

Osteonecrosis of the Jaw

Information for patients on bone modifying therapy

What is Osteonecrosis of the Jaw?

Osteonecrosis of the jaw (ONJ) is when one or more parts of the jawbones become damaged (necrotic) and exposed to the inside of the mouth. This is **not** a common event that can occur in patients with cancer receiving **bone modifying therapy**.

What is bone modifying therapy?

Bone-modifying therapy is used to help to prevent bone problems for people with cancer. We may also give this therapy to patients with bone metastases (when the cancer has spread to the bones). Bone modifying therapy increases bone density and reduce risk of breaking bones (fractures). Examples of commonly used bone modifying medications in cancer patients are:

Clodronate (Bonefos®)

Zoledronic Acid (Zometa®)

Pamidronate (Aredia®)

Denosumab (Xgeva®)

Clodronate, pamidronate, zoledronic acid all belong to a class of drugs called **bisphosphonates**. Bisphosphonates are a type of bone modifying therapy. Denosumab is not a bisphosphonate but it is also a bone modifying therapy.

Causes of ONJ

The exact cause of ONJ is unknown. Normal, gum tissue covers the jawbones; with ONJ, some of this gum tissue becomes damaged, leaving the underlying bone exposed. The section of the bone eventually dies.

What are the Risk Factors for Developing ONJ?

Some of the following conditions have been found in people who have developed ONJ:

- A history of gum disease, mouth infections, poorly fitting dentures
- Had gum or dental surgery such as pulled teeth and implants while receiving bone modifying therapy
- Received bone modifying therapy
- Received bone modifying therapy over a long period of time
- Previous treatment with high doses of radiation to the jaw for head and neck cancers

What are some signs and symptoms of ONJ?

- Pain in the mouth, teeth or jaw
- Swelling or infection of gums
- Loosening of teeth
- Poor gum healing
- Exposed bone (often at the site of previous tooth extraction)
- Numbness or a tingling feeling inside the jaw

What can I do?

BEFORE starting bone modifying therapy	DURING bone modifying therapy
<p>1. Have a dental examination.</p> <p>Let your dentist know you will be starting bone modifying therapy.</p>	<p>1. Inspect mouth & gums daily. Shine a flashlight in your mouth to better see all areas.</p> <p>Tell your Care Team, or Call Triage 705-728-9090 x79565 if you have pain or sores in your mouth.</p>
<p>2. <u>If possible</u> all dental surgeries, extractions & root canals should be performed before starting treatment.</p> <p>Tell your oncologist the dates of your dental procedures so that the bone modifying drug can be started <u>after</u> you have healed from the dental procedure.</p>	<p>2. Maintain routine dental cleanings by a dental specialist. Keep practicing excellent mouth and dental hygiene every day.</p> <p>Check with your oncologist for the best timing of these procedures.</p>
<p>3. Practice excellent mouth and dental hygiene on a daily basis.</p>	<p>3. Remove dentures at night.</p>
<p>4. Ensure that dentures fit properly. Extra cushioning or refitting may be necessary.</p>	<p>4. Avoid having <u>elective</u> dental surgery or invasive dental procedures.</p>