



This leaflet has been designed to explain osteonecrosis of the jaw and it contains answers to many frequently asked questions. If you have any other questions that the leaflet does not answer, or if you would like further information, please ask us.

What is osteonecrosis of the jaw?

Osteonecrosis is the name for a rare condition in which part of your jaw bone becomes visible inside your mouth and your gum does not heal over it within 8 weeks. There are two main types of osteonecrosis – osteo**chemo**necrosis and osteo**radio**necrosis. This leaflet deals with osteochemonecrosis only. Osteochemonecrosis is also known as bisphosphonate-related or bisphosphonate-induced osteochemonecrosis - BRONJ or BIONJ for short. It is also sometimes called medication-related osteochemonecrosis – MRONJ.

Who gets osteonecrosis?

If you are taking medications called bisphosphonates then you are more likely to develop osteonecrosis. Bisphosphonates can be taken in tablet form or be injected into a vein. They are used to treat many different conditions such as osteoporosis, some forms of cancer and other specific bone conditions.

If you are taking bisphosphonates for treatment of osteoporosis then you are likely to be taking tablets. The risk of somebody who takes these tablets developing osteonecrosis is extremely low, especially in the first three years of treatment. The risk is much greater with bisphosphonates given through a vein. These are usually used in cancer treatment. Some other types of medication used to treat osteoporosis are also linked to osteonecrosis.

When does osteonecrosis happen?

Osteonecrosis is most likely to happen when there has been an injury to your jaw. The most common type of injury is having a tooth removed or having some other surgery in your mouth. The more difficult the tooth is to remove the more likely you are to develop osteonecrosis. It develops more often after a lower tooth is removed than after an upper tooth is removed. Osteonecrosis can also develop if your denture is cutting your gum.

What problems will I have?

You will have an area of exposed (visible) bone in your jaw. This is most often painless but can in some cases be painful (for example, like toothache or a heavy jaw sensation). Sometimes people can get numbness or tingling of the jaw, gums or lips. Teeth in the area may get loose or fall out. The area may be prone to infection.

Are there other things that make osteonecrosis more likely?

Yes. If you have gum disease this makes it more likely that you will develop osteonecrosis. Smokers and people who drink heavily are also more likely to get osteonecrosis. Osteonecrosis is more common in diabetics and in people who take steroid medication.

Can osteonecrosis be prevented?

Not always. Sometimes your dentist will ask you to stop your medication for up to 3 months before you have your dental treatment. This decision **must** be discussed with your doctor. You may also be advised to use mouthwash before surgery or you may get a prescription for an antibiotic. The way your treatment is carried out may be adjusted to make osteonecrosis less likely. If your dentist thinks your risk of developing osteonecrosis is very high then they may suggest ways in which surgery or tooth removal can be avoided.

Can osteonecrosis be treated?

Treating osteonecrosis successfully can be very difficult. It will usually involve mouthwashes and antibiotics. Sometimes further surgery may be necessary. You may need to stop your bisphosphonate medication for some time.

In some people the area may never heal, even with treatment.

What can I do to help?

There is some advice for people who have been prescribed bisphosphonate medication:

- if possible visit your dentist for treatment before you start the medication
- keep your gums healthy
- make sure your dentures fit comfortably
- get treatment for broken or bad teeth as early as possible
- talk to your dentist about treatments that might allow you to keep your teeth rather than have them removed
- always tell your dentist if you are taking bisphosphonate medications or you have taken them in the past

Remember – bisphosphonates are important medications which are very valuable for many people. You should take them when they are prescribed for you and you should never stop taking them without talking to your doctor.

The following web-site may be helpful. (CUDSH cannot be held responsible for the content of other websites) http://www.cancerresearchuk.org/cancer-help/about-cancer/cancer-questions/about-bisphosphonates-and-jaw-problems

This leaflet is available online at http://www.ucc.ie/en/dentalschool/patients