



The Current Facts about Osteonecrosis of the Jaw and Osteoporosis Drugs

Recent reports in the media have highlighted possible jaw bone damage resulting from some osteoporosis treatments called bisphosphonates. Most cases have occurred in patients receiving high doses of certain potent bisphosphonate drugs given by vein for the treatment of cancer complications. Osteonecrosis of the Jaw (ONJ) has been rarely associated with the use of oral bisphosphonates. There are several bisphosphonates on the market, including alendronate (Fosomax®), risedronate (Actonel®), ibandronate (Boniva®), pamidronate (Aredia®), zoledronic acid (Zometa®), tiludronate (Skelid®) and etidronate (Didronel®); these agents are used for the treatment of osteoporosis, Paget's disease of bone, as well as skeletal complications of cancer. ONJ is a condition where bone in the upper and lower jaw is exposed. This condition may be painful and associated with infection. Symptoms of ONJ can include oral discomfort, mouth sores, loose teeth, and poor healing after tooth extraction or dental surgery.

The vast majority ONJ cases have occurred in patients receiving treatments with intravenous bisphosphonates (most often pamidronate and zoledronic acid) for the treatment of cancer complication where these drugs are given frequently and in relatively high doses. Tooth extraction, dental surgery, local trauma from dentures or other physical trauma to the jaw appear to be potential precipitating factors. Some cases of ONJ have been seen in patients who have had bony oral prominences (exostoses, palatal torus) that are easily injured.

Currently, the incidence of ONJ among individuals receiving oral bisphosphonate therapy is not known. Although most cases of ONJ have been reported in patients receiving intravenous bisphosphonates, there are a few reports of ONJ in individuals who received only oral bisphosphonate therapy for osteoporosis.

Patients should get a routine dental examination prior to initiation of bisphosphonate therapy. They should also be informed about the importance of good oral hygiene, and should remain alert for the symptoms of ONJ. If possible, invasive dental procedures such as extractions, implants, and jaw or gum surgery should be avoided during bisphosphonate therapy, and dentures should be well-fitted. Should invasive dental procedures be required, they should ideally be done prior to starting treatment with bisphosphonates; or if required during bisphosphonate therapy, it may be wise to withhold treatment for a period of time prior to and after the dental procedure. Patients with potential symptoms or signs of ONJ should be evaluated by an oral surgeon and withdrawal of bisphosphonate therapy may be considered.