

# **Osteonecrosis of the Jaw, bisphosphonate treatment and Paget's disease – is there a risk?**

**By Professor Stuart Ralston - Edinburgh**

## ***What are bisphosphonates?***

Bisphosphonates are drugs used in the treatment of Paget's disease. The most commonly used bisphosphonates are Pamidronate (Aredia); Risedronate (Actonel), Zoledronate (Aclasta), Tiludronate (Skelid) and Etidronate (Didronel). Usually you would be given this treatment if your doctor thought that Paget's disease was causing pain.

## ***What is Osteonecrosis of the jaw?***

Osteonecrosis of the jaw (ONJ) is a rare condition which has been reported to occur in some patients who have had dental surgery after receiving high doses of bisphosphonates for various bone disease. Nearly all cases have occurred in people with bone cancer but in a few cases, ONJ has occurred in people being treated for osteoporosis and Paget's disease.

## ***What are the signs of ONJ?***

The main sign of ONJ is an area of exposed bone in the mouth which doesn't heal and which usually occurs after dental surgery for tooth extraction. It may be painful but does not always cause pain. It is often associated with poor dental hygiene and infection.

## ***How is Osteonecrosis of the jaw diagnosed?***

The diagnosis would usually be made by a dentist or doctor by an examination of the mouth. The diagnosis does not usually require any special blood tests or scans.

## ***How is ONJ treated?***

Treatment of ONJ involves maintaining good oral hygiene and giving antibiotics if necessary for infection. This treatment would usually be supervised by a dentist or oral surgeon. In most cases bisphosphonate treatment would be stopped until the ONJ had healed.

## ***What are the implications for people with Paget's disease?***

Thankfully, ONJ seems to be very rare in Paget's disease. In the PRISM study, for example where over 1300 patients were treated with bisphosphonates over a 3 year period, no cases of ONJ were reported. Also ONJ was not observed in any patients being treated in clinical trials with the drug Zoledronic acid (Aclasta). In view of this it is quite unlikely that any problems would arise in the course of routine bisphosphonate treatment for Paget's disease.

## ***What if I need dental work and I am also taking bisphosphonates for Paget's disease?***

If you are about to have a tooth extraction or other dental surgery it would be best to tell your doctor about this so that your doctor can plan the timing of your bisphosphonate treatment. If you have previously been treated with bisphosphonates for Paget's disease and you are seeing dentist for tooth extractions or other dental surgery please mention that you have had bisphosphonate treatment.

## ***What if I need fillings or other minor dental work?***

Most cases of ONJ have been reported in people having tooth extractions or other surgery. Having fillings and other minor dental work hasn't been associated with ONJ.

## ***Any other questions?***

If you have any other questions or concerns you should discuss these with the doctor that you see for treatment of your Paget's disease.