

Cleanings & Prevention

A preventive program is a cooperative effort by the patient, dentist, and dental staff to preserve the natural dentition and supporting structures by preventing the onset, progress, and recurrence of dental diseases and conditions.

Preventing dental disease starts at home with good oral hygiene and a balanced diet. It is continued in the dental office by the efforts of your dentist and dental hygienist to promote, restore, and maintain your oral health.

Prevention also includes regular dental exams, cleanings, and x-rays. Sealants and fluoride are also great preventive treatments that help protect the teeth.

Prevention helps avoid serious and costly dental problems and is the key to having a **healthy, confident, beautiful smile.**

Panoramic X-rays

Panoramic X-rays (also known as Panorex[®] or orthopantomograms) are wraparound photographs of the face and teeth. They offer a view that would otherwise be invisible to the naked eye. X-rays in general, expose hidden structures, such as wisdom teeth, reveal preliminary signs of cavities, and also show fractures and bone loss.

Panoramic X-rays are extraoral and simple to perform. Usually, dental X-rays involve the film being placed inside the mouth, but panoramic film is hidden inside a mechanism that rotates around the outside of the head.

Unlike bitewing X-rays that need to be taken every few years, panoramic X-rays are generally only taken on an as-needed basis. A panoramic X-ray is not conducted to give a detailed view of each tooth, but rather to provide a better view of the sinus areas, nasal areas and mandibular nerve. Panoramic X-rays are preferable to bitewing X-rays when a patient is in extreme pain, and when a sinus problem is suspected to have caused dental problems.

Panoramic X-rays are extremely versatile in dentistry, and are used to:

- Assess patients with an extreme gag reflex.
- Evaluate the progression of TMJ.
- Expose cysts and abnormalities.
- Expose impacted teeth.
- Expose jawbone fractures.
- Plan treatment (full and partial dentures, braces and implants).

- Reveal gum disease and cavities.

How are panoramic X-rays taken?

The panoramic X-ray provides the dentist with an ear-to-ear two-dimensional view of both the upper and lower jaw. The most common uses for panoramic X-rays are to reveal the positioning of wisdom teeth and to check whether dental implants will affect the mandibular nerve (the nerve extending toward the lower lip).

The Panorex equipment consists of a rotating arm that holds the X-ray generator, and a moving film attachment that holds the pictures. The head is positioned between these two devices. The X-ray generator moves around the head taking pictures as orthogonally as possible. The positioning of the head and body is what determines how sharp, clear and useful the X-rays will be to the dentist. The pictures are magnified by as much as 30% to ensure that even the minutest detail will be noted.

Panoramic X-rays are an important diagnostic tool and are also valuable for planning future treatment. They are safer than other types of X-rays because less radiation enters the body.

Diagnodent®

Tooth decay can be extremely painful and puts the teeth at risk. Many extractions and restorative treatments are performed every single day because tooth decay has become too severe for the tooth to be saved. Diagnodent® is a safe fluorescent laser that detects hidden tooth decay accurately, quickly, and in its earliest stages.

All dentists are advocates for healthy, natural teeth. Restoration devices like crowns and bridges are popular because they allow the natural tooth to remain in the mouth. Diagnodent® accurately exposes areas of tooth decay without scratching, probing, or "opening up the tooth." This provides a greater chance of identifying, treating, and retaining a natural tooth without the need for expensive and time-consuming restorations.

How can Diagnodent® help me?

Diagnodent® accurately exposes more caries than X-rays and examinations. In fact, this revolutionary diagnostic tool is over 90% accurate. Sometimes, caries "go underground" due to fluoridation. This essentially means that lesions that once lay on the surface of the tooth bed down, and remain invisible to the naked eye. Because Diagnodent® exposes caries earlier, more treatment options are possible.

Here are some of the other benefits associated with Diagnodent®:

- Allows dentists to perform treatment with greater confidence.
- Allows for the investigation of suspicious areas.
- Completely safe.
- Cost effective.
- Empirically measurable results.
- Helps reduce future dental procedures.
- More accurate than any other diagnostic tool.
- No exposure to X-rays.
- No need for invasive investigations.
- No pain or scratching.
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What does the Diagnodent® process involve?

The Diagnodent® process is performed within the scope of a regular dental checkup. It is strikingly similar to having a laser pointer aimed at the teeth. Diagnodent® is a hi-tech tool, which first scans a clean tooth surface with a laser beam. This scanning procedure serves to calibrate the instrument by providing information about the tooth structure.

The Diagnodent® System is actually measuring the amount of laser fluorescence within the tooth. As each tooth is scanned, the amount of reflected laser light is recorded to produce a digital readout. If the tooth contains little or no decay, little or no laser light will be reflected back to the instrument. However, if a tooth contains caries of any significance, more laser light is reflected back. High readings (compared to the tooth originally scanned) indicate that caries are present within the structure of a particular tooth. The amount of laser light reflected back correlates with the amount of decay within the tooth.

Once we determine which teeth are suffering from decay, a plan can be formulated and treatment options can be discussed. In most cases, the early detection of caries means more treatment options and a greater chance of saving the affected tooth.

Fluoride Treatment

Fluoride is the most effective agent available to help prevent tooth decay. It is a mineral that is naturally present in varying amounts in almost all foods and water supplies. The benefits of fluoride have been well known for over 50 years and are supported by many health and professional organizations.

Fluoride works in two ways:

Topical fluoride strengthens the teeth once they have erupted by seeping into the outer surface of the tooth enamel, making the teeth more resistant to decay. We gain topical fluoride by using fluoride containing dental products such as toothpaste, mouth rinses, and gels. Dentists and dental hygienists generally recommend that children have a professional application of fluoride *twice a year* during dental check-ups.

Systemic fluoride strengthens the teeth that have erupted *as well as those that are developing under the gums*. We gain systemic fluoride from most foods and our community water supplies. It is also available as a supplement in drop or gel form and can be prescribed by your dentist or physician. Generally, fluoride drops are recommended for infants, and tablets are best suited for children up through the teen years. It is very important to monitor the amounts of fluoride a child ingests. If too much fluoride is consumed while the teeth are developing, a condition called fluorosis (white spots on the teeth) may result.

Although most people receive fluoride from food and water, sometimes it is not enough to help prevent decay. Your dentist or dental hygienist may recommend the use of home and/or professional fluoride treatments for the following reasons:

- Deep pits and fissures on the chewing surfaces of teeth.
- Exposed and sensitive root surfaces.
- Fair to poor oral hygiene habits.
- Frequent sugar and carbohydrate intake.
- Inadequate exposure to fluorides.
- Inadequate saliva flow due to medical conditions, medical treatments or medications.
- Recent history of dental decay.

Oral Cancer Exam

According to research conducted by the American Cancer Society, more than 30,000 cases of oral cancer are diagnosed each year. More than 7,000 of these cases result in the death of the patient. The good news is that oral cancer can easily be diagnosed with an annual oral cancer exam, and effectively treated when caught in its earliest stages.

Oral cancer is a pathologic process which begins with an asymptomatic stage during which the usual cancer signs may not be readily noticeable. This makes the oral cancer examinations performed by the dentist critically important. Oral cancers can be of varied histologic types such as teratoma, adenocarcinoma and melanoma. The most common type of oral cancer is the malignant squamous cell carcinoma. This oral cancer type usually originates in lip and mouth tissues.

There are many different places in the oral cavity and maxillofacial region in which oral cancers commonly occur, including:

- Lips
- Mouth
- Tongue
- Salivary Glands
- Oropharyngeal Region (throat)
- Gums
- Face

Reasons for oral cancer examinations

It is important to note that around 75 percent of oral cancers are linked with modifiable behaviors such as smoking, tobacco use and excessive alcohol consumption. Your dentist can provide literature and education on making lifestyle changes and smoking cessation.

When oral cancer is diagnosed in its earliest stages, treatment is generally very effective. Any noticeable abnormalities in the tongue, gums, mouth or surrounding area should be evaluated by a health professional as quickly as possible. During the oral cancer exam, the dentist and dental hygienist will be scrutinizing the maxillofacial and oral regions carefully for signs of pathologic changes.

The following signs will be investigated during a routine oral cancer exam:

- **Red patches and sores** – Red patches on the floor of the mouth, the front and sides of the tongue, white or pink patches which fail to heal and slow healing sores that bleed easily can be indicative of pathologic (cancerous) changes.
- **Leukoplakia** – This is a hardened white or gray, slightly raised lesion that can appear anywhere inside the mouth. Leukoplakia can be cancerous, or may become cancerous if treatment is not sought.
- **Lumps** – Soreness, lumps or the general thickening of tissue anywhere in the throat or mouth can signal pathological problems.

Oral cancer exams, diagnosis and treatment

The oral cancer examination is a completely painless process. During the visual part of the examination, the dentist will look for abnormality and feel the face, glands and neck for unusual bumps. Lasers which can highlight pathologic changes are also a wonderful tool for oral cancer checks. The laser can “look”

below the surface for abnormal signs and lesions which would be invisible to the naked eye.

If abnormalities, lesions, leukoplakia or lumps are apparent, the dentist will implement a diagnostic impression and treatment plan. In the event that the initial treatment plan is ineffective, a biopsy of the area will be performed. The biopsy includes a clinical evaluation which will identify the precise stage and grade of the oral lesion.

Oral cancer is deemed to be present when the basement membrane of the epithelium has been broken. Malignant types of cancer can readily spread to other places in the oral and maxillofacial regions, posing additional secondary threats. Treatment methods vary according to the precise diagnosis, but may include excision, radiation therapy and chemotherapy.

During bi-annual check-ups, the dentist and hygienist will thoroughly look for changes and lesions in the mouth, but a dedicated comprehensive oral cancer screening should be performed at least once each year.

Sealants

A sealant is a thin, plastic coating applied to the chewing surface of molars, premolars and any deep grooves (called pits and fissures) of teeth. More than 75% of dental decay begins in these deep grooves. Teeth with these conditions are hard to clean and are very susceptible to decay. A sealant protects the tooth by sealing deep grooves, creating a smooth, easy to clean surface.

Sealants can protect teeth from decay for many years, but need to be checked for wear and chipping at regular dental visits.

Reasons for sealants:

- **Children and teenagers** – As soon as the six-year molars (the first permanent back teeth) appear or any time throughout the cavity prone years of 6-16.
- **Adults** – Tooth surfaces without decay that have deep grooves or depressions.
- **Baby teeth** – Occasionally done if teeth have deep grooves or depressions and child is cavity prone.

What do sealants involve?

Sealants are easily applied by your dentist or dental hygienist and the process takes only a couple of minutes per tooth.

The teeth to be sealed are thoroughly cleaned and then surrounded with cotton to keep the area dry. A special solution is applied to the enamel surface to help the sealant bond to the teeth. The teeth are then rinsed and dried. Sealant material is carefully painted onto the enamel surface to cover the deep grooves or depressions. Depending on the type of sealant used, the material will either harden automatically or with a special curing light.

Proper home care, a balanced diet, and regular dental visits will aid in the life of your new sealants.

Dental Exams & Cleanings

A comprehensive dental exam will be performed by your dentist at your initial dental visit. At regular check-up exams, your dentist and hygienist will perform the following:

- **Examination of diagnostic X-rays (radiographs):** Essential for detection of decay, tumors, cysts, and bone loss. X-rays also help determine tooth and root positions.
- **Oral cancer screening:** Check the face, neck, lips, tongue, throat, tissues, and gums for any signs of oral cancer.
- **Gum disease evaluation:** Check the gums and bone around the teeth for any signs of periodontal disease.
- **Examination of tooth decay:** All tooth surfaces will be checked for decay with special dental instruments.
- **Examination of existing restorations:** Check current fillings, crowns, etc.

Professional Dental Cleaning

Professional dental cleanings (dental prophylaxis) are usually performed by Registered Dental Hygienists. Your cleaning appointment will include a dental exam and the following:

- **Removal of calculus (tartar):** Calculus is hardened plaque that has been left on the tooth for some time and is now firmly attached to the tooth surface. Calculus forms above and below the gum line and can only be removed with special dental instruments.
- **Removal of plaque:** Plaque is a sticky, almost invisible film that forms on the teeth. It is a growing colony of living bacteria, food debris, and saliva. The bacteria produce toxins (poisons) that inflame the gums. This inflammation is the start of periodontal disease!
- **Teeth polishing:** Remove stain and plaque that is not otherwise removed during tooth brushing and scaling.
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Dental X-rays

Dental radiographs (X-rays) are essential, preventative, diagnostic tools that provide valuable information not visible during a regular dental exam. Dentists and dental hygienists use this information to safely and accurately detect hidden dental abnormalities and complete an accurate treatment plan. Without X-rays, problem areas may go undetected.

Dental X-rays may reveal:

- Abscesses or cysts.
- Bone loss.
- Cancerous and non-cancerous tumors.
- Decay between the teeth.
- Developmental abnormalities.
- Poor tooth and root positions.
- Problems inside a tooth or below the gum line.

Detecting and treating dental problems at an early stage can save you time, money, unnecessary discomfort, and your teeth!

Are dental X-rays safe?

We are all exposed to natural radiation in our environment. The amount of radiation exposure from a full mouth series of X-rays is equal to the amount a person receives in a single day from natural sources.

Dental X-rays produce a low level of radiation and are considered safe. Dentists take necessary precautions to limit the patient's exposure to radiation when taking dental X-rays. These precautions include using lead apron shields to protect the body and using modern, fast film that cuts down the exposure time of each X-ray.

How often should dental X-rays be taken?

The need for dental X-rays depends on each patient's *individual* dental health needs. Your dentist and dental hygienist will recommend necessary x-rays based on the review of your medical and dental history, dental exam, signs and symptoms, age consideration, and risk for disease.

A *full mouth series* of dental X-rays is recommended for new patients. A full series is usually good for three to five years. *Bite-wing X-rays* (X-rays of top and bottom teeth biting together) are taken at recall (check-up) visits and are recommended once or twice a year to detect new dental problems.

Home Care

A beautiful, healthy smile that lasts a lifetime is our ultimate goal when treating patients. Your personal home care plays an important role in achieving that goal. Your personal home care starts by eating balanced meals, reducing the number of snacks you eat, and correctly using the various dental aids that help control the plaque and bacteria that cause dental disease.

Tooth brushing – Brush your teeth at least twice a day (especially before going to bed at night) with an ADA approved soft bristle brush and toothpaste.

1. Place the brush at a 45 degree angle to the gums and gently brush using a small, circular motion, ensuring that you always feel the bristles on the gums.
2. Brush the outer, inner, and biting surfaces of each tooth.
3. Use the tip of the brush to clean the inside of the front teeth.
4. Brush your tongue to remove bacteria and freshen your breath.

Electric toothbrushes are also recommended. They are easy to use and can remove plaque efficiently. Simply place the bristles of the electric brush on your gums and teeth and allow the brush to do its job, several teeth at a time.

Flossing – Daily flossing is the best way to clean between the teeth and under the gumline. Flossing not only helps clean these spaces, it disrupts plaque colonies from building up, preventing damage to the gums, teeth, and bone.

1. Take 12-16 inches (30-40cm) of dental floss and wrap it around your middle fingers, leaving about 2 inches (5cm) of floss between the hands.
2. Using your thumbs and forefingers to guide the floss, gently insert the floss between teeth using a sawing motion.
3. Curve the floss into a "C" shape around each tooth and under the gumline. Gently move the floss up and down, cleaning the side of each tooth.

Floss holders are recommended if you have difficulty using conventional floss.

Rinsing – It is important to rinse your mouth with water after brushing and after meals if you are unable to brush. If you are using an over-the-counter product for rinsing, it's a good idea to consult with your dentist or dental hygienist on its appropriateness for you.

Use other dental aids as recommended by your dentist or dental hygienist: interdental brushes, rubber tip stimulators, tongue cleaners, irrigation devices, fluoride, medicated rinses, etc., can all play a role in good dental home care.

How to Properly Brush & Floss

Brushing and flossing are of paramount importance to oral hygiene. Though bi-annual professional dental cleanings remove plaque, tartar, and debris, excellent homecare methods are equally valuable. Proper brushing and flossing can enhance the health of the mouth, make the smile sparkle, and prevent serious diseases.

Reasons why proper brushing and flossing are essential:

- **Prevention of tooth decay** – Tooth decay is one of the leading causes of tooth loss, and its treatment often requires complex dental procedures. Tooth decay occurs when the acids found in plaque erode the natural enamel found on the teeth. This phenomenon can easily be prevented by using proper home hygiene methods.
- **Prevention of periodontal disease** – Periodontal disease is a serious, progressive condition which can cause tooth loss, gum recession, and jawbone recession. Periodontal disease is caused by the toxins found in plaque and can lead to serious health problems in other parts of the body. Removing plaque and calculus (tartar) from the surface of the tooth using a toothbrush and from the interdental areas using dental floss, is an excellent way to stave off periodontal problems.
- **Prevention of halitosis** – Bad breath or halitosis is usually caused by old food particles on or between the teeth. These food particles can be removed with regular brushing and flossing, leaving the mouth healthier, and breath smelling fresher.
- **Prevention of staining** – Staining, or yellowing, of teeth can be caused by a wide variety of factors such as smoking, coffee, and tea. The more regularly these staining agents are removed from the teeth using brushing and flossing techniques, the less likely it is that the stains will become permanent.

The Proper Way to Brush

The teeth should be brushed at least twice a day, ideally in the morning and before bed. The perfect toothbrush is small in size with soft, rounded-end bristles, and is no more than three months old. The head of the brush needs to be small enough to access all areas of the mouth, and the bristles should be soft enough so as not to cause undue damage to the gum tissue. The American Dental Association (ADA) has given electric toothbrushes their seal of approval, stating that those with rotating or oscillating heads are more effective than other toothbrushes.

Here is a basic guide to proper brushing:

1. Place the toothbrush at a 45-degree angle where the gums and teeth meet.
2. Use small circular motions to gently brush the gumline and teeth.
3. Do not scrub or apply too much pressure to the teeth, as this can damage the gums and tooth enamel.
4. Brush every surface of every tooth, cheek-side, tongue-side, and chewing surfaces. Place special emphasis on the surfaces of the back teeth.
5. Use back and forth strokes to brush the chewing surfaces.
6. Brush the tongue to remove fungi, food, and debris.

The Proper Way to Floss

Flossing is a great way to remove plaque from the interdental regions (between the teeth). Flossing is an especially important tool for preventing periodontal disease and limiting the depth of the gum pockets. The interdental regions are difficult to reach with a toothbrush and should be cleansed with dental floss on a daily basis. The flavor and type of floss are unimportant; choose floss that will be easy and pleasant to use.

Here is a basic guide to proper flossing:

1. Cut a piece of floss to around 18 inches long.
2. Wrap one end of the floss around the middle finger of the left hand and the other end around the middle finger of the right hand until the hands are 2-3 inches apart.
3. Work the floss gently between the teeth toward the gum line.
4. Curve the floss in a U-shape around each individual tooth and carefully slide it beneath the gum line.
5. Carefully move the floss up and down several times to remove interdental plaque and debris.
6. Do not pop the floss in and out between the teeth as this will inflame and cut the gums.

Cosmetic Dentistry

In the past decade there has been a *dramatic* interest in cosmetic dentistry. We all realize that having a healthy, bright, beautiful smile enhances our appearance and allows us to smile with confidence. Thanks to the advances in modern cosmetic dentistry, we are able to improve our teeth and smiles with quick, painless and surprisingly affordable treatments.

Cosmetic dental treatments can:

- Change the size, shape, and alignment of certain teeth.
- Fill in unattractive spaces between teeth.
- Improve or correct bites.
- Lighten or brighten the color of teeth.
- Repair decayed, broken, cracked, or chipped teeth.
- Replace missing teeth.
- Replace old, unattractive dental treatments.

Remember, your smile speaks before you even say a word!

Composite Fillings

A composite (tooth colored) filling is used to repair a tooth that is affected by decay, cracks, fractures, etc. The decayed or affected portion of the tooth will be removed and then filled with a composite filling.

There are many types of filling materials available, each with their own advantages and disadvantages. You and your dentist can discuss the best options for restoring your teeth. Composite fillings, along with silver amalgam fillings, are the most widely used today. Because composite fillings are tooth colored, they can be closely matched to the color of existing teeth, and are more aesthetically suited for use in front teeth or more visible areas of the mouth.

As with most dental restorations, composite fillings are not permanent and may someday have to be replaced. They are very durable and will last many years, giving you a long lasting, beautiful smile.

Reasons for composite fillings:

- Chipped teeth.
- Closing space between two teeth.
- Cracked or broken teeth.
- Decayed teeth.

- Worn teeth.

How are composite fillings placed?

Composite fillings are usually placed in one appointment. While the tooth is numb, your dentist will remove decay as needed. The space will then be thoroughly cleaned and carefully prepared before the new filling is placed. If the decay was near the nerve of the tooth, a special medication will be applied for added protection. The composite filling will then be precisely placed, shaped, and polished, restoring your tooth to its original shape and function.

It is normal to experience sensitivity to hot and cold when composite fillings are first placed, however this will subside shortly after your tooth acclimates to the new filling.

You will be given care instructions at the conclusion of your treatment. Good oral hygiene practices, eating habits, and regular dental visits will aid in the life of your new fillings.

Porcelain Crowns (Caps)

A crown (or cap) is a covering that encases the entire tooth surface restoring it to its original shape and size. A crown protects and strengthens tooth structure that cannot be restored with fillings or other types of restorations.

Although there are several types of crowns, porcelain (tooth colored crown) are the most popular, because they resemble your natural teeth. They are highly durable and will last many years, but like most dental restorations, they may eventually need to be replaced. Porcelain crowns are made to match the shape, size, and color of your teeth giving you a natural, long-lasting beautiful smile.

Reasons for crowns:

- Broken or fractured teeth.
- Cosmetic enhancement.
- Decayed teeth.
- Fractured fillings.
- Large fillings.
- Tooth has a root canal.

What does getting a crown involve?

A crown procedure usually requires two appointments. Your first appointment will include taking several highly accurate molds (or impressions) that will be used to

create your custom crown. A mold will also be used to create a temporary crown which will stay on your tooth for approximately two weeks until your new crown is fabricated by a dental laboratory.

While the tooth is numb, the dentist will prepare the tooth by removing any decay and shaping the surface to properly fit the crown. Once these details are accomplished, your temporary crown will be placed with temporary cement and your bite will be checked to ensure you are biting properly.

At your second appointment your temporary crown will be removed, the tooth will be cleaned, and your new crown will be carefully placed to ensure the spacing and bite are accurate.

You will be given care instructions and encouraged to have regular dental visits to check your new crown.

Porcelain Fixed Bridges

A dental bridge is a fixed (non-removable) appliance and is an excellent way to replace missing teeth.

There are several types of bridges. You and your dentist will discuss the best options for your particular case. The "traditional bridge" is the most popular type and is usually made of porcelain fused to metal. Porcelain fixed bridges are most popular because they resemble your natural teeth. This type of bridge consists to two crowns that go over two anchoring teeth (abutment teeth) and are attached to pontics (artificial teeth), filling the gap created by one or more missing teeth.

Dental bridges are highly durable and will last many years; however, they may need replacement or need to be re-cemented due to normal wear.

Reasons for a fixed bridge:

- Fill space of missing teeth.
- Maintain facial shape.
- Prevent remaining teeth from drifting out of position.
- Restore chewing and speaking ability.
- Restore your smile.
- Upgrade from a removable partial denture to a permanent dental appliance.

What does getting a fixed bridge involve?

Getting a bridge usually requires two or more visits. While the teeth are numb, the two anchoring teeth are prepared by removing a portion of enamel to allow for

a crown. Next, a highly accurate impression (mold) is made which will be sent to a dental laboratory where the bridge will be fabricated. In addition, a temporary bridge will be made and worn for several weeks until your next appointment.

At the second visit, your permanent bridge will be carefully checked, adjusted, and cemented to achieve a proper fit. Occasionally your dentist may only temporarily cement the bridge, allowing your teeth and tissue time to get used to the new bridge. The new bridge will be permanently cemented at a later time.

You will receive care instructions at the conclusion of your treatment. Proper brushing, flossing and regular dental visits will aid in the life of your new permanent bridge.

Porcelain Veneers

Veneers are very thin pieces of durable, tooth shaped porcelain that are custom made (for shape and color) by a professional dental laboratory. They are bonded onto the front of teeth to create a beautiful and attractive smile.

Veneers can completely reshape your teeth and smile. They can often be alternatives to crowns and the ideal solution in treating many dental conditions.

As with most dental restorations, veneers are not permanent and may someday need replacement. They are very durable and will last many years, giving you a beautiful long lasting smile.

Reasons for porcelain veneers:

- Cosmetically, to create a uniform, white, beautiful smile.
- Crooked teeth.
- Misshapen teeth.
- Severely discolored or stained teeth.
- Teeth that are too small or large.
- Unwanted or uneven spaces.
- Worn or chipped teeth.

What does getting porcelain veneers involve?

Getting veneers usually requires two visits to complete the process, with little or no anesthesia required during the procedure. The teeth are prepared by lightly buffing and shaping the surface to allow for the thickness of the veneer. A mold or impression of the teeth is taken and a shade (color) will then be chosen by you and the dentist.

On the second visit the teeth will be cleansed with special liquids to achieve a durable bond. Bonding cement is then placed between the tooth and veneer and a special light beam is used to harden and set the bond.

You will receive care instructions for veneers. Proper brushing, flossing and regular dental visits will aid in the life of your new veneers.

Teeth Whitening

Teeth whitening (or bleaching) is a simple, non-invasive dental treatment used to change the color of natural tooth enamel and is an ideal way to enhance the beauty of your smile.

Because having whiter teeth has now become the number one aesthetic concern of most patients, there are a number of ways to whiten teeth. The most popular method is using a home teeth whitening system that will whiten teeth dramatically. Since teeth whitening only works on natural tooth enamel, it is important to evaluate replacement of any old fillings, crowns, etc. Replacement of any restorations will be done after bleaching so they will match the newly bleached teeth.

Teeth whitening is not permanent. A touch-up may be needed every several years, and more often if you smoke, drink coffee, tea, or wine.

Reasons for teeth whitening:

- Fluorosis (excessive fluoridation during tooth development).
- Normal wear of outer tooth layer.
- Stained teeth due to medications (tetracycline, etc.).
- Yellow, brown stained teeth.

What does teeth whitening involve?

This type of teeth whitening usually requires two visits. At the first appointment, impressions (molds) will be made of your teeth to fabricate custom, clear, plastic, trays.

At your second appointment, you will try on the trays for proper fit, and adjustments will be made if necessary. The trays are worn with special whitening solution either twice a day for 30 minutes or overnight for a couple of weeks depending on the degree of staining and desired level of whitening. It is normal to experience tooth sensitivity during the time you are whitening your teeth, but it will subside shortly after you have stopped bleaching.

You will receive care instructions for your teeth and trays, and be encouraged to visit your dentist regularly to help maintain a beautiful, healthy, white smile.

Periodontal Disease

Periodontal disease, which is also known as gum disease and periodontitis, is a progressive disease which, if left untreated, may result in tooth loss. Gum disease begins with the inflammation and irritation of the gingival tissues which surround and support the teeth. The cause of this inflammation is the toxins found in plaque which cause an ongoing bacterial infection.

The bacterial infection colonizes in the gingival tissue, and deep pockets form between the teeth and the gums. If treated promptly by a periodontist, the effects of mild inflammation (known as gingivitis) are completely reversible. However, if the bacterial infection is allowed to progress, periodontal disease begins to destroy the gums and the underlying jawbone, promoting tooth loss. In some cases, the bacteria from this infection can travel to other areas of the body via the bloodstream.

Common Causes of Gum Disease

There are genetic and environmental factors involved in the onset of gum disease, and in many cases, the risk of developing periodontitis can be significantly lowered by taking preventative measures.

Here are some of the most common causes of gum disease:

- **Poor dental hygiene** - Preventing dental disease starts at home with good oral hygiene and a balanced diet. Prevention also includes regular dental visits which include exams, cleanings, and x-rays. A combination of excellent home care and professional dental care will preserve the natural dentition and support of bony structures. When bacteria and calculus (tartar) are not removed, the gums and bone around the teeth become affected by bacterial toxins and can cause gingivitis or periodontitis, which ultimately lead to tooth loss.
- **Tobacco use** – Research has indicated that smoking and tobacco use are some of the most significant factors in the development and progression of gum disease. In addition to smokers experiencing a slower recovery and healing rate, smokers are far more likely to suffer from calculus (tartar) build-up on teeth, deep pockets in the gingival tissue, and significant bone loss.
- **Genetic predisposition** – Despite practicing rigorous oral hygiene routines, as much as 30% of the population may have a strong genetic predisposition to gum disease. These individuals are six times more likely to develop periodontal disease than individuals with no genetic predisposition. Genetic tests can be used to

determine susceptibility and early intervention can be performed to keep the oral cavity healthy.

- **Pregnancy and menopause** – During pregnancy, regular brushing and flossing is critical. Hormonal changes experienced by the body can cause the gum tissue to become more sensitive, rendering them more susceptible to gum disease.
- **Chronic stress and poor diet** – Stress lowers the ability of the immune system to fight off disease which means bacterial infection can beat the body's defense system. Poor diet or malnutrition can also lower the body's ability to fight periodontal infections, as well as negatively affecting the health of the gums.
- **Diabetes and underlying medical issues** – Many medical conditions can intensify or accelerate the onset and progression of gum disease including respiratory disease, heart disease, arthritis and osteoporosis. Diabetes hinders the body's ability to utilize insulin which makes the bacterial infection in the gums more difficult to control and cure.
- **Grinding teeth** – The clenching or grinding of teeth can significantly damage the supporting tissue surrounding the teeth. Grinding one's teeth is usually associated with a "bad bite" or the misalignment of the teeth. When an individual is suffering from gum disease, the additional destruction of gingival tissue due to grinding can accelerate the progression of the disease.
- **Medication** – Many drugs including oral contraceptive pills, heart medicines, anti-depressants, and steroids affect the overall condition of teeth and gums, making them more susceptible to gum disease. Steroid use promotes gingival overgrowth, which makes swelling more commonplace and allows bacteria to colonize more readily in the gum tissue.

Treatment of Gum Disease

Periodontists specialize in the treatment of gum disease and the placement of dental implants. A periodontist can perform effective cleaning procedures in deep pockets such as scaling and root planing; they can also prescribe antibiotic and antifungal medications to treat infection and halt the progression of the disease.

In the case of tooth loss, the periodontist is able to perform tissue grafts to promote natural tissue regeneration, and insert dental implants if a tooth or several teeth are missing. Where gum recession causes a "toothy" looking smile, the periodontist can recontour the gingival tissue to create an even and aesthetically pleasing appearance.

Preventing periodontal disease is critical in preserving the natural dentition. Addressing the causes of gum disease and discussing them with your dentist will help prevent the onset, progression, and recurrence of periodontal disease.

Types of Periodontal Disease

Periodontal disease (also known as **periodontitis** and **gum disease**) is a progressive disease which affects the supporting and surrounding tissue of the gums, and also the underlying jawbone. If left untreated, periodontal disease can result in loose, unstable teeth, and even tooth loss. Periodontal disease is in fact the leading cause of tooth loss in adults in the developed world and should not be taken lightly.

Periodontal disease begins when the toxins found in plaque start to attack the soft or gingival tissue surrounding the teeth. This bacterium embeds itself in the gum and rapidly breeds, causing a bacterial infection. As the infection progresses, it starts to burrow deeper into the tissue causing inflammation or irritation between the teeth and gums. The response of the body is to destroy the infected tissue, which is why the gums appear to recede. The resulting pockets between the teeth deepen and, if no treatment is sought, the tissue which makes up the jawbone also recedes causing unstable teeth and tooth loss.

Types of Periodontal Disease

There are many different varieties of periodontal disease, and many ways in which these variations manifest themselves. All require immediate treatment by a periodontist to halt the progression and save the gum tissue and bone.

Here are some of the most common types of periodontal disease along with the treatments typically performed to correct them:

Gingivitis

Gingivitis is the mildest and most common form of periodontitis. It is caused by the toxins in plaque and leads to periodontal disease. People at increased risk of developing gingivitis include pregnant women, women taking birth control pills, people with uncontrolled diabetes, steroid users and people who control seizures and blood pressure using medication.

Treatment: Gingivitis is easily reversible using a solid combination of home care and professional cleaning. The dentist may perform root planing and deep scaling procedures to cleanse the pockets of debris. A combination of antibiotics and medicated mouthwashes may be used to kill any remaining bacteria and promote the good healing of the pockets.

Chronic Periodontal Disease

Chronic periodontal disease is the most common form of the disease, and occurs much more frequently in people over 45. Chronic periodontal disease is characterized by inflammation below the gum line and the progressive destruction of the gingival and bone tissue. It may appear that the teeth are gradually growing in length, but in actuality the gums are gradually receding.

Treatment: Unfortunately unlike gingivitis, chronic periodontal disease cannot be completely cured because the supportive tissue cannot be rebuilt. However, the dentist can halt the progression of the disease using scaling and root planing procedures in combination with antimicrobial treatments. If necessary, the periodontist can perform surgical treatments such as pocket reduction surgery and also tissue grafts to strengthen the bone and improve the aesthetic appearance of the oral cavity.

Aggressive Periodontal Disease

Aggressive periodontal disease is characterized by the rapid loss of gum attachment, the rapid loss of bone tissue and familial aggregation. The disease itself is essentially the same as chronic periodontitis but the progression is much faster. Smokers and those with a family history of this disease are at an increased risk of developing aggressive periodontitis.

Treatment: The treatments for aggressive periodontal disease are the same as those for chronic periodontal disease, but aggressive periodontal disease sufferers are far more likely to require a surgical intervention. This form of the disease is harder to halt and treat, but the dentist will perform scaling, root planing, antimicrobial, and in some cases laser procedures in an attempt to save valuable tissue and bone.

Periodontal Disease Relating to Systemic Conditions

Periodontal disease can be a symptom of a disease or condition affecting the rest of the body. Depending on the underlying condition, the disease can behave like aggressive periodontal disease, working quickly to destroy tissue. Heart disease, diabetes and respiratory disease are the most common cofactors, though there are many others. Even in cases where little plaque coats the teeth, many medical conditions intensify and accelerate the progression of periodontal disease.

Treatment: Initially, the medical condition which caused the onset of periodontal disease must be controlled. The dentist will halt the progression of the disease using the same treatments used for controlling aggressive and chronic periodontal disease.

Necrotizing Periodontal Disease

This form of the disease rapidly worsens and is more prevalent among people who suffer from HIV, immunosuppression, malnutrition, chronic stress or choose to smoke. Tissue death (necrosis) frequently affects the periodontal ligament, gingival tissues and alveolar bone.

Treatment: Necrotizing periodontal disease is extremely rare. Because it may be associated with HIV or another serious medical condition, it is likely the dentist will consult with a physician before commencing treatment. Scaling, root planing, antibiotic pills, medicated mouth wash and fungicidal medicines are generally used to treat this form of the disease.

Diagnosis of Periodontal Disease

Periodontal disease is diagnosed by your dentist or dental hygienist during a *periodontal examination*. This type of exam should always be part of your regular dental check-up.

A periodontal probe (small dental instrument) is gently used to measure the sulcus (pocket or space) between the tooth and the gums. The depth of a healthy sulcus measures three millimeters or less and does not bleed. The periodontal probe helps indicate if pockets are deeper than three millimeters. As periodontal disease progresses, the pockets usually get deeper.

Your dentist or hygienist will use pocket depths, amount of bleeding, inflammation, tooth mobility, etc., to make a diagnosis that will fall into a category below:

Gingivitis

Gingivitis is the first stage of periodontal disease. Plaque and its toxin by-products irritate the gums, making them tender, inflamed, and likely to bleed.

Periodontitis

Plaque hardens into calculus (tartar). As calculus and plaque continue to build up, the gums begin to recede from the teeth. Deeper pockets form between the gums and teeth and become filled with bacteria and pus. The gums become very irritated, inflamed, and bleed easily. Slight to moderate bone loss may be present.

Advanced Periodontitis

The teeth lose more support as the gums, bone, and periodontal ligament continue to be destroyed. Unless treated, the affected teeth will become very loose and may be lost. Generalized moderate to severe bone loss may be present.

Treatment of Periodontal Disease

Periodontal treatment methods depend upon the type and severity of the disease. Your dentist and dental hygienist will evaluate for periodontal disease and recommend the appropriate treatment.

Periodontal disease progresses as the sulcus (pocket or space) between the tooth and gums gets filled with bacteria, plaque, and tartar, causing irritation to the surrounding tissues. When these irritants remain in the pocket space, they can cause damage to the gums and eventually, the bone that supports the teeth!

If the disease is caught in the early stages of *gingivitis*, and no damage has been done, one to two regular cleanings will be recommended. You will also be given instructions on improving your daily oral hygiene habits and having regular dental cleanings.

If the disease has progressed to more advanced stages, a special periodontal cleaning called ***scaling and root planing*** (*deep cleaning*) will be recommended. It is usually done one quadrant of the mouth at a time while the area is numb. In this procedure, tartar, plaque, and toxins are removed from above and below the gum line (*scaling*) and rough spots on root surfaces are made smooth (*planing*). This procedure helps gum tissue to heal and pockets to shrink. Medications, special medicated mouth rinses, and an electric tooth brush may be recommended to help control infection and healing.

If the pockets do not heal after scaling and root planing, periodontal surgery may be needed to reduce pocket depths, making teeth easier to clean. Your dentist may also recommend that you see a periodontist (specialist of the gums and supporting bone).

Restorations

It's great news that the incidence of tooth decay has significantly diminished over the years due to the use of fluorides and an increase in patient awareness. However, teeth are still susceptible to decay, infection, and breakage and sometimes need to be restored back to health. Through improved techniques and modern technology, we are now able to offer more options for restoring a tooth back to its normal shape, appearance and function.

Should your teeth ever require a restorative treatment, you can rest assured knowing we will always discuss with you the available options, and recommend

what we believe to be the most comfortable and least invasive treatment. Providing you with excellent care is our number one priority when creating your beautiful smile.

Reasons for restorative dentistry:

- Enhance your smile.
- Fill in unattractive spaces between teeth.
- Improve or correct an improper bite.
- Prevent the loss of a tooth.
- Relieve dental pain.
- Repair damaged and decayed teeth.
- Replace missing teeth.
- Replace old, unattractive dental treatments.
- Restore normal eating and chewing.

Remember to give your teeth the attention they need today!

Inlay Restorations

An inlay restoration is a custom made filling made of composite material, gold, or tooth-colored porcelain. It is made by a professional dental laboratory and is permanently cemented into the tooth by your dentist.

Inlays can be utilized to conservatively repair teeth that have large defective fillings or have been damaged by decay or trauma. Inlays are an ideal alternative to conventional silver and composite fillings. Also, they are more conservative than crowns because less tooth structure is removed in the preparation of inlays.

As with most dental restorations, inlays are not always permanent and may someday require replacement. They are highly durable and will last many years, giving you a beautiful long lasting smile.

Reasons for inlay restorations:

- Broken or fractured teeth.
- Cosmetic enhancement.
- Decayed teeth.
- Fractured fillings.
- Large fillings.

What does getting an inlay involve?

An inlay procedure usually requires two appointments. Your first appointment will include taking several highly accurate impressions (molds) that will be used to create your custom inlay and a temporary restoration.

While the tooth is numb, the dentist will remove any decay and/or old filling materials. The space will then be thoroughly cleaned and carefully prepared, shaping the surface to properly fit an inlay restoration. A temporary filling will be applied to protect the tooth while your inlay is made by a dental laboratory.

At your second appointment, your new inlay will be carefully and precisely cemented into place. A few adjustments may be necessary to ensure a proper fit and comfortable bite.

You will receive care instruction at the conclusion of your treatment. Good oral hygiene practices, a proper diet, and regular dental visits will aid in the life of your new inlay.

Onlay Restorations

An onlay restoration is a custom made filling made of composite material, gold, or tooth-colored porcelain. An onlay is sometimes also referred to as a *partial crown*. It is made by a professional dental laboratory and is permanently cemented onto the tooth by your dentist.

Onlays can be utilized to *conservatively* repair teeth that have large defective fillings or have been damaged by decay or trauma. Onlays are an ideal alternative to crowns (caps) because less tooth structure is removed in the preparation of onlays. *Onlays* are essentially identical to *inlays* with the exception that one or more of the chewing cusps have also been affected and need to be included in the restoration.

As with most dental restorations, onlays are not always permanent and may someday require replacement. They are highly durable and will last many years, giving you a beautiful long lasting smile.

Reasons for onlay restorations:

- Broken or fractured teeth.
- Cosmetic enhancement.
- Decayed teeth.
- Fractured fillings.
- Large fillings.

What does getting an onlay involve?

An onlay procedure usually requires two appointments. Your first appointment will include taking several highly accurate impressions (molds) that will be used to create your custom onlay and a temporary restoration.

While the tooth is numb, the dentist will remove any decay and/or old filling materials. The space will then be thoroughly cleaned and carefully prepared, shaping the surface to properly fit an onlay restoration. A temporary filling will be applied to protect the tooth while your onlay is made by a dental laboratory.

At your second appointment, your new onlay will be carefully and precisely cemented into place. A few adjustments may be necessary to ensure a proper fit and that your bite is comfortable.

You will receive care instruction at the conclusion of your treatment. Good oral hygiene practices, a proper diet, and regular dental visits will aid in the life of your new onlay.

Dentures & Partial Dentures

A denture is a removable dental appliance and a replacement for missing teeth and surrounding tissue. They are made to closely resemble your natural teeth and may even enhance your smile.

There are two types of dentures - complete and partial dentures. Complete dentures are used when all of the teeth are missing, while partial dentures are used when some natural teeth remain. A partial denture not only fills in the spaces created by missing teeth, it prevents other teeth from shifting.

A complete denture can be either "conventional" or "immediate." A conventional type is made after the teeth have been removed and the gum tissue has healed (usually takes 4 to 6 weeks). During this time, the patient will go without teeth. Immediate dentures are made in advance and immediately placed after the teeth are removed, thus preventing the patient from having to be without teeth during the healing process. Once the tissues shrink and heal, adjustments will have to be made.

Dentures are very durable appliances and will last many years but may have to be remade, repaired, or readjusted due to normal wear.

Reasons for dentures:

- Complete Denture - Loss of all teeth in an arch.
- Partial Denture - Loss of several teeth in an arch.
- Enhancing smile and facial tissues.

- Improving chewing, speech, and digestion.

What does getting dentures involve?

The process of getting dentures requires several appointments, usually over a period of several weeks. Highly accurate impressions (molds) and measurements are taken and used to create your custom denture. Several "try-in" appointments may be necessary to ensure proper shape, color, and fit. At the final appointment, your dentist will precisely adjust and place the completed denture, ensuring a natural and comfortable fit.

It is normal to experience increased saliva flow, some soreness, and possible speech and chewing difficulty, however this will subside as your muscles and tissues get used to the new dentures.

You will be given care instructions for your new dentures. Proper cleaning of your new dental appliance, good oral hygiene, and regular dental visits will aid in the life of your new dentures.

Fixed Bridges

A dental bridge is a fixed (non-removable) appliance and is an excellent way to replace missing teeth.

There are several types of bridges. You and your dentist will discuss the best options for your particular case. The "traditional bridge" is the most popular type and is usually made of porcelain fused to metal. This type of bridge consists of two crowns that go over two anchoring teeth (abutment teeth) and are attached to pontics (artificial teeth), filling the gap created by one or more missing teeth.

Dental bridges are highly durable and will last many years; however, they may need replacement or need to be re-cemented due to normal wear.

Reasons for a fixed bridge:

- Fill space of missing teeth.
- Maintain facial shape.
- Prevent remaining teeth from drifting out of position.
- Restore chewing and speaking ability.
- Restore your smile.
- Upgrade from a removable partial denture to a permanent dental appliance.

What does getting a fixed bridge involve?

Getting a bridge usually requires two or more visits. While the teeth are numb, the two anchoring teeth are prepared by removing a portion of enamel to allow for a crown. Next, a highly accurate impression (mold) is made which will be sent to a dental laboratory where the bridge will be fabricated. In addition, a temporary bridge will be made and worn for several weeks until your next appointment.

At the second visit, your permanent bridge will be carefully checked, adjusted, and cemented to achieve a proper fit. Occasionally your dentist may only temporarily cement the bridge, allowing your teeth and tissue time to get used to the new bridge. The new bridge will be permanently cemented at a later time.

You will receive care instructions at the conclusion of the procedure. Proper brushing, flossing, and regular dental visits will aid in the life of your new, permanent bridge.

Root Canal Therapy

Root canal therapy is needed when the nerve of a tooth is affected by decay or infection. In order to save the tooth, the pulp (the living tissue inside the tooth), nerves, bacteria, and any decay are removed and the resulting space is filled with special, medicated, dental materials, which restore the tooth to its full function.

Having a root canal done on a tooth is the treatment of choice to save a tooth that otherwise would die and have to be removed. Many patients believe that removing a tooth that has problems is the solution, but what is not realized is that extracting (pulling) a tooth will ultimately be more costly and cause significant problems for adjacent teeth.

Root canal treatment is highly successful and usually lasts a lifetime, although on occasion, a tooth will have to be retreated due to new infections.

Signs and symptoms for possible root canal therapy:

- An abscess (or pimple) on the gums.
- Sensitivity to hot and cold.
- Severe toothache pain.
- Sometimes no symptoms are present.
- Swelling and/or tenderness.

Reasons for root canal therapy:

- Decay has reached the tooth pulp (the living tissue inside the tooth).
- Infection or abscess have developed inside the tooth or at the root tip.
- Injury or trauma to the tooth.

What does root canal therapy involve?

A root canal procedure requires one or more appointments and can be performed by a dentist or endodontist (a root canal specialist).

While the tooth is numb, a rubber dam (a sheet of rubber) will be placed around the tooth to keep it dry and free of saliva. An access opening is made on top of the tooth and a series of root canal files are placed into the opening, one at a time, removing the pulp, nerve tissue, and bacteria. If tooth decay is present, it will also be removed with special dental instruments.

Once the tooth is thoroughly cleaned, it will be sealed with either a permanent filling or, if additional appointments are needed, a temporary filling will be placed.

At the next appointment, usually a week later, the roots and the inside cavity of the tooth will be filled and sealed with special dental materials. A filling will be placed to cover the opening on top of the tooth. In addition, all teeth that have root canal treatment should have a crown (cap) placed. This will protect the tooth and prevent it from breaking, and restore it to its full function.

After treatment, your tooth may still be sensitive, but this will subside as the inflammation diminishes and the tooth has healed.

You will be given care instructions after each appointment. Good oral hygiene practices and regular dental visits will aid in the life of your root canal treatment.

Cosmetic Dentistry

In the past decade there has been a *dramatic* interest in cosmetic dentistry. We all realize that having a healthy, bright, beautiful smile enhances our appearance and allows us to smile with confidence. Thanks to the advances in modern cosmetic dentistry, we are able to improve our teeth and smiles with quick, painless and surprisingly affordable treatments.

Cosmetic dental treatments can:

- Change the size, shape, and alignment of certain teeth.
- Fill in unattractive spaces between teeth.
- Improve or correct bites.
- Lighten or brighten the color of teeth.
- Repair decayed, broken, cracked, or chipped teeth.
- Replace missing teeth.
- Replace old, unattractive dental treatments.

Remember, your smile speaks before you even say a word!

Bonding

Bonding is a cosmetic procedure that allows the dentist to reshape or repair your smile using composite resin. Cosmetic bonding is particularly ideal if you're insecure about the appearance of your smile or want an affordable alternative to invasive and more costly procedures such as orthodontics or veneers. With bonding, chipped or uneven teeth can be repaired easily and affordably, restoring your self-confidence. Additionally, bonding is often completed in a single visit and doesn't require any anesthetic!

As with most cosmetic procedures, bonding will wear and discolor over time, eventually needing to be replaced; however, bonding is very durable and typically lasts many years.

Reasons for cosmetic bonding:

- Closing spaces or gaps
- Fixing chipped teeth
- Fixing decayed teeth (teeth with cavities)
- Lengthening uneven teeth
- Protecting roots exposed by receding gums
- Restoring badly discolored teeth

What does dental bonding involve?

To begin, the dentist will isolate the teeth included in the procedure, etching them in preparation for bonding. After applying the etching conditioning liquid, the surface of the teeth will have small crevices that allow the tooth stronger adhesion with the bonding agent.

The dentist will then apply a bonding resin which cements the composite in place. After several layers of tooth-colored composite are applied, the composite and bonding resin are shaped and hardened with a specially calibrated light. Once the composite is fully set, the bonded areas are smoothed, buffed, and polished to blend in naturally with the surrounding teeth.

If you want to regain confidence in your smile, contact our practice to learn more about bonding.

Dental Implants

Dental implants are a great way to replace missing teeth and also provide a fixed solution to having removable partial or complete dentures. Implants provide excellent support and stability for these dental appliances.

Dental implants are artificial roots and teeth (usually titanium) that are surgically placed into the upper or lower jaw bone by a dentist or Periodontist - a specialist of the gums and supporting bone. The teeth attached to implants are very natural looking and often enhance or restore a patient's smile!

Dental implants are strong and durable and will last many years. On occasion, they will have to be re-tightened or replaced due to normal wear.

Reasons for dental implants:

- Replace one or more missing teeth without affecting adjacent teeth.
- Resolve joint pain or bite problems caused by teeth shifting into missing tooth space.
- Restore a patient's confident smile.
- Restore chewing, speech, and digestion.
- Restore or enhance facial tissues.
- Support a bridge or denture, making it more secure and comfortable.

What does getting dental implants involve?

The process of getting implants requires a number of visits over several months.

X-rays and impressions (molds) are taken of the jaw and teeth to determine bone, gum tissue, and spacing available for an implant. While the area is numb, the implant will be surgically placed into the bone and allowed to heal and integrate itself for up to six months. Depending on the type of implant, a second surgery may be required in order to place the "post" that will hold the artificial tooth in place. With other implants the post and anchor are already attached and placed at the same time.

After several weeks of healing the artificial teeth are made and fitted to the post portion of the anchor. Because several fittings may be required, this step may take one to two months to complete. After a healing period, the artificial teeth are securely attached to the implant, providing excellent stability and comfort to the patient.

You will receive care instructions when your treatment is completed. Good oral hygiene and eating habits, alongside regular dental visits, will aid in the life of your new implant.

BriteSmile®

A pearly white smile can be an excellent confidence booster. Yellowing or stained teeth are unpleasant to look at and can negatively affect your overall appearance. The BriteSmile® Whitening System is a quick, safe, and gentle way to restore the natural color of your teeth with minimal discomfort. BriteSmile® uses a combination of gel and light to whiten teeth by up to 14 shades in just one hour.

BriteSmile® has several advantages over comparable whitening systems. First, the bleaching gel does not need to be activated by lasers or heat. This means that no radiation enters the body. Instead, BriteSmile® utilizes a unique lamp that propels blue light toward the teeth and expedites whitening. All of the key “smile” teeth will be bleached in a uniform way, without creating hypersensitive lips, gums, or soft tissue. BriteSmile® gel is much more viscous, which prevents tooth dehydration and creates longer lasting results.

How can BriteSmile® help me?

The best candidates for the BriteSmile® whitening procedure have strong, healthy teeth and gums. If gum disease is an issue, it needs to be treated prior to the gel application. Whitening treatment may not be a good option for patients with highly sensitive teeth, thinning teeth, or teeth that exhibit deep inorganic staining.

BriteSmile® can effectively alleviate the following problems:

- Staining caused by tobacco use.
- Staining caused by strong foods and drinks.
- Yellowing teeth caused by aging.
- Greying teeth (usually hereditary).
- Organic staining.

What preparation is necessary before the BriteSmile® treatment?

BriteSmile® elicits the best results on clean, healthy teeth. Therefore, a thorough cleaning is recommended prior to treatment, to rid the teeth of plaque, tartar, and rotting food particles. The dentist will always thoroughly examine the teeth while performing the cleaning to check for any fractures, inflammation, or decay. Photographs might also be taken of the teeth prior to the bleaching procedure. This makes “before and after” comparisons more evident.

Though the whitening procedure only takes an hour in the office, BriteSmile® toothpaste, dental trays, and a less concentrated version of the gel can be given for home use. BriteSmile® is long lasting and effective, but stains can quickly reappear on the teeth – particularly if tobacco is being used.

What does BriteSmile® treatment involve?

None of the steps in the BriteSmile® system should cause discomfort. The BriteSmile® gel only contains a 15% or 25% concentration of hydrogen peroxide, which means the teeth and gums should not feel uncomfortable. Many of the alternative whitening treatments contain a 35% or 50% concentration of hydrogen peroxide, which dehydrates teeth and causes them to become hypersensitive. BriteSmile® gel is balanced with water and glycerin which work together to hydrate the teeth. The bleaching gel is applied to the teeth for three twenty-minute intervals as follows:

1. A retractor is placed inside the mouth to fully expose the teeth.
2. A hardening resin is applied to the gums to prevent the bleaching gel from irritating them.
3. The gel and blue light are applied to the teeth for twenty minutes.
4. The dentist checks whitening progress.
5. The gel is removed, and more gel is applied for another twenty minutes.
6. The gel is again removed, and more gel is applied for an additional twenty minutes.
7. The retractors are removed when the final gel application is complete.
8. The mouth is rinsed and the new tooth color is measured immediately.

The teeth may look incredibly white immediately after treatment due to mild dehydration. The actual color of teeth will become apparent when the teeth have had 48 hours to rehydrate.

DaVinci™ Veneers

Today, a wonderful, pearly-white smile is important for a wide variety of reasons. Beautiful teeth can boost self-confidence, and a stunning smile is often the most recognized feature of a person. daVinci™ dental veneers have been renowned for excellence and durability in the field of cosmetic dentistry for the past 25 years. These ceramic veneers can cover even the most unsightly blemishes on the teeth, and treatment can be completed in two or three visits.

Who is a good candidate for daVinci™ veneers?

daVinci™ veneers are ideal for the nervous patient because they need little or no anesthesia to apply. They're also highly resistant to staining agents like tobacco, coffee, and red wine. daVinci™ veneers look completely natural, feel fantastic, and can instantly cover the most severe cosmetic defects.

daVinci™ veneers are wafer-thin, which means that eating, speaking, and biting functions are seldom affected by their placement. daVinci™ veneers are available in four different shades, ranging from “bright” to “incredibly bright” and can only be applied to healthy underlying teeth and gums. If your dentist notes tooth decay or gum disease, these issues need to be addressed before the placement of dental veneers.

Here are some of the main advantages associated with daVinci™ veneers:

- High resistance to staining agents.
- Incredibly strong bonding agent.
- Little or no anesthesia required.
- Quick, natural looking results.
- Transforms even the most disfiguring defects.
- Unsurpassed whiteness.
- Wafer thin veneers.

What is the procedure for placing daVinci™ veneers?

Your dentist will plan on three visits, though treatment may be completed in two. The first visit involves a thorough investigation of the teeth and the planning of forthcoming treatments. The planning stage is an ideal opportunity to ask questions. Objectives and potential end results will be discussed, and your dentist will ensure that teeth are healthy enough for veneer placement.

The second visit may last several hours. The teeth need to be prepared before the daVinci™ veneers are placed. Preparation generally involves light buffing of the teeth to create space for veneer placement. Since daVinci™ veneers are wafer-thin, little of the tooth needs to be altered.

When the teeth are fully prepared, impressions are created. These impressions or molds are then sent to a daVinci™ laboratory. It generally takes around two weeks for the custom-made daVinci™ veneers to be fabricated. In the meantime, a temporary measure is placed to ensure the teeth look pleasant and are fully functional.

During the final visit, the daVinci™ veneers are bonded to the teeth. Before bonding permanently, your dentist temporarily places the veneers on the teeth with glycerin. This helps to determine whether the shade and fit are agreeable. If the shade requires alteration, this can be adjusted using colored dental cement.

daVinci™ veneers are permanently placed with specialized dental cleansers and bonded using a visible light beam. The light beam hardens the cement and

ensures that an ultra-secure affixation occurs. Once the veneers are placed with cement, the color can no longer be altered.

daVinci™ veneers produce a stunning result that transforms the smile with minimal discomfort.

LUMINEERS®

LUMINEERS® are an excellent option for people who are unhappy with the cosmetic appearance of their teeth. These ultra-thin, porcelain slips fit perfectly over teeth, making them look cosmetically perfect and completely beautiful. An off-white or crooked smile can cause serious confidence problems. LUMINEERS® are a fantastic alternative for patients wanting a beautiful smile without surgery, harsh chemicals or painful treatments.

For LUMINEERS® to be applied, the underlying teeth, bone and gums must be healthy. Patients with gum disease or tooth decay must be treated prior to LUMINEERS® placement. Unlike dental veneers, LUMINEERS® can be left in place for over 20 years or removed upon request to expose the intact original teeth. LUMINEERS® can be fitted in just two appointments, and instantly add pizzazz to the smile.

Here are some of the problems that LUMINEERS® can solve:

- Large gaps between the teeth.
- Misaligned teeth.
- Misshapen teeth.
- Stained teeth.
- Uneven gums and teeth.
- Unnatural looking bridges and crowns.

How can LUMINEERS® benefit me?

LUMINEERS® provide a wide range of advantages over similar treatments. The most meaningful advantage to anxious patients is that no painful alterations of the teeth are required prior to the LUMINEERS® application. The covers themselves are so thin and unobtrusive that speech and eating are seldom affected.

Here are some of the other advantages of LUMINEERS®:

- Last over 20 years.
- No harsh drilling of inner tooth mechanisms.
- No injections.
- No pain or discomfort.

- Only two dental visits required.
- Option to place multiple LUMINEERS® at one time.
- Perfect, pearly-white teeth.
- Thickness of a contact lens.
- Totally reversible treatment.

Are LUMINEERS® strong enough?

LUMINEERS® are constructed from Cerinate® porcelain, which is known for its exceptional strength. Even though LUMINEERS® are thinner than dental veneers, they are less likely to break or chip. Additionally, Cerinate® porcelain can be color-modified and balanced. This means that different levels of opaqueness and translucency can be utilized.

How are LUMINEERS® applied to the teeth?

One of the main reasons LUMINEERS® are so easy to fit is that little etching has to be done beforehand. With veneers, many teeth might have to be permanently altered or drilled to ensure the best fit. However, LUMINEERS® offer a beautiful end product without any drilling, anesthesia or extensive etching. This factor alone can reduce the time in the dental chair by almost half, when compared to traditional veneers.

During the initial visit, bite impressions and X-rays are taken to determine the exact way the teeth fit together. The dentist also thoroughly examines the teeth to ensure that no tooth decay and no signs of gum disease are present. Together, the dentist and patient choose the color of the LUMINEERS® and the desired level of transparency. The bite impressions are sent to the laboratory to be custom-crafted.

The LUMINEERS® are bonded to the teeth at the second appointment. If bonding substance has oozed out from beneath the LUMINEERS®, this is carefully removed using a beveled featheredge margin. Once the LUMINEERS® are in place, the dentist polishes them until they are completely smooth. The advantage of this smoothness is that bacteria and staining agents cannot easily adhere to the surface of the LUMINEERS®.

The LUMINEERS® are finally separated. Up until this point, they are still attached where the bite impressions suggest teeth would naturally join. The treatment is finished, leaving a beautiful white smile, and perfect, healthy teeth.

ZOOM!®

A pearly-white smile is beautiful to look at and can greatly improve self-confidence. Many people are opting for the Zoom!® Chairside Whitening System (Zoom!®) for fast, safe and effective teeth whitening. Zoom!® combines the newest advances in dental technology with proven chemical formulas. This ensures that the bleaching experience is painless, and the results are satisfying.

There are many reasons why teeth become stained or discolored, including tobacco use, and drinking dark liquids such as red wine, coffee, tea and cola. However, the natural aging process and prescription medication use can also cause yellowing and graying.

There are literally hundreds of whitening treatments available in the marketplace, including take-home strips, bleaching toothpastes and take-home whitening gels. Many take-home gels are ineffective and may not elicit the desired results.

Zoom!® has many advantages over these other treatments, including:

- All teeth treated simultaneously.
- Faster treatment times.
- Longer lasting results.
- Reduced sensitivity.
- Removal of stains on crowns, veneers and other restorations.
- Safe procedure and treatment.
- Treatments are performed by an experienced professional.

It is important to seek advice from the dentist prior to beginning a bleaching regime. Women who are pregnant or lactating should not seek bleaching treatment.

How does Zoom!® whiten the teeth?

Zoom!® is a bleaching process that lightens the dentin and enamel of the teeth. Zoom!® contains a hydrogen peroxide component (25%), which is the active ingredient in the gel. When hydrogen peroxide is applied to the teeth, the peroxide component breaks down into tiny oxygen bubbles. It is these bubbles that eliminate yellowing and staining.

A mercury metal halide light is used to activate the gel and expedite the whitening process. This specialized light contains a unique infrared filter that works to reduce the amount of heat (and therefore sensitivity) on the surface of the teeth during the procedure. The internal structure of the teeth remains completely healthy and intact during and after the treatment.

As with any whitening system, the post-treatment results can vary according to the degree of staining and the condition of the teeth. A consultation with the dentist prior to treatment will provide information as to what kind of results Zoom![®] can provide in specific instances. Zoom![®] is only applied to healthy teeth and gums. If tooth decay or gum disease is an issue, these need to be controlled before the bleaching treatment is performed.

How is the Zoom![®] treatment performed?

Prior to treatment, there will be a consultation where the dentist will outline the exact procedure. On treatment day, a deep cleaning (prophylaxis) will be performed to rid the teeth of any debris and plaque. Then, special eyewear will be provided to protect the eyes from the halide light, and splashguards to protect the clothing from the bleaching agent.

Here is a brief overview of the Zoom![®] procedure:

1. Cheek retractors will be placed to expose the entire surface of the teeth.
2. The gums will be painted or covered to reduce sensitivity.
3. The dentist will apply the whitening gel to the teeth.
4. The halide light will then be applied to activate the gel. This specialized Zoom![®] light can be positioned to work on all the teeth simultaneously.
5. After 15 minutes, gel will be removed from the teeth and the mouth will be rinsed.
6. More gel will be applied for another 15 minutes.
7. Again, the gel will be removed and the mouth will be thoroughly cleansed.
8. The final treatment of gel will be applied for 15 minutes.
9. The gel will be removed for the final time.

What happens after treatment?

The same external factors that caused the discoloration in the first place can quickly work their way back onto the teeth. For this reason, the dentist recommends flossing once a day, thorough cleaning with anti-sensitivity toothpaste twice a day, and occasional retreatment with Zoom![®]Weekender. These post-treatment measures will ensure that the smile stays at its whitest for a long time.

Orthodontics

Orthodontics is a branch of dentistry specializing in the diagnosis, prevention, and treatment of jaw, face and bite irregularities (malocclusions*). Orthodontic treatment is provided by an oral health care provider known as an orthodontist, who has completed two to three years of additional training beyond dental school.

Recent years have brought about many changes within the dental industry, specifically with regards to orthodontic treatment and care. Now more than ever patients are experiencing fewer incidences of cavities and missing teeth due to the heightened awareness of fluoride use and preventative dentistry. This increasing awareness on the health and look of a patient's smile has fueled the desire for many to seek out orthodontia not only as a medical necessity, but for cosmetic reasons as well.

Whether it's traditional braces or custom made removable appliances, ***orthodontics can help you have the healthy, straight, beautiful smile you've been waiting for!***

Give us a call today and schedule your orthodontic consultation!

****Malocclusion*** is the technical term for teeth that don't fit together correctly. Malocclusions not only affect the teeth, but also the appearance of the face. Most malocclusions are inherited; however some are due to acquired habits such as thumb sucking and tongue thrusting. The spacing left from an adult tooth being extracted or an early loss of a baby tooth can also contribute to a malocclusion.

Braces for Children

Many children are ambivalent about getting braces. On one hand, they like the idea of perfect teeth, but on the other hand, they are nervous about whether the braces will cause pain and discomfort. The good news is that the placement of orthodontic braces is not at all painful, and the end result will be a beautiful straight smile.

Although patients of any age can benefit from orthodontic braces, they tend to work much quicker on pre-teens and teenagers since they are still experiencing jaw growth. The American Association of Orthodontists (AAO) recommends that children should first see an orthodontist around the age of seven years-old. An orthodontic examination may be beneficial before age seven if facial or oral irregularities are noted.

What Causes misalignment of teeth?

Poorly aligned teeth often cause problems speaking, biting and chewing. Most irregularities are genetic or occur as a result of developmental issues. Conversely, some irregularities are acquired or greatly exacerbated by certain habits and behaviors such as:

- Mouth breathing

- Thumb or finger sucking
- Prolonged pacifier use
- Poor oral hygiene
- Poor nutrition

What's involved when a child gets braces?

The orthodontist initially conducts a visual examination of the child's teeth. This will be accompanied by panoramic X-rays, study models (bite impressions), and computer generated images of the head and neck. These preliminary assessments are sometimes known as the "planning phase" because they aid the orthodontist in making a diagnosis and planning the most effective treatment.

In many cases, the orthodontist will recommend "fixed" orthodontic braces for a child. Fixed braces cannot be lost, forgotten or removed at will, which means that treatment is completed more quickly. Removable appliances may also be utilized, which are less intrusive and are generally used to treat various types of defects.

Here is a brief overview of some of the main types of orthodontic appliances used on children:

- **Fixed braces** – Braces are comprised of brackets that are affixed to each individual tooth and an archwire that connects the brackets. The brackets are usually made of metal, ceramic, or a clear synthetic material which is less noticeable to the naked eye. After braces have been applied, the child will have regular appointments to have the braces adjusted by the orthodontist. Orthodontic elastic bands are often added to the braces to aid in the movement of specific teeth.
- **Headgear** – This type of appliance is most useful to treat developmental irregularities. A headgear is a custom-made appliance attached to wire that aids in tooth movement. A headgear is intended to be worn for 12-20 hours each day and must be worn as recommended to achieve the intended result.
- **Retainers** – Retainers are typically utilized in the third phase (retention phase). When the original malocclusion has been treated with braces, it is essential that the teeth do not regress back to the original misalignment. Wearing a retainer ensures that teeth maintain their proper alignment and gives the jawbone around the teeth a chance to stabilize.

Braces for Adults

Orthodontic braces were historically associated with teenagers. Today, an increasing number of adults are choosing to wear braces to straighten their teeth and correct malocclusions (bad bites). In fact, it is now estimated that almost one third of all current orthodontic patients are adults.

Orthodontic braces are predictable, versatile, and incredibly successful at realigning the teeth. Braces work in the same way regardless of the age of the patient, but the treatment time is greatly reduced in patients who are still experiencing jaw growth and have not been affected by gum disease. In short, an adult can experience the same beautiful end results as a teenager, but treatment often takes longer.

Can adults benefit from orthodontic braces?

Absolutely! Crooked or misaligned teeth look unsightly, which can cause a low self-esteem and a lack of self confidence. Aside from poor aesthetics, improperly aligned teeth can also cause difficulties biting, chewing, and articulating clearly. Generally speaking, orthodontists agree that straight teeth tend to be healthier teeth.

Straight teeth offer a multitude of health and dental benefits including:

- Reduction in general tooth decay
- Decreased likelihood of developing periodontal disease
- Decreased likelihood of tooth injury
- Reduction in digestive disorders

Fortunately, orthodontic braces have been adapted and modified to make them more convenient for adults. There are now a wide range of fixed and removable orthodontic devices available, depending on the precise classification of the malocclusion.

The most common types of malocclusion are underbite (lower teeth protrude further than upper teeth), overbite (upper teeth protrude further than lower teeth), and overcrowding where there is insufficient space on the arches to accommodate the full complement of adult teeth.

Prior to recommending specific orthodontic treatment, the orthodontist will recommend treatment of any pre-existing dental conditions such as gum disease, excess plaque, and tooth decay. Orthodontic braces can greatly exacerbate any or all of these conditions.

What are the main types of orthodontic braces?

The following are some of the most popular orthodontic braces:

Traditional braces – These braces are strong and tend not to stain the teeth. They are comprised of individual brackets which are cemented to each tooth and accompanied by an archwire which constantly asserts gentle pressure

on the teeth. Traditional braces are generally metal but are also available in a clear synthetic material and “tooth colored” ceramic. The ceramic brackets are usually more comfortable than the metal alternative, but can become discolored by coffee, wine, smoking, and certain foods.

Invisalign® – Invisalign® aligners are clear trays and should be worn for the recommended amount of time each day for the quickest results. Invisalign® aligners are clear trays, and should be worn for the recommended amount of time each day for the quickest results. Invisalign® aligners are more comfortable and less obtrusive than traditional braces but also tend to be more costly. Not all patients are candidates for Invisalign®.

Lingual braces – These appliances are usually metal and fixed on the tongue side of the teeth, therefore cannot be seen when a patient smiles. Lingual braces tend to be moderately expensive and can interfere with normal speech.

Invisalign®

One of the primary concerns people often have about dental braces is the aesthetic impact of the metalwork on their smile. Especially for adults, the prospect of wearing unattractive metal braces for long periods of time can be very discouraging. Invisalign® offers an almost invisible aligning system that straightens teeth fast and contains no metal.

Invisalign® treatment consists of a series of custom-made aligning trays. The dentist changes the trays every several weeks to fit the new tooth configuration. In addition to the reduced visual impact, Invisalign® aligning trays can be temporarily removed for important occasions – meaning that treatment duration is patient-controlled. A great number of people report complete satisfaction with both the Invisalign® treatment and the stunning results.

What kind of bite problems can Invisalign® correct?

Invisalign® corrects the same dental problems as traditional metal braces; the only difference is that Invisalign® trays are almost invisible to the naked eye, and can be removed at will.

Here are some problems that are commonly corrected with Invisalign®:

- **Overcrowding** – This occurs when there is too little space for the teeth to align normally in the mouth. Overcrowding can cause tooth decay and increase the likelihood of gum disease.
- **Large gaps between teeth** – This can sometimes occur because teeth are missing or because the jaw continues to grow abnormally.

- **Crossbite** – This common dental problem occurs when one or multiple upper teeth bite inside the lower teeth. As a consequence, uneven wear can lead to bone erosion and gum disease.
- **Overbite** – This problem occurs when the upper teeth project further than, or completely cover, the lower teeth. Eventually, jaw pain and TMJ may occur.
- **Underbite** – This is the inverse of the overbite; the lower teeth project further than, or completely cover, the upper teeth. Eventually, jaw pain and TMJ can occur.

What advantages does Invisalign® offer over traditional braces and veneers?

Traditional dental braces, Invisalign® aligning trays, and dental veneers are three different ways to perfect the alignment of the teeth. There are many different considerations to make when deciding which treatment will be best, and each of these options works better in certain situations.

Invisalign® differs from traditional braces in that the aligning trays are fully removable. This means that more discipline and commitment is required from the patient. This is not usually a problem since the trays are comfortable and nearly invisible. Almost identical results can be obtained by using either treatment.

Invisalign® is preferable to veneers in many cases because unlike veneers, Invisalign® actually straightens the teeth. Veneers are thin covers that the dentist permanently affixes to the teeth. Teeth must be etched beforehand, meaning that to remove dental veneers, an alternative covering must be constructed. In addition to being somewhat expensive, veneers can break and often last for less than 20 years.

What does Invisalign® treatment involve?

First, the dentist needs to devise an initial treatment plan before creating the special aligning trays. Three-dimensional digital images are taken of the entire jaw. These images allow the dentist to move specific teeth on the screen, view the jaw from different angles, and also foresee what the face might look like in years to come. In essence, this technology can show how Invisalign® trays will change the facial aesthetics.

Once planning is complete, a unique set of aligners is made. The total amount of aligners required varies with each individual case, but 20-29 sets per arch is typical.

What are some considerations when wearing Invisalign® trays?

Life with Invisalign® aligning trays may take several weeks to get used to. The trays should be worn constantly, except when eating and drinking. It is important to remove the trays when consuming food or drink because food can become trapped between the tray and the teeth, causing tooth decay.

Usually, new trays are necessary every two weeks, and progress between appointments can be seen with the naked eye. There is no doubt that Invisalign® aligning trays have revolutionized orthodontics. Invisalign® is renowned for being both comfortable and effective.

Oral & Maxillofacial Surgery

Oral and maxillofacial surgeons are specialists with advanced training and expertise in the diagnosis and treatment of various head and neck conditions and injuries. After four years of dental school, an oral and maxillofacial surgeon completes four to six years of additional formal training in treating the craniomaxillofacial complex. This specialty is one of 9 dental specialties recognized internationally and by the American Dental Association (ADA).

An oral and maxillofacial surgeon can diagnose and treat a wide variety conditions. The following are just some of the many conditions, treatments and procedures oral and maxillofacial surgeon deal with on a daily basis:

- TMJ, Facial Pain, & Facial Reconstruction
- Dental Implants
- Tooth Extractions & Impacted Teeth
- Wisdom Teeth
- Misaligned Jaws
- Cleft Lip & Palate
- Apicoectomy
- Oral Cancers , Tumors, Cysts, & Biopsies
- Sleep Apnea
- Facial Cosmetic Surgery

Whether your dentist refers you to our office, you have pain or symptoms causing you concern, or you simply have questions you would like answered, please contact our office today to schedule an appointment. We are here to answer your questions and provide the treatment you deserve!

Sleep Apnea Appliances

Sleep apnea is a serious, sometimes fatal medical disorder that affects around 10% of American men over the age of 40, and 6% of American women of the

same age. Sleep apnea sufferers completely stop breathing during sleep, sometimes hundreds of times in a single night. Normal breathing ceases because the airway becomes obstructed, causing a serious reduction of airflow to the lungs.

There are a number of dental devices that can be used to alleviate this condition. The goal of most of these devices is to separate the jaws and push them forward slightly. This slight repositioning opens up the airway, and allows oxygen to flow freely again. Wearers of sleep apnea dental devices report that they stop loud snoring, feel more rested in the daytime, and are much more comfortable going to sleep. Sleep apnea appliances work best on patients who are not significantly overweight. They offer a viable alternative to Continuous Positive Airway Pressure (CPAP).

Sleep apnea appliances fall into two categories: fixed and adjustable. Here are brief descriptions of some commonly used sleep apnea dental appliances:

TAP[®] 3 (Thornton Adjustable Positioner)

The TAP[®] 3 is the smallest, most comfortable member of the TAP family. It is a two-part custom-created sleep apnea appliance that fits over the teeth in much the same way as a sports mouthguard. The TAP[®] 3 projects the jaw forward to prevent the tongue and soft tissues from impeding the airway. The lower jaw positioner is adjustable, which means that it can be altered to suit the comfort level of the wearer. The TAP[®] 3 appliance can accommodate the three main types of malocclusion, and allows the lips to fully close.

OASYS Appliance

The OASYS appliance is designed to move the base of the tongue toward the front of the mouth by gently repositioning the jawbone (mandible). This shift opens the oropharynx and strengthens the upper airway. An extension of the upper shield projects toward the nose, creating a larger nasal opening and less resistance to normal airflow. This adjustable appliance is comfortable to wear and extremely patient friendly.

Klearway[™] Appliance

The Klearway[™] Appliance is generally used to alleviate obstructive sleep disorder and eliminate snoring. The patient or dentist can project the jaw forwards in increments of .25mm at a time. This ensures maximum comfort for the sleeper. The Klearway[™] appliance is made from Variflex[™] heat softening acrylic, which makes it easier to insert. Running warm water over the appliance makes it pliable, but once placed in the desired position, the acrylic hardens again.

Herbst Telescopic Appliance

The Herbst appliance is held in the mouth by clasps and friction grips. It is made of acrylic, and contains adjustable metal wiring. The advantage of this appliance is that the wearer is able to move vertically and laterally without dislodging the appliance. The Herbst appliance is usually used in mild and moderate cases of sleep apnea, and can also alleviate loud snoring effectively.

TMJ

Temporomandibular Joint Dysfunction Syndrome (TMJ) is a common condition affecting a wide variety of people. TMJ is characterized by severe headaches, jaw pain of varying degrees, grinding teeth, and an intermittent ringing in the ears. The vast majority of TMJ sufferers are unaware that the root cause of these problems is something that a dentist can effectively treat.

The symptoms of TMJ are debilitating and can greatly interfere with every day life. The comfort and general well being of the patient is at the heart of the dental practice, so pain relief is the first consideration of the dentist. The dentist is able to test, diagnose, and devise an immediate plan to treat the underlying causes of the TMJ disorder.

Reasons for treating TMJ

TMJ sufferers report that their symptoms generally worsen during periods of prolonged or unexpected stress, and that intense outbreaks of the condition can lead to neck pain and dizziness.

The most common cause of TMJ is the misalignment of the teeth, often called "bad bite." It is possible for the dentist to realign or adjust the teeth without the need for painful or expensive surgeries. The realignment/adjustment will stop the pounding headaches, the jaw pain, and the dizziness.

The grinding teeth symptom is particularly common and usually occurs at night. The grinding will eventually erode the structure of the teeth and lead to much more severe dental problems in the future. Untreated TMJ is one of the prime underlying factors in eroded jawbones and loose teeth.

It is important for anyone experiencing the symptoms of TMJ to visit the dentist for an exact diagnosis.

What does treating TMJ involve?

TMJ could be a result of several different problems. Bad bite is the most common, but an injury resulting from a blow to the meniscus cartilage is also a possibility. Initially, the dentist will thoroughly examine the jaw area, the patient's bite, take X-rays, and review the patient's history in order to make an accurate diagnosis and recommend necessary treatment.

Once a firm diagnosis is attained, there are several ways in which relief can be provided. A specially molded bite guard can be created to stop teeth grinding during the night. A bite relationship analysis may be recommended by the dentist. The dentist can also provide advice on relaxation techniques which will lessen the effects of stress. As a last alternative, the dentist is also able to prescribe muscle relaxants.

A better option is to change the shape of the teeth and get rid of the bad bite completely, often called "realignment." This is especially useful because it alleviates TMJ symptoms and may improve the aesthetic appearance of the teeth as well. Realignment involves adjusting the relationship between how the upper teeth come together with the lower teeth. This may require new restorations and/or adjusting the natural teeth as well. It is not a painful procedure, and it is one the dentist has performed with great success numerous times. As with any procedure, the dentist will be happy to answer questions and discuss symptoms, options, and treatments.

Wisdom Teeth Extractions

Third molars, commonly referred to as wisdom teeth, are usually the last four of 32 teeth to erupt (surface) in the mouth, generally making their appearance between the ages of 17 to 25. They are located at the back of the mouth (top and bottom), near the entrance to the throat. The term "wisdom" stems from the idea that the molars surface at a time typically associated with increased maturity or "wisdom".

In most cases, inadequate space in the mouth does not allow the wisdom teeth to erupt properly and become fully functional. When this happens, the tooth can become impacted (stuck) in an undesirable or potentially harmful position. If left untreated, impacted wisdom teeth can contribute to infection, damage to other teeth, and possibly cysts or tumors.

There are several types, or degrees, of impaction based on the actual depth of the teeth within the jaw:

Soft Tissue Impaction: The upper portion of the tooth (the crown) has penetrated through the bone, but the gingiva (gum) is covering part or all of the tooth's crown and has not positioned properly around the tooth. Because it is

difficult to keep the area clean, food can become trapped below the gum and cause an infection and/or tooth decay, resulting in pain and swelling.

Partial Bony Impaction: The tooth has partially erupted, but a portion of the crown remains submerged below the gum and surrounding jawbone. Again, because it is difficult to keep the area clean, infection will commonly occur.

Complete Bony Impaction: The tooth is completely encased by jawbone. This will require more complex removal techniques.

Reasons to remove wisdom teeth

While not all wisdom teeth require removal, wisdom teeth extractions are most often performed because of an active problem such as pain, swelling, decay or infection, or as a preventative measure to avoid serious problems in the future. If impaction of one or more wisdom teeth is present, and left untreated, a number of potentially harmful outcomes can occur, including:

- **Damage to nearby teeth:** Second molars (the teeth directly in front of the wisdom teeth) can be adversely affected by impacted wisdom teeth, resulting in tooth decay (cavities), periodontal disease (gum disease) and possible bone loss.
- **Disease:** Although uncommon, cysts and tumors can occur in the areas surrounding impacted wisdom teeth.
- **Infection:** Bacteria and food can become trapped under the gum tissue, resulting in an infection. The infection can cause considerable pain and danger.
- **Tooth Crowding:** It has been theorized that impacted wisdom teeth can put pressure on other teeth and cause them to become misaligned (crowded or twisted). This theory isn't universally accepted by all dental professionals, and it has never been validated by any scientific studies.

Wisdom teeth examination

As with any dental procedure, your dentist will want to initially conduct a thorough examination of the wisdom and surrounding teeth. Panoramic or digital X-rays will be taken in order for your dentist to evaluate the position of the wisdom teeth and determine if a current problem exists, or the likelihood of any potential future problems. The X-rays can also expose additional risk factors, such as deterioration or decay of nearby teeth. Early evaluation and treatment (typically in the mid-teen years) is recommended in order to identify potential problems and to improve the results for patients requiring wisdom teeth extractions. Only after a thorough examination can your dentist provide you with the best options for your particular case.

What does the removal of wisdom teeth involve?

Wisdom teeth removal is a common procedure, generally performed under local anesthesia, intravenous (IV) sedation, or general anesthesia by a specially trained dentist in an office surgery suite. The surgery does not require an overnight stay, and you will be released with post-operative instructions and medication (if necessary), to help manage any swelling or discomfort.