

Guidelines for Patients Receiving Bisphosphonates

Mechanism of Action- Inhibition of osteoclasts and capillary neogenesis

Bisphosphonates:

1. Reciprocate (actonel) - Second most commonly prescribed
2. Etidronate (didronel) - Infrequently used
3. Tiludronate (skelid) - Infrequently used
4. Alendronate (fosamax) - Most commonly prescribed orally
5. Pamidronate (aredia) - IV
6. Zoledronate (zometa) - Very potent, IV

Conditions That Frequently Require the Use of Bisphosphonates:

IV therapy: Frequently used in osteoblastic metastatic cancer.

Other conditions when used: Prostate cancer, breast cancer, multiple myeloma, and other various malignancies.

Oral Therapy: Frequently used in postmenopausal women.

Other conditions when used: Osteoporosis and osteopenia. Patients may check yes for arthritis on our medical history sheet out of confusion. It is important to question the patient to find out if it is osteoporosis or just arthritis.

Recommendations for patients Who have received IV bisphosphonates before dental treatment:

1. Avoid invasive procedures (extractions, implants).
2. Treat caries. For hopeless teeth, perform root canal treatment and amputate the crown at gingiva to avoid extractions.
3. Supragingival scaling.
4. Splint mobile teeth.
5. If extractions are unavoidable, refer to oral surgeon and make patient aware of increased risks.

Recommendations for patients taking Oral bisphosphonates before dental surgery:

1. Patients taking medications for less than 3 years - most procedures are safe.
2. Patients taking medication for greater than three years-discontinue oral bisphosphonates for 3 months before surgery and 3 months after (Bone recovers in 3 months-180 day turn over).
3. Provide patient with education about meds and increased risks.
4. Make sure to inform and consent patients about increased risks.
5. Add a sentence to bottom of the consent about increased risk of dental surgery with patients taking oral bisphosphonates and have them initial it.

Conclusion:

Bisphosphonates are life saving drugs that result in the inability of bone to heal properly. IV bisphosphonates produce irreversible osteonecrosis. Oral bisphosphonates have an accumulative effect so finding out the length of therapy is very important.

This information was copied from a lecture by Dr. Robert E. Marx, professor of surgery at the University of Miami and is the protocol being used by the University of Pittsburgh.