

Dental advice for patients prescribed anti-resorptive drugs for the treatment of osteoporosis or other non-malignant diseases of bone

Why have I been given this leaflet?

You are taking an anti-resorptive drug, such as a bisphosphonate or denosumab, that might affect your jaw bone. There is a very small risk for developing a condition called medication-related osteonecrosis of the jaw (MRONJ). This may result in some bone becoming exposed in your jaw and is a rare side effect of treatment with these drugs. See overleaf for a list of drugs commonly prescribed for the treatment of osteoporosis and other non-malignant diseases of bone.

What is the risk of developing this side effect?

The risk of developing this side effect is very low as this is a rare condition. However, some other medical problems that you may have might slightly increase your risk, for example conditions that are managed with long-term oral steroids.

Should I stop taking the drug?

No, continue to take your medication. The medical benefits are likely to far outweigh the risks. Talk with your doctor and dentist if you have any questions.

What are the risks associated with dental treatment?

The risk is very low to non-existent for most ordinary treatments. The risk is increased if you require treatment that affects bone (like a tooth extraction or dental implants) but is still considered low.

What are the risks associated with not having dental treatment?

You may be at increased risk of developing other health problems if a dental disease is not treated. Your dentist will be able to discuss alternative treatment options and the risks associated with them. You should also consult with your doctor about any health risks.

Can I decrease my risk of developing this side effect?

There are several things you can do to reduce the risk of this side effect:

- **Visit your dentist for regular dental check-ups**
Your dentist will monitor your oral health to ensure that any dental disease that may develop is treated before dental surgery is required.
- **Ensure that you tell your dentist about all the medications you are taking and your medical history**
Tell your dentist about any health problems that you have and all medicines that you are taking so that the dentist can assess your individual risk for developing MRONJ.
- **Talk to your dentist about oral hygiene**
Cleaning your teeth regularly and carefully is the best way to prevent oral diseases that may require dental surgery. Your dentist can help you ensure the cleaning technique you use is effective.

What else can I do?

- **Stop smoking**
Smoking can affect your oral health. There are various services to help you stop/give up. For help and advice in Scotland, call Smokeline (0800 84 84 84) or go to www.canstopsmoking.com.
- **Reduce the frequency of sugary snacks and drinks**
Regular consumption of sugary snacks and drinks can lead to tooth decay.
- **Reduce the amount of alcohol you drink**
Regular heavy alcohol consumption can increase your risk of developing some dental diseases.

Are there signs and symptoms I should look out for?

You should contact your dentist immediately if you notice any of the following symptoms:

- Feeling of tingling, numbness, heaviness or other unusual sensations in your jaw
- Pain in your jaw or a bad taste
- Swelling of your jaw
- Pus or discharge
- Loose teeth
- Exposed bone in your jaw

If I develop medication-related osteonecrosis of the jaw, how will it be treated?

If your dentist suspects that you have this side effect, you will be referred to hospital to be managed by specialists. In general, for cases where only a small amount of bone is exposed, treatment may be with antibiotics or antibacterial mouth rinses. In cases where more bone is exposed, some surgery may be required. However, the treatment given will depend on your individual symptoms.

Remember, this side effect is rare and the benefits of taking the drug you have been prescribed are likely to far outweigh the risks. Looking after your oral health will reduce your risk even more.

Drugs Associated with Medication-related Osteonecrosis of the Jaw (MRONJ)

Bisphosphonates are drugs prescribed to treat osteoporosis or other non-malignant diseases of bone. They can be given as tablets, injections or infusions. There are several different bisphosphonates licensed for this purpose in the UK, including alendronic acid (Binosto[®], Fosamax[®] or Fosavance[®]), risedronate sodium (Actonel[®] or Actonel Combi[®]), zoledronic acid (Aclasta[®]), ibandronic acid (Bonviva[®] or Quodixor[®]) and pamidronate disodium (Aredia[®]).

Denosumab (Prolia[®]) is also prescribed to treat osteoporosis or other non-malignant diseases of bone in the UK and is given as an injection. This drug acts differently to the bisphosphonates but is also associated with MRONJ.

Risk level

For patients taking anti-resorptive drugs for the treatment of osteoporosis or other non-malignant diseases of bone, the risk of developing this side effect is between 1 in 1000 and 1 in 10,000. The illustration below may help you visualise what this means for you.



Be aware that when thinking about your risk, the frequency stated above includes only people who take the drugs. For example, a risk of 1 in 10,000 means that, on average, there would be one case of MRONJ for every 10,000 patients who take the drugs.

Other resources

You may find additional helpful information on the following websites:

National Osteoporosis Society (www.nos.org.uk)

Paget's Association (www.paget.org.uk)

This leaflet has been developed by the Scottish Dental Clinical Effectiveness Programme (SDCEP), part of NHS Education for Scotland. This and other patient information is available on the SDCEP website (www.sdcep.org.uk).