BASICS OF RADIATION BIOLOGY (RADIOBIOLOGY)

206 BIOCHEM

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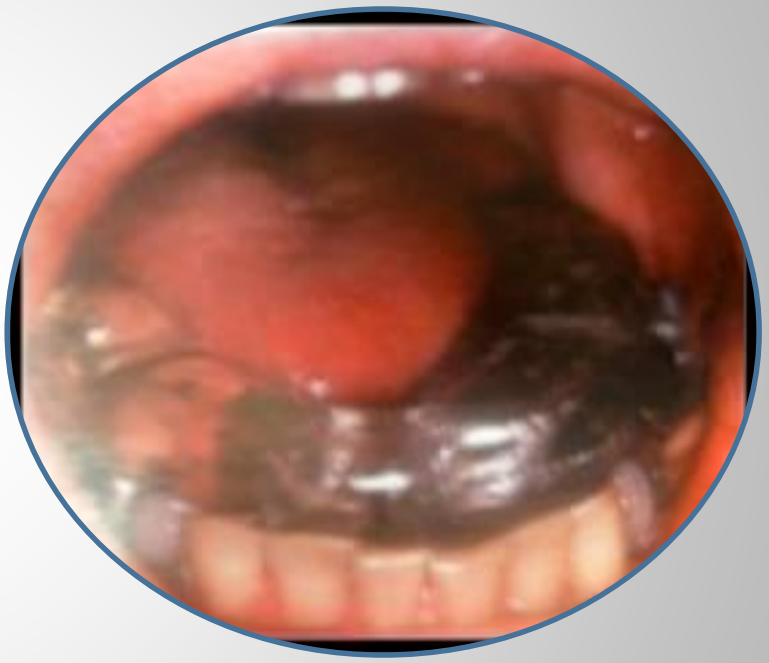
Shielding

- Helpful if patient is to receive unilateral dose of radiation.
- Useful in;
- Buccal mucosa, skin and alveolar ridge حافة.
- Will prevent transmission of about 95% of beam radiation exposure to normal structures.



A stent for recontouring tissues

- Use of a stent to flatten the lip and corner of the mouth, thereby placing the entire lip in the same plane to deliver uniform dosage of radiation.

Useful in;

- treating skin lesions

associated with upper and lower lips.

What to expect? (Treatment plan)

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- The doctor will discuss radiation therapy and other options and help weigh the pros and cons إيجابيات وسلبيات. Before treatment starts, they will determine the right type and dosage of radiation.

- A person receiving external beam radiation may undergo a CT or MRI scan before treatment. This is to locate the exact location and size of the tumor. A doctor may make a permanent but small mark on the skin to ensure that the radiation therapist will target the beam correctly.

- A person may need to wear a plaster cast ارتداء قالب جبس or use a headrest مسند رأس or another device to ensure that they stay still during treatment لضمان بقائه ثابتًا أثناء العلاج. The first session may be a simulation محاكاة, in which the team runs through the procedure.

What to expect? (Treatment plan)

- Many people have five sessions per week for 3–9 weeks, but this depends on specific factors. Each session lasts for around 15 minutes. Radiation therapy is painless, but there will be damage to surrounding tissue. This is why the treatment occurs on only 5 days per week. The 2-day break allows for some healing.

- A person who has internal radiation therapy may require an anesthetic before the doctor can implant the radioactive substance. Overall, several sessions and some time in the hospital may be necessary.

- The details of the process depend on the type of radiation therapy and the type and location of the cancer.

What to expect? (Treatment plan)

Aftercare

- After receiving external treatment, a person can go home and continue with their daily routine.

- However, they may experience:

1. tiredness
2. sensitivity around the treatment site
3. emotional distress

What to expect? (Treatment plan)

Aftercare

- To help manage these effects, it is important to:

1. get plenty of rest
2. eat healthfully
3. talk to friends and family about any side effects
4. follow instructions, which may involve skin care, from the treatment team
5. avoid spending time in the sun, due to a risk of photosensitivity
6. Also, monitor for adverse effects and tell the doctor if they occur. The doctor may recommend additional treatments aimed at relieving these.

- People may need to speak to their employers about adjusting work schedules or taking medical leave.

Outlook

- Some people feel anxiety and concern about radiation therapy. It has various uses in treating cancer, and it can help achieve complete remission, in some cases.

- Radiation can be costly.
- Discuss any concerns with the doctor and ask as many questions as possible. Knowing what to expect can help. For example:

Question:

Will my hair grow back after radiation therapy?

Answer:

Radiation therapy only causes hair loss at the site receiving the therapy. Hair loss may be temporary or permanent, depending on the site and the doses. Higher doses of radiation may be more likely to result in permanent hair loss.