

Informed Consent **-Bisphosphonate-**

Bisphosphonates are generally prescribed for the prevention and treatment of resorptive bone diseases such as osteoporosis and bone metastasis associated with breast, prostate, and bone cancer. These drugs slow down the cellular activity necessary for bone remodeling. This results in decreased new bone formation and reduced blood vessel in-growth into the bone. Because the bisphosphonates are preferentially deposited in bone with high turnover rates, the jaw is particularly affected by these drugs. Bisphosphonates also are not metabolized, high concentrations remain within the bone for a long period of time.

Having been treated previously with Bisphosphonate drugs, you should know that there is a risk, though very rare, of future complications associated with dental treatment. Recent studies have identified several potential risk factors associated with the development of "Bisphosphonate-Related Osteonecrosis of the Jaw." Osteonecrosis, or dead bone, is a long-term, destructive process in the jawbone that is often very difficult or impossible to eliminate. Potential risk factors include:

- History of trauma to the teeth or jaw(s).
 1. Recent trauma (tooth extraction, implant placement, jaw surgery) is the most prevalent and consistent risk factor in reported cases of osteonecrosis.
- Duration of bisphosphonate exposure.
 2. Longer treatment with bisphosphonates is associated with a higher risk of developing osteonecrosis.
- The type of bisphosphonate taken
 3. The more potent IV bisphosphonates (pamidronate, zoledronate) appear to be more problematic as compared to the oral bisphosphonates.

It is important to understand that routine dental care, including plaque removal, fillings, prosthetic procedures and routine root canal treatment is still recommended. If dental surgery is treatment planned, consultation with the medical doctor or oncologist is beneficial to determine the relative degree of risk for developing Bisphosphonate-Related Osteonecrosis of the Jaw. This risk is increased after surgery, especially from extraction, implant placement or other "invasive" procedures that might cause even mild trauma to bone.

Despite all precautions, there may be delayed healing that could result in osteonecrosis, loss of bone and soft tissues, pathologic fracture of the jaw, or other significant complications. Treatment strategies may include;

- Antibacterial mouth rinses.
- Routine clinical follow-up at 3 month intervals.
- Antibiotic therapy and pain control.
- Superficial surgical debridement to relieve soft tissue irritation.
- Surgical debridement/resection for longer term control of infection and pain.

Even if there are no immediate complications from the proposed dental treatment, the area is always subject to spontaneous breakdown and infection. Signs and symptoms of osteonecrosis include pain, soft tissue swelling and infection, loosening of the teeth, drainage and exposed bone. This condition may remain asymptomatic for many weeks or months and may only be recognized by the presence of pain or exposed bone in the mouth.

By checking the box that follow, I have read the above paragraphs and understand the possible risks of undergoing my planned treatment.