

INFORMED CONSENT FOR FIXED PROSTHODONTICS TREATMENT

You are to receive fixed prosthodontic treatment (crown, bridge, inlay, onlay, or veneer) for one or more of the following reasons:

- (1) Full coverage for endodontically (root canal) treated tooth to prevent fracture of the tooth.
- (2) Cracked tooth syndrome - A part of the tooth is split and the patient complains of sensitivity to cold and/or discomfort upon biting.
- (3) Broken tooth and/or restoration (filling) - Part of the tooth or filling has broken away from the rest of the tooth.
- (4) Caries (cavity) - Decay in the tooth or around an existing restoration prevents the tooth from being adequately restored with amalgam or composite.
- (5) Defective restoration - Part of the existing restoration is breaking away or cracking preventing the tooth from being adequately restored with amalgam or composite.
- (6) Defective existing crown - Part of the crown has broken away, the crown has fallen off and cannot be recemented, or there is decay around the margin of the crown or under the crown.
- (7) Cosmetic - The patient does not like the way the tooth, the existing restoration, or arrangement of the teeth looks.
- (8) Trauma from occlusion (bruxism or clenching) - Grinding or clenching of the teeth has caused them to fracture.
- (9) Parafunctional habit - Biting on pencils, pens, fingernails, fishing line, etc.
- (10) Trauma - Accident
- (11) Fixed partial denture (bridge) is the treatment of choice for replacing a missing tooth (teeth). A fixed partial denture requires at least one tooth on each side of the space to be crowned.
- (12) Abutment (retainer tooth) for removable partial denture.
- (13) Precision attachment for removable partial denture.
- (14) Crowning the tooth is required to equilibrate the patient's bite so that the temporomandibular joints (TMJ) and the occlusion can be stabilized.
- (15) Porcelain inlay or onlay.

Fixed prosthodontics treatment is composed of the following treatment modalities:

(1) **Crowns:** The fabrication of a crown (cap) or crowns to restore a tooth (teeth) as closely as possible to its original form and function. This treatment becomes necessary when it is not possible to restore a tooth through the use of a filling.

Treatment usually involves the reduction of the natural tooth structure. If an **inadequate** amount of tooth structure remains, it may be necessary to place a filling in the tooth first to make sure there is enough support for the crown. Sometimes it is necessary to also place a space in the root of the tooth to support a post (post & core) upon which a crown may be constructed.

The clinical indication for a crown is one half or more of the tooth is missing from one cusp tip (point of the tooth) to another cusp tip. A crown is cemented in the mouth. There are several types of crowns:

- (A) **All porcelain** - No metal or gold is contained in the crown. These are the best cosmetic crowns. No metal allergies are possible.
- (B) **All gold** - These have the longest life expectancy of any crown. Gold has a very long history as the best restorative material.
- (C) **Porcelain to metal** - Porcelain is on the outside with a metal substructure. Sometimes a dark line can be seen at the gum line of these crowns. Some studies show that up to 50% of all females have allergic reaction to some of the elements in the metal of these crowns. Men have also shown some allergic reactions to these metals. If you turn green on your body where you wear non-gold jewelry, you should not consider a porcelain to metal crown.
- (D) **Porcelain to gold crowns** - Porcelain is on the outside with a gold substructure. These crowns may also show a dark line at the gum line. There are less allergic reactions to these crowns, but an allergic reaction is still possible.

(2) **Bridges** are a series of crowns cemented in place to replace missing teeth. They do not come out of the mouth.

A bridge requires at least one tooth on each side of the space to be crowned. The alternative treatments to bridges are removable partial dentures that come in and out of the mouth and implants, titanium post placed in the bone. Bridges are constructed of the same materials as crowns; however, porcelain bridges are limited to the amount of space they can span from one abutment (existing tooth) to another abutment.

In traditional crown and bridge preparations, the tooth is trimmed in all directions at least one millimeter for gold crowns and approximately 1.2 to 2.0 millimeters for porcelain and porcelain to metal crowns. This is a two appointment procedure.

The first appointment is for the preparation of the tooth, impression of the prepared tooth , adjacent teeth, and opposing teeth, and the fabrication of a temporary to protect the prepared tooth and maintain in its proper position while the lab fabricates your permanent restoration.

The second dental appointment is usually two to four weeks after the initial appointment. At this appointment your temporary will be removed and your permanent crown or bridge will be adjusted and cemented in your mouth. Many patients elect not to be anesthetized at this appointment, but there will be some sensitivity in vital teeth. It is very important to keep your temporary in place because if it is lost, your teeth may move and your permanent crown may not fit.

The national average for the life expectancy of a crowns and bridges is 7 years; however, with good home care and regular dental exams, crowns have been known to last for decades.

(3) **Porcelain inlays and onlays** are porcelain tooth colored restorations that are bonded into/onto the tooth with tooth colored restorative materials and various adhesives. The advantage to these restorations is that less tooth structure is removed than with traditional crowns. Sometimes, these restorations can also be used when there is not enough tooth to support a crown without performing a root canal on the tooth to gain additional retention.

(4) **Porcelain veneer:** The porcelain veneer is a porcelain tooth colored restoration that is bonded onto the tooth with tooth colored restorative materials and various adhesives. It is usually limited to the front ten teeth in each arch. The goal of a veneer is to reduce less than one millimeter of tooth structure and to stay in enamel. The enamel provides for an outstanding bond strength.

The amount of reduction is determined by existing restorations, decay, arch positioning of the tooth, and the goal of the restoration.

In this office, every existing filling will be removed before the crown, bridge, inlay, onlay, or veneer is placed to ensure that there is no decay under that filling. Also, all the decay will be removed from the tooth before the restoration is cemented or bonded.

Complications arising from fixed prosthodontic (crown, bridge, inlay, onlay) treatment may include, but are not limited to, the following:

1. **Exposure of the pulp (nerve)** of the tooth during removal of an existing restoration, removal of decay, or in shaping the tooth for a crown or bridge. An endodontic (root canal) procedure would be required to prevent pain and/or infection. Sometimes, even without the nerve becoming exposed, the tooth may become symptomatic (painful or uncomfortable) after the preparation of a crown. The onset of symptoms may come the next day, next week, next month, next year, or in the distant future if the pulp has been insulted enough from previous restorations, decay, trauma, thermal insult (hot and cold), and/or mechanical manipulation (drilling). If spontaneous pain, prolonged sensitivity to temperature, or infection develops, a root canal will be required to alleviate the symptoms. Sometimes the nerve dies and weakens the tooth causing the tooth to fracture at the gum line or just below the gum line. Many times these teeth can be saved with root canal therapy, post and core, and a new crown. In some cases, it will be necessary to perform minor gum surgery to gain adequate tooth structure to place a new crown. The patient will be responsible for all fees associated with the root canal treatment, post and cores, and periodontal surgery. It may be necessary to refer the patient for treatment to an endodontist (root canal specialist) for the root canal procedure and/or referral to the periodontist (gum specialist) for periodontal surgical procedures.

2. The **tooth may require root canal treatment without an exposure occurring**. Some teeth do not have enough remaining tooth structure to support a crown. Therefore, a root canal is accomplished so that a post and core can be placed in the root canal space. This works like a deep fence post hole to support a fence. In this case, the patient will be responsible for ensuring that the root canal treatment is performed and will be responsible for any fees associated with the root canal treatment and post and core placement. These are additional procedures to the crown preparation and cementation.

3. The **root of the tooth may become perforated during the fabrication of the post** in which case the tooth may require extraction. The **root of the tooth may fracture (split)** during the root canal procedure or fabrication of the post. If this occurs, the tooth may require extraction. The patient will be responsible for any fees associated with the extraction of the tooth. In some cases, the fractured may have to be removed, but it is possible to save the remaining roots. This procedure is called a root amputation or hemisection. The patient will be responsible for any fees associated with the root amputation or hemisection.

4. **Cracked tooth syndrome patients:** Most teeth that crack already have a large restoration (filling), multiple restorations, large area of decay, or decay around an existing restoration. This restoration weakens the remaining tooth structure and over time it will crack when the appropriate force is placed on the weakened tooth structure. Sometimes chewing on ice, rock candy, jaw breakers, etc. can cause a tooth without any restorations or decay to fracture.

- A) The crack in your tooth is similar to a split in a log. It is possible to squeeze the wood together so that the crack is not visible. When a force is placed on any part of the wood, the crack will reappear. You have supporting tissue that holds your tooth together even though it is cracked. In many cases, the crack in your tooth cannot be seen. However, when you bite down on the tooth, the crack is microscopically opened.
- B) In most cases, it is impossible to tell how far down into the tooth the crack goes. 90% of cracked teeth are successfully solved with a crown. Approximately 9% require a root canal in addition to the crown because the crack has gone down into the pulp (nerve). The remaining 1% of the teeth are not restorable and must be extracted because the crack has gone down into the root, but this cannot be determined in most of these cases until after the crown and root canal have been performed. If this is a multi-rooted tooth, it may be possible to perform a root amputation or hemisection rather than extraction.

The patient is responsible for all fees for the root canal, root amputation, hemisection, or extraction. ***If the pain upon biting disappears while you are in a temporary crown, a crown will successfully complete your treatment.***

5. It may not be possible to achieve a level of esthetics to meet the patient's expectations. In some cases, the final crown form is limited by the existing condition of the patient's mouth (remaining teeth, bone support, and health of gums).

Every attempt will be made to match you with the shape and color of your existing teeth. However, many mouths have a multitude of colors so at best it will be difficult to find a perfect shade match in this situation. If you are not pleased with the shade of your permanent crown or bridge, we will send it back to the lab and try a different shading scheme. Custom staining and glazing is also available. If you are not pleased with your restoration, you must say so before the restoration is permanently cemented. If you have doubts about the restoration, many times we can temporarily cement crowns and bridges, but we cannot temporarily cement inlays, onlays, or veneers. If you sign the treatment form that you approve of the restoration and we permanently cement it, then you change your mind at a later date, you may be charged fee for removal of the restoration. If you change your mind in the first thirty (30) days after the restoration is cemented, you will be charged for the new restoration at a rate of one half the cost of the original restoration. If you change your mind after the first thirty (30) days, you will be fully charged for a new restoration. Under no circumstances will you be coerced (forced) into signing your approval of the restoration. We want you to be happy with your final restoration as we sincerely hope it will last you a number of years.

6. Postoperative discomfort or swelling may occur and last a few hours to several days depending upon the complexity of the case. It is not unusual for this to occur, especially following impression procedures. The discomfort may come from the removal of existing restorations, decay, or tooth structure, or it may be related to the manipulation of the gum tissue around the tooth during the removal of the restoration, decay or tooth structure. In most cases 800mg of IB three times per day, other non-steroidal anti-inflammatory drug, or Tylenol will relieve the discomfort.

7. Postoperative discomfort from temperature sensitivity may be present. In many cases this gets better with time. The general rule is: If the temperature sensitivity goes away when the food or drink is swallowed or within about a minute, the response is considered normal. If the temperature sensitivity lasts for more than five minutes, the pulp is in a state of death or dying and a root canal will need to be performed. If the tooth ever awakens you at night, this is not normal and the pulp may be in an irreversible state of health (dying).

8. Postoperative discomfort may result from a high temporary. If you touch the tooth we worked on first, you cannot bite down of your tooth, or it hurts to bite down on the tooth, your temporary may be high. A simple adjustment to the temporary will most likely solve the discomfort.

9. Postoperative discomfort may result from an unstable occlusion (bite) or instability in the temporomandibular joints (TMJ).

You may have heard this called Temporomandibular Disorder (TMD) or Temporomandibular Joint Syndrome (TMJ). The dental procedure you are about to undergo will require you to remain open wide for a prolonged period of time. This may exacerbate (worsen) an underlying TMJ or occlusal problem.

4 Signs of TMJ Instability

- 1) Progressive anterior open bite - The distance between the upper and lower front teeth is widening.
- 2) Posterior occlusal wear. Wearing down of the chewing surface of the back teeth.
- 3) Changes in asymmetry. Your lower jaw is leaning more towards one side of the face than the other.
- 4) Indication of disk involvement. You have popping or clicking in your jaw joints by your ears. Frequent headaches, you wake up in the morning with headaches, or you have headaches late in the day. These may be caused by clenching or grinding of your teeth.

3 Signs of Occlusal Instability

- 1) Mobility of the teeth
- 2) Excessive wear of the teeth. Wear facets (shiny, flat spots) on the teeth. Exposed dentin, the inside layer of the tooth. This is often seen as a darker area in the middle of the tooth looking down from the top of the biting surface.
- 3) Changes in tooth position. The teeth appear longer or shorter. The tooth has moved in its relationship to other teeth.

You will be advised if you have any signs of TMJ or occlusal instability before the procedure begins. For you optimum dental health, it is highly recommended that you have a stable occlusion with stable temporomandibular joints. It is also recommended that your periodontal health (gum tissue and underlying supporting bone and tissues) be in stable condition prior to the initiation of prosthodontic treatment.

Trismus (restricted jaw opening) is one such complication. This is a limited opening of the mouth due to inflammation and/or swelling in the muscles. It usually lasts several days but may last longer than 2 weeks. It can be treated by placing a warm (hot) moist wash cloth against the affected side of the face for 15 minute intervals, eating a soft diet, and non-steriodal anti-inflammatory drugs. Sometimes it necessary for the doctor to prescribe muscle relaxants to relieve discomfort.

10. The patient's **bite may feel different especially if your temporomandibular joints and occlusion (bite) have not been stabilized.**

11. The **crowns may feel different in shape and the color may be different than the natural teeth.**

12. **Recurrent decay:** Crowns require continual care, brushing and flossing. Decay can occur around the margins of the crown if the tooth is not cared for properly. It is the patient's responsibility to maintain good oral hygiene habits at home and to have regular dental exams. If you have any questions about brushing, flossing, or caring for your mouth, please ask and we will be more than happy to advise you. Good oral hygiene and periodic dental exams are necessary for maintaining good dental health.

13. **Tooth loss due to periodontal disease (gum disease):** In order to maintain the entire tooth (root and crown) proper brushing and flossing is required. Periodontal disease is the loss of the supporting gum tissue and bone for the tooth. Periodontal disease is the number one reason for tooth loss in adults. Periodontal disease has also been linked to heart problems and other medical problems such as low birth weight in babies and premature births. It is the responsibility of the patient to maintain proper home dental care through brushing and flossing. Also regular dental examinations are a must to monitor the health of the supporting tissues.

If a procedure cannot be completed due to a complication, there will be a charge for all procedures performed up to that point. The amount of the charge will be commensurate with the portion of the case that has been finished. There will be a full charge for all completed crowns. Although crowns and bridges have a high degree of success, it is a biological procedure, therefore it cannot be guaranteed. A crown has a margin (edge) around the circumference of the tooth; therefore, it is important for the patient to maintain good oral hygiene (brushing and flossing) and regular dental exams. There is a direct relationship between the patient's oral hygiene and the life expectancy of a crown. Porcelain to metal crowns have been known to last 30 years or longer. Gold crowns have been known to last 40 years or longer. Porcelain inlays, onlays, and veneers are dental procedures that are less than 20 years old, but they have been shown to have a very high degree of success.

If you receive an inlay or onlay and it fails within five (5) years and it can be replaced with another inlay or onlay, you will receive another inlay or onlay at no charge. If the tooth requires a crown due to fracture of the remaining tooth structure or you are in need of a crown because the nerve has died and now you need a root canal, you will be credited the amount you paid for the inlay or onlay and then charged for the crown. You will also be responsible for any root canal and post and core fees.

Post-op instructions while in your temporary(s).

- 1) *Your permanent crown(s) or bridge will not look like your temporary.* Your temporary was made to protect your tooth between appointments. It is made to keep all the adjacent and opposing teeth in their position as well as protect the tooth from any thermal or traumatic insult (eating). It is made of acrylic and cemented with a sedative temporary cement. It is made to come off. Acrylic only comes in a few shades, so it may be impossible to match the shade of your existing teeth.
- 2) Considerable effort by the staff will be given so that you may have a satisfactory temporary. If the temporary was to be fabricated so that it was as nice as the permanent crown, the fee for the procedure would have to be almost doubled.
- 3) ***DO NOT EAT STICKY FOODS OR CHEW GUM ON YOUR TEMPORARY AS THEY WILL PULL THE TEMPORARY OFF OF YOUR TOOTH.***
- 4) If your temporary comes off or breaks between appointments, please call us so that we get you back in to recement it or fabricate you a new temporary. Sometimes the patient can place the temporary back in its proper place and it will stay. The temporary will only go on the tooth in one direction. Sometimes, *Fixodent* or *Vaseline*. Placed inside the temporary will help hold it in place. If your temporary comes off and you leave it off, it is possible for the gum tissue to grow into the crown preparation and it is possible that the adjacent and opposing teeth will move thus preventing the permanent crown from fitting properly. If this occurs, it will be necessary to start the procedure again by administering anesthesia, possibly reprepating the tooth, taking a new impression, and fabricating a new temporary. The patient may be held responsible for any additional costs due to negligence on the part of the patient.
- 5) Brush and floss daily. This is extremely important in keeping the gum tissue around the temporary healthy. This will help make your cementation appointment go more smoothly. When flossing, pull the floss out the side of the teeth instead from the biting surface. Pulling the floss from the top can cause the temporary to come loose. If you have problems keeping your temporary clean let us know. If you received a bridge temporary, it is important to use Superfloss and/or floss threaders. We will show you how to use these products.
- 6) Discomfort is usually controlled with *Ibuprofen* 800mg taken three times a day. This is the equivalence of four over the counter tablets of *Ibuprofen*, *Motrin*, or *Advil*. It is extremely important to eat before taking this medication. If you cannot take *Ibuprofen*, then two *Extra-Strength Tylenol* should be taken every four hours until symptoms subside.

- 7) You will be given a crown cementation appointment as soon as possible. It is important to keep this appointment as prolonging the time between the preparation and cementation appointments may cause the crown not to fit properly, especially if the temporary has been off. We will do everything possible to keep this waiting time to a minimum. Currently one to three units of crown and bridge work require seven business days for fabrication and greater than three units requires ten days. Transportation to and from the lab is not in these totals. If the patient prolongs this appointment out over two months and the crown does not fit properly, the patient is responsible for all fees in the preparation of a new crown.
- 8) When your crown is permanently cemented at your next appointment, the tooth will be sensitive to air and water once the temporary is removed, provided you have not had a root canal. Many patients do not like to be given anesthesia for this appointment, however you may prefer to be given an injection prior to the removal of your temporary. This is entirely your choice. Unless you tell the staff differently, you will not be given an injection at the cementation appointment.
- 9) You should call our office right away if:
 - A) Your bite feels uneven
 - B) You have persistent pain
 - C) You have any questions or concerns

*** **Emergency telephone numbers:** _____

- 1) I have been advised by Dr. _____ that I (or my child) require(s) fixed prosthodontics treatment for tooth (teeth) number _____. I have read and discussed the risks and complications which may occur in connection with this procedure.
- 2) I have been given this form prior to the initiation of treatment.
- 3) I understand the potential risks are not limited to those discussed.
- 4) I understand that this is an elective procedure. I have a choice of other forms of treatment or no treatment at all.
- 5) Should any unforeseen condition arise in the course of the operation calling for your doctor's judgment or for procedures in addition to or different from those now planned, I request and authorize my doctor to do whatever he may deem advisable. I understand there is no warranty or guarantee that the proposed treatment will be curative and/or successful to my complete satisfaction.
- 6) I believe I have been given and understand enough information to give my consent to the above procedure.
- 7) I understand that proper brushing, flossing, and regular dental exams are essential to the success of my restoration(s).
- 8) I understand the post-op instructions for my temporary and the importance of returning in a timely manner for final cementation of my restoration. I understand that if I wait more than sixty days for returning for my cementation appointment and my restoration does not fit, I will be charged for a new restoration.
- 9) I state that I read, write, and understand English.
- 10) I have been given instructions for the care of my temporary(s), permanent crown(s), bridge(s), inlay(s), onlay(s), and veneer(s). I fully understand these instructions.
- 11) I will be given a copy of this informed consent after I have signed it if I request it.

Signature (legal guardian if patient is a minor or incompetent)

Date