

## Office of Keerthi Senthil DDS, MS 72027 Desert Drive, Rancho Mirage,CA 92270 (760) 340- 5107

# Patient's Name Email Date Phone

# Please initial each paragraph after reading. If you have any questions, please ask your doctor BEFORE initialing.

Since I have been treated previously for cancer with radiation (x-ray therapy to eradicate cancer cells), I should know that there is a significant risk of future complications when dental treatment is planned within those areas. Therapeutic radiation to jaw and facial regions may adversely affect the blood supply to bone, and reduce its ordinary excellent healing capacity. This risk is increased after surgery, especially from extraction; implant placement or other "invasive" procedures that might cause even mild trauma to bone.

Osteoradionecrosis may result. This is a smoldering, long-term, destructive process in the jawbone that is often very difficult to eliminate.

If the area of proposed treatment is within the area previously irradiated, it may be advisable or necessary for me to undergo hyperbaric oxygen therapy (HBO) before any invasive procedure. HBO is known to improve blood supply and oxygenation in bone and reduce the risk of post-operative complications – but it is not a guarantee. HBO is performed in a special atmospheric chamber in a hospital outpatient clinic and is staged over several weeks.

- 1. Antibiotic therapy may be used to help control possible post-operative infection. For some patients, such therapy may cause allergic responses or have undesirable side effects such as gastric discomfort, diarrhea, colitis, etc.
- 2. Despite all precautions, including HBO pre-treatment, there may be delayed healing, osteoradionecrosis, loss of bony and soft tissues, pathologic fracture of the jaw, oral-cutaneous fistula, or other significant complications.
- 3. If osteoradionecrosis should occur, treatment may be prolonged and difficult, involving ongoing intensive therapy including hospitalization, further hyperbaric oxygen therapy, long-term antibiotics, and debridement to remove non-vital bone. Reconstructive surgery may be required, including bone grafting, metal plates and screws, and/or skin flaps and grafts.
- 4. Even if there are no immediate complications from the proposed dental treatment, an irradiated area is always subject to spontaneous breakdown and infection due to the precarious condition of the bony blood supply. Even minimal trauma from a toothbrush, chewing hard food, or denture sores may trigger a complication.

| 5.                          | Long-term post-operative monitoring may be required and my cooperative scheduled appointments is important. Radiation brings about side effect decreased salivary flow, "radiation caries", and other problems not order patients who have not received cancer treatment. Regular and frequent with my dentist are important to monitor such issues and prevent furth oral health. | cts such as<br>linarily seen with<br>it dental check-ups     |
|-----------------------------|--|--|
| 6.                          | I have read the above paragraphs and understand the possible risks of dental treatment. I understand and agree to the following treatment pla  |  |
| 7.                          | I understand the importance of my health history and affirm that I have information that may impact my care. This includes the total amount of cancer therapy, the exact region(s) where it was applied, and the name understand that failure to give true health information may adversely a unwanted complications.  | radiation I received during s of my cancer therapists. I     |
| 8.                          | I realize that, despite all precautions that may be taken to avoid complicate the no guarantee as to the result of the proposed treatment.   | ations, there can  |
| CONS                        | ENT  |  |
| listed a<br>the ab<br>medic | rstand that my doctor can't promise that everything will be perfect. I understabove and other forms of treatment or no treatment at all are choices I have ove and give my consent to surgery. I have given a complete and truthful metines, drug use, pregnancy, etc. I certify that I speak, read and write English. Inswered before signing this form.                          | . I have read and understand<br>dical history, including all |
| Patien                      | t's (or LegalGuardian's) Signature   | Date   |
| Doctor                      | r's Signature  | Date   |
| Witne                       | ss' Signature  | Date   |

## ORAL AND IV BISPHOSPHONATE DRUGS, ANTIRESORPTIVE DRUGS, OR ANTIANGIOGENIC DRUGS PATIENT EDUCATION

For patients who have taken or are currently taking

- Oral Bisphosphonate Drugs
- IV Bisphosphonate Drugs (Zometa/Aredia)
- Antiresorptive Drugs (Denosumab)
- Antiangiogenic Drugs

Research shows that there is a small risk of developing osteonecrosis (bone cell death) of the jaw or other complications after dental treatment. The jaw bones usually heal completely, but in some patients taking these drugs, the ability of the bone to heal may be altered. This risk is increased in procedures like tooth extraction, tissue surgery, implant placement or other invasive procedures that cause damage to the bone. Therefore, it is important to understand these risks before proceeding with any invasive procedure.

After your dental procedure, long-term care with your medical doctor, dentist and/or oral and maxillofacial surgeon may be required to check your condition. Even if there are no immediate complications from the proposed dental treatment, the area is always subject to infection and breakdown at any time due to the unstable condition of the bone. Even the smallest trauma from a toothbrush, chewing hard food, or denture sores may set off a complication. There may be delayed healing, osteonecrosis of the jaw, loss of bone and soft tissues, infection, jaw fracture, oral-cutaneous fistula (open draining wounds), or other significant complications. The risk of osteonecrosis can be increased by certain medical conditions including diabetes, immune suppression, cancer, as well as social habits like tobacco and alcohol use.

If osteonecrosis should occur, treatment may be long and difficult. Ongoing intensive therapy that could include hospitalization, taking antibiotics for a long time, and removal of dead bone. Reconstructive surgery may be needed, including bone grafting, metal plates and screws, and/or skin flaps and grafts. The risk is higher the longer these drug therapies have been taken.

The decision to stop this drug therapy before dental treatment will not lessen the risk of developing osteonecrosis and should only be made after talking with the medical doctor who prescribed the drug(s) and the treating oral and maxillofacial surgeon. If you are taking anti-angiogenic medications, stopping these medications prior to dental treatment may improve healing and should be reviewed with your treating doctors.

| questions have been answered.                           | ie information provided to me and my |
|---|--------------------------------------|
| Patient's (or Legal Guardian's) Signature               | <br>Date                             |
| Print Patient's (or Legal Guardian's) Name/Relationship | <br>Date                             |

#### POST-OPERATIVE INSTRUCTIONS

### \*\*\*PLEASE READ ALL OF THESE INSTRUCTIONS CAREFULLY\*\*\*

Sometimes the after-effects of oral surgery are quite minimal, so not all of the instructions may apply. Common sense will often dictate what you should do. However, if you have a question, follow these guidelines or call our office for clarification.

#### **DAY OF SURGERY**

**FIRST HOUR**: Bite down gently but firmly on the gauze packs that have been placed over the surgical areas, making sure they remain in place. Do not change them for the first hour unless the bleeding is not controlled. The packs may be gently removed after one hour. If active bleeding persists, place enough new gauze to obtain pressure over the surgical site for another 30 minutes. The gauze may then be changed as necessary (typically every 30 to 45 minutes). It is best to moisten the gauze with tap water and loosely fluff for more comfortable positioning.

**EXERCISE CARE**: Do not disturb the surgical area today. Do **NOT** rinse vigorously or probe the area with any objects. You may brush your teeth gently. **PLEASE DO NOT SMOKE** for at least 48 hours, since this is very detrimental to healing and may cause a dry socket.

**OOZING:** Intermittent bleeding or oozing overnight is normal. Bleeding may be controlled by placing fresh gauze over the areas and biting on the gauze for 30-45 minutes at a time.

**PERSISTENT BLEEDING**: Bleeding should never be severe. If so, it usually means that the packs are being clenched between teeth only and are not exerting pressure on the surgical areas. Try repositioning the packs. If bleeding persists or becomes heavy, you may **substitute a tea bag** (soaked in very hot water, squeezed damp-dry and wrapped in a moist gauze) for 20 or 30 minutes. If bleeding remains uncontrolled, please call our office.

**SWELLING**: Swelling is often associated with oral surgery. It can be minimized by using a cold pack, ice bag or a bag of frozen vegetables (such as peas) wrapped in a towel and applied firmly to the cheek adjacent to the surgical area. This should be applied twenty minutes on and twenty minutes off during the first 24 hours after surgery. If you have been prescribed medicine for the control of swelling, be sure to take it as directed.

PAIN: Unfortunately most oral surgery is accompanied by some degree of discomfort. You will usually have a prescription for pain medication. If you take the first pill before the anesthetic has worn off, you should be able to manage any discomfort better. Some patients find that stronger pain medicine causes nausea, but if you precede each pain pill with a small amount of food, it will reduce the chance that nausea will occur. The effects of pain medications vary widely among individuals. If you do not achieve adequate relief at first, you may supplement each pain pill with an analgesic such as aspirin or ibuprofen. Some patients may even require two of the pain pills at one time. Remember that the most severe pain is usually within six hours after the local anesthetic wears off; after that your need for medicine should lessen. If you find you are taking large amounts of pain medicine at frequent intervals, please call our office. If you anticipate needing more prescription medication for the weekend, you must call for a refill during weekday business hours.

**NAUSEA**: Nausea is not uncommon after surgery. Sometimes pain medications are the cause. Nausea can be reduced by preceding each pain pill with a small amount of soft food, and taking the pill with a large volume of water. Try to keep taking clear fluids and minimize dosing of pain medications, but call us if you do not feel better. Classic Coca Cola may help with nausea.

**DIET:** Eat any nourishing food that can be eaten with comfort. Avoid extremely hot foods. Do not use a straw for the first few days after surgery. It is sometimes advisable, but not absolutely required, to confine the first day's intake to liquids or pureed foods (soups, puddings, yogurt, milk shakes, etc.). It is best to avoid foods like nuts, sunflower seeds, popcorn, etc., which may get lodged in the socket areas. Over the next several days you may gradually progress to solid foods. It is important not to skip meals! If you take nourishment regularly you will feel better, gain strength, have less discomfort and heal faster. If you are a diabetic, maintain your normal eating habits or follow instructions given by your doctor.

**SHARP EDGES**: If you feel something hard or sharp edges in the surgical areas, it is likely you are feeling the bony walls which once supported the extracted teeth. Occasionally, small slivers of bone may work themselves out during the following week or so. If they cause concern or discomfort, please call the office.

#### INSTRUCTIONS FOR THE SECOND AND THIRD DAYS

**MOUTH RINSES**: Keeping your mouth clean after surgery is essential. Use ¼ teaspoon of salt dissolved in an 8 ounce glass of warm water and gently rinse with portions of the solution, taking five minutes to use the entire glassful. Repeat as often as you like, but at least two or three times daily.

**BRUSHING:** Begin your normal oral hygiene routine as soon as possible after surgery. Soreness and swelling may not permit vigorous brushing, but please make every effort to clean your teeth within the bounds of comfort.

**HOT APPLICATIONS**: You may apply warm compresses to the skin over the areas of swelling (hot water bottle, hot moist towels, heating pad) for 20 minutes on and 20 minutes off to help soothe tender areas. This will also help decrease swelling and stiffness.

**HEALING**: Normal healing after tooth extraction should be as follows: The first two days after surgery are generally the most uncomfortable and there is usually some swelling. On the third day you should be more comfortable and, although still swollen, can usually begin a more substantial diet. **The remainder of the post-operative course should be gradual, steady improvement.** If you don't see continued improvement, please call our office. If you are given a plastic irrigating syringe, **DO NOT** use it for the first five days. Then use it daily according to the instructions until you are certain the tooth socket has closed completely and that there is no chance of any food particles lodging in the socket.

It is our desire that your recovery be as smooth and pleasant as possible. Following these instructions will assist you, but if you have questions about your progress, please call the office where you had surgery. A 24-hour answering service is available to contact the doctor on call after hours. Calling during office hours will afford a faster response to your question or concern.

PLEASE NOTE: Telephone calls for narcotic (pain killer) prescription renewal are ONLY accepted during office hours.