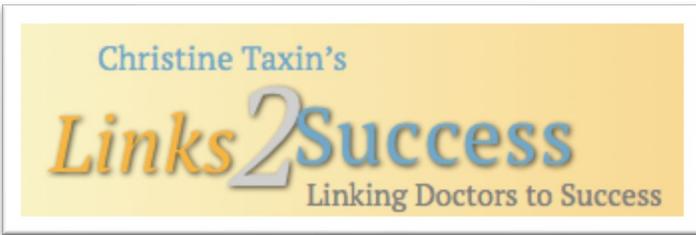


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Dental Management of Patients Prescribed Bisphosphonates Clinical Guidance

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What Are Bisphosphonates and How Do They Work?

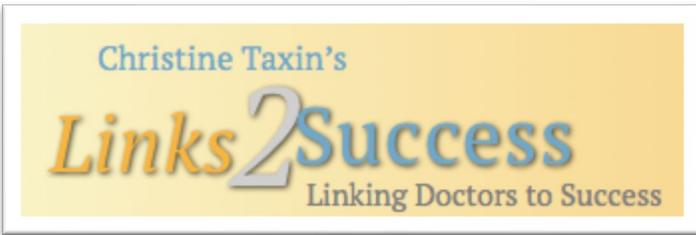
Bisphosphonates are drugs that reduce bone resorption by hindering the formation, recruitment and function of osteoclasts. Bisphosphonates are used most commonly in the management of osteoporosis but are also used in the management of many other nonmalignant and malignant conditions. Bisphosphonates can have a significantly positive effect on the quality of life of patients by reducing or delaying the onset of disease or treatment complications, such as bone fractures and bone pain. However, bisphosphonates accumulate at sites of high bone turnover, such as in the jaw. This may reduce bone turnover and bone blood supply and lead to the death of the bone, termed osteonecrosis. The condition of particular concern for dentists is bisphosphonate-related osteonecrosis of the jaw.

What is Bisphosphonate-related Osteonecrosis of the Jaw (BRONJ)?

BRONJ is defined as exposed, necrotic bone in the maxilla or mandible that has persisted for more than eight weeks in patients taking bisphosphonates and where there has been no history of radiation therapy to the jaw. Symptoms include delayed healing following a dental extraction or other oral surgery, pain, soft tissue infection and swelling, numbness, paraesthesia or exposed bone.

It should be acknowledged that BRONJ is an extremely rare condition, and it is very important that patients are not discouraged from taking bisphosphonate drugs or from undergoing dental treatment.

Note: There is no supporting evidence that BRONJ risk will be reduced if the patient temporarily, or even permanently, stops taking bisphosphonates prior to invasive dental procedures since the drugs may persist in the skeletal tissue for years. If a patient has taken bisphosphonates in the past but is no longer taking them for whatever reason (i.e. completed or discontinued the course, taking a drug holiday), allocate them to a risk group as if they are still taking them.



Reduce risk factors

Whenever possible, patients should be encouraged and counseled to stop smoking. Oral hygiene and periodontal health should be improved prior to any surgical procedures.

However, the unnecessary delay or avoidance of appropriate treatment cannot be supported and each case should be considered on its own merits.

Chlorhexidine mouthwash

All patients to rinse with Chlorhexidine mouthwash twice daily during the week before extractions are done. There is no evidence that pre- and post-operative antibiotics are effective in preventing BRONJ. Immediately before the extractions, the area should be irrigated/wiped with chlorhexidine. Use the atraumatic technique, and avoid raising flaps. Primary soft tissue closure should be achieved wherever possible. 24 hours post-operatively patients should rinse with Chlorhexidine twice daily for 2 months and should be reviewed regularly to monitor healing.

Children or infants on bisphosphonates

There is currently insufficient evidence to give any meaningful guidance on treating young children on bisphosphonates. In such cases, it is advisable to seek specialist advice and refer to an OMFS dept. for assessment and treatment.



CONSENT FOR DENTAL/ORAL SURGICAL TREATMENT IN PATIENTS WHO HAVE RECEIVED BISPHOSPHONATE DRUGS

Patient Name: Patient Chart # :

Today's Date :

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

Having been treated previously with bisphosphonate drugs you should know that there is a risk of future complications associated with dental treatment. Bisphosphonate drugs appear to adversely affect the ability of bone to break down or remodel itself thereby reducing or eliminating the ordinary excellent healing capacity of bone. This risk is increased after surgery, especially from extraction; implant placement or other "invasive" procedures that might cause even mild trauma to the bone.

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

Your medical/dental history is very important. We must know the medications and drugs that you have received or taken or are currently receiving or taking. An accurate medical history, including:

Names of physician's patient are seeing and who is prescribing RX:

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, there may be delayed healing, osteonecrosis, loss of bony and soft tissue, pathologic fracture of the jaw, oral-cutaneous fistula, or other significant complications.
3. If osteonecrosis should occur, treatment may be prolonged and difficult, involving ongoing intensive therapy including hospitalization, 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, the area is always subject to spontaneous breakdown and infection. Even minimal trauma from a toothbrush, chewing hard food, or denture sores may trigger a complication.
5. Long-term postoperative monitoring may be required and cooperation in keeping



scheduled appointments are important. Regular and frequent dental checkups with your dentist are important to monitor and attempt to prevent a breakdown in your oral health.

6. I have read the above paragraphs and understand the possible risks of undergoing my planned treatment. I understand and agree with the following treatment plan:

7. I understand the importance of my health history and affirm that I have given any and all information that may impact my care. I understand that failure to give true health information may adversely affect my care and lead to unwanted complications.

8. I realize that despite all precautions that may be taken to avoid complications; there can be no guarantee as to the result of the proposed treatment.

CONSENT

I certify that I speak, read, and write English, or, have used a translator to explain all of the previous information to me and I understand all of the information translated to me. I give my permission and consent to the procedure(s) proposed. I have had all of my questions answered and all necessary information has been completed on this form prior to my initials or signature.

Patient's (or Legal Guardian's) Signature Date

Doctor's Signature Date

Witness' Signature Date