

Osteoradionecrosis (ORN)

What is osteoradionecrosis (ORN)?

Osteoradionecrosis (ORN) is the death of tissue or bone in an area treated with radiation. This problem can happen after radiation therapy to the head and neck area and may not develop until years after treatment has ended.

During treatment, radiation attacks and destroys cancer cells. Radiation therapy also damages healthy cells and may decrease the blood supply and oxygen to nearby bones and tissues. These bones and tissues can become infected and die.

What are the symptoms of ORN?

- New tooth or jaw pain
- New jaw swelling
- Exposed bone in your mouth or on your face in the area treated with radiation
- A wound (inside your mouth or on your face) in the area treated with radiation that drains or does not heal

How is ORN diagnosed?

Your doctor will review your medical history and do a physical exam. Your doctor may order imaging, such as x-ray, CT scan or MRI or do a biopsy of your tissue or bone.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

How is ORN treated?

Treatment depends on how severe the problem is for you. Treatment options may include:

- Long-term antibiotics to treat an infection in your tissue or bone
- Hyperbaric Oxygen Therapy to improve healing and control infection
 - ▶ This treatment has you breathe 100% oxygen inside a compression chamber to increase the amount of oxygen to the affected area.
- Medicines such as, Trental and Vitamin E, to increase blood flow to the affected area
- Surgery to remove dead or infected tissue or bone

How is ORN prevented?

- **You will need to see a dentist before you start radiation treatment.** Your dentist will check your teeth for any problems and do any dental work that is needed. This will help make sure your mouth is healthy before you start radiation therapy.
- You should have regular dental check-ups and take good care of your teeth.
- Use a toothpaste with fluoride to brush your teeth after every meal and floss each day.
- Use the fluoride treatment ordered by your dentist each day.
- If a wound develops, it is important to follow the wound care instructions from your doctor.