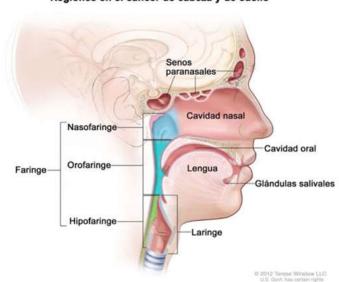


# Radiotherapy in head and neck

The main objective of this information is for you and your family to know what radiotherapy treatment consists of and the possible side effects that you may have when receiving the head and neck therapy treatment.

It is important that you know about the possible adverse events that may occur during treatment, without necessarily having to suffer them.

It should be considered that each person reacts differently to radiotherapy treatments and that the intensity of the adverse events will depend on the dose, the irradiated area, as well as the patient's general condition. This document aims to educate you and contribute positively to your quality of life.

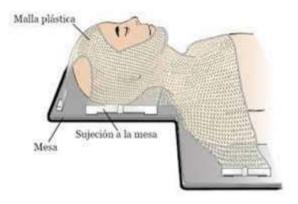


Regiones en el cáncer de cabeza y de cuello

### What is Radiation Therapy?



It is a form of treatment in which ionizing radiation is used in order to reduce or destroy tumor cells, this depends on the state of the disease and the reaction with the organism. It is applied by directly irradiating the area where the tumor is and in the lymph nodes to the areas where the tumor can migrate. To avoid movement of the shoulders and head, we will use a thermoplastic mask customized to your anatomy.



The time of each daily session can be around 10 to 15 minutes where it is important your cooperation in not moving on the table during this time interval. The expected side effects are classified as acute and chronic.

#### Acute side effects:

- General: tiredness, general malaise, loss of appetite and weight loss.
- Skin effects: redness, itching, cracking, peeling of the skin, hair loss in the area where the radiation beams enter, this hair loss may be temporary and in very rare cases is permanent.
- Mucositis: irritation of the mucosa of the oral cavity and throat, it may appear between the second and third week of treatment, there may be difficulty in swallowing, pain and even infections.
- Alteration in the production of saliva and loss of taste: the production of saliva decreases and becomes thicker and thicker as the head and neck therapy treatment progresses, this is secondary to the inflammatory processes on the salivary glands, this symptom, called xerostomia, starts with the first two to three doses. The sensation of thick saliva may be a permanent damage.



#### Chronic or late side effects:

These discomforts may appear after three months or last from the end of the radiotherapy treatment.

- Dry mouth (xerostomia): it will depend on the amount of salivary glands irradiated during treatment.
- Sensation of electric shocks when bending the neck: this discomfort can extend to
  the arms, trunk and legs, it is due to the inflammation of the spinal cord and
  disappears spontaneously, in cases where the intensity of the discomfort alters the
  quality of life of the person, we use drugs to reduce the inflammation of the spinal
  cord.
- Inflammation of the deep neck: it is manifested by a hardening of the neck or jowls, and when present it could be a permanent symptom.

#### Recommendations:

- Do not eat spicy, acidic, sugary and rough foods.
- Select foods with good taste and easy to chew such as: cereals, mashed potatoes and scrambled eggs, preferably during treatment maintain a soft or liquid diet.
- Try to maintain and increase the frequency of your feeding with the intention of not losing weight during the treatment.
- Keep your mouth moist, you are ingesting water constantly.
- The temperature of the food should be warm or room temperature.
- The mouth should be cleaned with a soft bristle brush, try to use medicated toothpaste and medicated oral rinses without alcohol.
- The skin should avoid scratching, do not use deodorants, perfumes, creams or any other product not recommended by your radiation oncologist.
- At the time of the shower use plenty of water, dry the area well with a soft towel by patting without rubbing the skin.
- Use soft clothes that do not have contact with the irritated skin. Do not wear clothing that presses on the skin under treatment.
- If you need to shave, preferably with an electric razor.
- You must protect the skin that is receiving radiotherapy from the sun and sudden changes in temperature, once the treatment is finished, try not to expose yourself to direct sunlight, it is also recommended that you use sunscreen once the entire radiotherapy treatment is finished.
- Try to avoid lifting heavy loads.
- Do not apply adhesives on the skin that is receiving radiotherapy, the use of these products could ulcerate the skin.
- Maintain strict adherence to your nutritionist's recommendations.

– It is important that you do not lose weight during radiotherapy treatment.

#### Recommended foods:

- Proteins: white meats, chicken or fish, with juicy sauces, white sauce with mayonnaise, eggs to your liking, pasta, cannelloni, lasagna and gelatins.
- Dairy products: yogurt, milk, flan, custard, fresh cheese, ice cream, milkshakes, chocolates, atol.

Fruits and vegetables: cooked in cream and puree, acid fruits, ripe, strained, apple, peach, watermelon and pear.

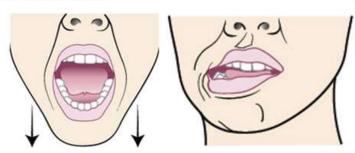


## Physical care

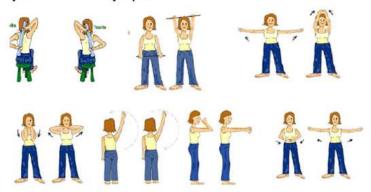
- Sometimes stiffness may appear in the muscles of the face as difficulty in opening the mouth, neck and arm movements that can cause pain, limit movement and alter their daily activities. Therefore, we recommend that you perform the following exercises.
- Vocalization exercises.
- In front of a mirror, exaggeratedly vocalize the vowels from "a" to "u" repeatedly.

Shoulder and back exercises.

## Ejercicios de mandíbula.



## Ejercicios de hombro y espalda.



## Ejercicios de cabeza y cuello

