

NURSING CARE OF THE CLIENT RECEIVING RADIATION THERAPY

NURSING RESPONSIBILITIES FOR EITHER EXTERNAL OR INTERNAL RADIATION THERAPY

- Carefully assess and manage any complications, usually in collaboration with the radiation oncologist.
- Assist in documenting the results of the therapy; for example, clients receiving radiation for metastases to the spine will show improved neurologic functioning as tumor size diminishes.
- Provide emotional support, relief of physical and psychologic discomfort, and opportunities to talk about fears and concerns. For some clients, radiation therapy is a last chance for cure or even just for relief of physical discomfort.

EXTERNAL RADIATION

Prior to the start of treatments, the treatment area will be specifically located by the radiation oncologist and marked with colored semipermanent ink or tattoos. Treatment is usually given 5 days per week for 15 to 30 minutes per day over 2 to 7 weeks.

Nursing Responsibilities

- Monitor for adverse effects: skin changes, such as blanching, erythema, desquamation, sloughing, or hemorrhage; ulcerations of mucous membranes; nausea and vomiting, diarrhea, or gastrointestinal bleeding.
- Assess lungs for rales, which may indicate interstitial exudate. Observe for any dyspnea or changes in respiratory pattern.
- Identify and record any medications that the client will be taking during the radiation treatment.
- Monitor white blood cell counts and platelet counts for significant decreases.

Client and Family Teaching

- Wash the skin that is marked as the radiation site only with plain water, no soap; do not apply deodorant, lotions, medications, perfume, or talcum powder to the site during the treatment period. Take care not to wash off the treatment marks.
- Do not rub, scratch, or scrub treated skin areas. If necessary, use only an electric razor to shave the treated area.
- Apply neither heat nor cold (e.g., heating pad or ice pack) to the treatment site.
- Inspect the skin for damage or serious changes, and report these to the radiologist or physician.

- Wear loose, soft clothing over the treated area.
- Protect skin from sun exposure during treatment and for at least 1 year after radiation therapy is discontinued. Cover skin with protective clothing during treatment; once radiation is discontinued, use sun-blocking agents with a sun protection factor (SPF) of at least 15.
- External radiation poses no risk to other people for radiation exposure, even with intimate physical contact.
- Be sure to get plenty of rest and eat a balanced diet.

INTERNAL RADIATION

The radiation source, called an implant, is placed into the affected tissue or body cavity and is sealed in tubes, containers, wires, seeds, capsules, or needles. An implant may be temporary or permanent. Internal radiation may also be ingested or injected as a solution into the bloodstream or a body cavity or be introduced into the tumor through a catheter. The radioactive substance may transmit rays outside the body or be excreted in body fluids.

Nursing Responsibilities

- Place the client in a private room.
- Limit visits to 10 to 30 minutes, and have visitors sit at least 6 feet from the client.
- Monitor for side effects such as burning sensations, excessive perspiration, chills and fever, nausea and vomiting, or diarrhea.
- Assess for fistulas or necrosis of adjacent tissues.

Client and Family Teaching

- While a temporary implant is in place, stay in bed and rest quietly to avoid dislodging the implant.
- For outpatient treatments, avoid close contact with others until treatment has been discontinued.
- If the radiologist indicates the need for such measures, dispose of excretory materials in special containers or in a toilet not used by others.
- Carry out daily activities as able; get extra rest if feeling fatigued.
- Eat a balanced diet; frequent, small meals often are better tolerated.
- Contact the nurse or physician for any concerns or questions after discharge.