
- **Root canal treatment:** this procedure is carried when the tissue or 'pulp' within a tooth becomes infected. This procedure can be performed by a general or specialist dentist.
- **Dentures:** these are basically a set of false teeth. If you have quite a few teeth missing, as a result of an accident or disease then dentures can help. They are removable false teeth which look and behave in much the same way as natural teeth.
- **Dental cleaning:** this can take the form of a 'scale & polish' or advice on brushing and flossing.
- **Bonding:** this is the name given to the procedure in which a type of resin is used as a 'glue' to stick a material, such as a veneer to a tooth. Often used to treat stained or damaged teeth.
- **Oral (mouth) and Maxillofacial treatments:** this is the technical term used to describe procedures for the mouth, face and jaw. Includes dental implants and treatment for temporomandibular joint syndrome (TMJ).

These are the most common services offered by a general dentist. However, you may find that your general dentist carries out a range of cosmetic dental procedures such as teeth whitening, veneers, lumineers and cosmetic bonding.

Dental Prosthesis

A dental prosthesis is an intraoral (inside the mouth) prosthesis used to restore (reconstruct) intraoral defects such as missing teeth, missing parts of teeth, and missing soft or hard structures of the jaw and palate. Prosthodontics is the dental specialty that focuses on dental prostheses. Such prostheses are used to rehabilitate mastication (chewing), improve aesthetics, and aid speech. A dental prosthesis may be held in place by connecting to teeth or dental implants, by suction, or by being held passively by surrounding muscles. Like other types of prostheses, they can either be fixed permanently or removable; fixed prosthodontics and removable dentures are made in many variations. Permanently fixed dental prostheses use dental adhesive or screws, to attach to teeth or dental implants. Removal prostheses may use friction against parallel hard surfaces and undercuts of adjacent teeth or dental implants, suction using the mucous retention (without or without aid from denture adhesives), and by exploiting the surrounding muscles and anatomical contours of the jaw to passively hold in place.

Some examples of dental prostheses include:

dentures

- partial denture
- palatal obturator
- orthodontic appliance
- dental implant
- crown
- bridge



DENTAL IMPLANTS

A dental implant is an artificial tooth root that is placed into your jaw to hold a replacement tooth or bridge. Dental implants may be an option for people who have lost a tooth or teeth due to periodontal disease, an injury, or some other reason.

TYPES OF DENTAL IMPLANTS

- **Endosteal (in the bone):** This is the most commonly used type of implant. The various types include screws, cylinders or blades surgically placed into the jawbone. Each implant holds one or more prosthetic teeth. This type of implant is generally used as an alternative for patients with bridges or removable dentures.
- **Subperiosteal (on the bone):** These are placed on top of the jaw with the metal framework's posts protruding through the gum to hold the prosthesis. These types of implants are used for patients who are unable to wear conventional dentures and who have minimal bone height.

ARE YOU A CANDIDATE FOR DENTAL IMPLANTS?

The ideal candidate for a dental implant is in good general and oral health. Adequate bone in your jaw is needed to support the implant, and the best candidates have healthy gum tissues that are free of periodontal disease.

Dental implants are intimately connected with the gum tissues and underlying bone in the mouth. Since periodontists are the dental experts who specialize in precisely these areas, they are ideal members of your dental implant team. Not only do periodontists have experience working with other dental professionals, they also have the special knowledge, training and facilities that you need to have teeth that look and feel just like your own. Your dentist and periodontist will work together to make your dreams come true.

WHAT IS A DENTAL IMPLANT PROCEDURE LIKE?

This procedure is a team effort between you, your dentist and your periodontist. Your periodontist and dentist will consult with you to determine where and how your implant should be placed. Depending on your specific condition and the type of implant chosen, your periodontist will create a treatment plan tailored to meet your needs.

Replacing a Single Tooth If you are missing a single tooth, one implant and a crown can replace it.

- **Replacing Several Teeth** If you are missing several teeth, implant-supported bridges can replace them.

- **Replacing All of Your Teeth** If you are missing all of your teeth, an implant-supported full bridge or full denture can replace them.

- **Sinus Augmentation** A key to implant success is the quantity and quality of the bone where the implant is to be placed. The upper back jaw has traditionally been one of the most difficult areas to successfully place dental implants due to insufficient bone quantity and quality and the close proximity to the sinus. Sinus augmentation can help correct this problem by raising the sinus floor and developing bone for the placement of dental implants.

- **Ridge Modification** Deformities in the upper or lower jaw can leave you with inadequate bone in which to place dental implants. To correct the problem, the gum is lifted away from the ridge to expose the bony defect. The defect is then filled with bone or bone substitute to build up the ridge. Ridge modification has been shown to greatly improve appearance and increase your chances for successful implants that can last for years to come.

Periodontology

- **Periodontology is the dental specialty dedicated to the tissues around the teeth (bone and gums) and their conditions. The aim of periodontology is the restoration and long-term maintenance of the periodontal health which is fundamental for the teeth support.**

Gingivitis is the microbial inflammation of the gums. Common symptoms are bleeding when brushing the teeth, redness and swelling of the gums. Gingivitis is reversible but if left untreated can progress further and compromise the bone support of the teeth.

- **Periodontitis is a chronic microbial infection of the periodontal tissues (bone and gums). Although periodontitis is not reversible, treatment aims in the prevention of further damage so that the affected teeth can be saved. If not detected and treated early can lead to tooth loss. Therefore, the earlier the disease is controlled the better the prognosis.**

Similarly, the tissues (gums and bone) around dental implants can also get infected by harmful bacteria and eventually cause implant failure or even loss of implants. Patients with untreated or poorly controlled periodontal disease have a much higher risk of suffering from peri-implantitis.

Some of the warning symptoms of periodontal disease are gum bleeding, gum recession, food trapping or increasing spaces between the teeth, gingival abscesses, tooth mobility or drifting and bad breath.

Major risk factors that can contribute to periodontal disease are smoking, diabetes, stress, hormonal changes (pregnancy), immunosuppressive conditions (HIV, corticosteroids), blood disorders (leukaemia, neutropenia), genetic disorders (Down Syndrome, Crohn's disease), obesity and other nutritional disorders, certain medication (calcium channel blockers, cyclosporine, phenytoin) as well as family history of periodontal conditions.

In addition, poorly controlled periodontitis has been linked to the increased risk for cardiovascular diseases, pre-term or low weight birth babies, erectile dysfunction as well as other health problems.

The periodontist can arrest the disease progression by reinforcing the oral hygiene, reducing the bacterial load and the inflammation. The treatment is carried out painlessly under local anaesthetic and by using the latest instruments, equipment and materials available such as magnifying loupes, specialised scalers, ultrasonic and laser tips as well as antimicrobial agents.

Other gum problems can be more cosmetic (gum recession or hyperplasia, "gummy smiles"). There are also various surgical techniques such as bone regeneration and gum augmentation available, to improve further the periodontal support, anatomy and appearance of the tissues and hence the prognosis of the teeth.

Most importantly, long-term regular maintenance by the patient and the periodontist is essential for the successful control of the disease progression and future stability.

Orthodontics and dentofacial orthopedics

Orthodontia, currently known as orthodontics and dentofacial orthopedics, was the first specialty created in the field of dentistry. An orthodontist, specialist in orthodontia, is limited to practice orthodontia only. Whereas general dentists can provide orthodontic treatment along with other treatments for teeth like fillings, cleanings, crowns, etc. Orthodontists are concerned with the study and treatment of malocclusions (improper bites), which may be a result of tooth irregularity and/or disproportionate jaw relationships. Orthodontic treatment can focus on dental displacement only, or can deal with the control and modification of facial growth. In the latter case it is better defined as "dentofacial orthopedics".

Methods

For comprehensive orthodontic treatment, metal wires ("Jushi") are inserted into orthodontic *brackets* (braces), which can be made from stainless steel or a more aesthetic ceramic material. The wires interact with the brackets to move teeth into the desired positions. Invisalign or other aligner trays consist of clear plastic trays that move teeth. Functional appliances are often used to redirect jaw growth.

Additional components—including removable appliances ("plates"), headgear, expansion appliances, and many other devices—may also be used to move teeth and jaw bones. *Functional appliances*, for example, are used in growing patients (age 5 to 14) with the aim of modifying the jaw dimensions and relationship if these are altered. This therapy, termed *Dentofacial Orthopedics*, is frequently followed by fixed multibracket therapy ("full braces") to align the teeth and refine the occlusion.

Hawley retainers are the most common type of retainers. This picture shows retainers for the top and bottom of the mouth.

Orthodontia is the specialty of dentistry that is concerned with the treatment of improper bites and crooked teeth. Orthodontic treatment can help fix the patient's teeth and set them in the right place. Orthodontists usually use braces and clear aligners to set the patient's teeth.

Orthodontists work on reconstructing the entire face rather than focusing only on teeth. After a course of active orthodontic treatment, patients will typically wear retainers (orthodontic devices), which help to maintain the teeth in their improved positions while surrounding bone reforms around them. The retainers are generally worn full-time for a period, anywhere from just a few days to a year, then part-time (typically, nightly during sleep) for as long as the orthodontist recommends. It is possible for the teeth to stay aligned without regular retainer wear. However, there are many reasons teeth will crowd as a person ages, whether or not the individual ever experienced orthodontic treatment; thus there is no guarantee that teeth will stay aligned without retention. For this reason, many orthodontists prescribe night-time or part-time retainer wear for many years after orthodontic treatment (potentially for life). Adult orthodontic patients are more likely to need lifetime retention.

Diagnosis and treatment planning

In diagnosis and treatment planning, the orthodontist must

- (1) recognize the various characteristics of a malocclusion or dentofacial deformity;
- (2) define the nature of the problem, including the etiology if possible;
- (3) design a treatment strategy based on the specific needs and desires of the individual; and
- (4) present the treatment strategy to the patient in such a way that the patient fully understands the ramifications of his/her decision.