Preventive Radiotherapy after Hip Replacement

Why am I getting radiotherapy?
After a hip replacement, some people are at risk of growing extra bone in their new hip joint; this is called heterotopic ossification (H.O.). One dose of radiation done a few days after surgery can prevent this. Radiotherapy prevents extra bone growth in the joint tissues.

What is heterotopic ossification?
H.O. occurs when bone cells grow in the place of tissue cells in the joint. This is not cancer. H.O. can lead to stiffness, loss of movement and failure of your new hip joint.

What is radiotherapy?
Radiotherapy, sometimes called radiation, is like an x-ray. It is a painless treatment used to stop the growth of extra or unwanted bone. Radiotherapy can be used as a cancer treatment, but there are many other uses. This is not for cancer treatment; you are receiving it to prevent H.O.

What happens during radiotherapy?
You will go down to the clinic to meet with the radiotherapy doctor. Staff will perform a practice radiation treatment, also called a simulation. The simulation helps the doctor decide your dose for radiation.

You will lie still on a narrow table. Over the table is the radiation machine. This machine may be noisy, but will not touch you. Your body will be covered except for the hip area. Your doctors will review the treatment plan and make changes if needed.

After the simulation, you will return to your hospital room if you are a patient at the main hospital. If you have been discharged from the American Center, you will remain at the East Clinic until the radiology staff is ready for your actual treatment. Your actual treatment will happen later that day.

How long is the treatment?
The actual treatment time is about 15 minutes. You will receive radiation for two minutes during that time.

What does it feel like?
You will not feel any pain from the radiation itself. You may feel discomfort or stiffness from moving or lying on the narrow table.

How will my pain be managed?
You may receive pain medicine before you go to the procedure. If you get pain during treatment, let the radiation staff know.

How will I be positioned?
You will be lying on your back during the treatment.

What can I expect after treatment?
You may have pain or stiffness from lying still on the table. This can be treated with medicine. It is also normal to feel tired from the activity during the treatment.

What are the risks:
- **On my reproductive organs?**
  Radiation may affect sperm, so men's genitals are protected during the treatment. Avoid having a baby for 6 months after radiation treatment. There is little information about the effects of radiotherapy on female reproductive organs. The only area radiated will be around the hip joint. All other areas are shielded and all other areas including the reproductive organs are protected.
• Of developing cancer? No studies have shown an increased risk of cancer after radiation treatment of H.O.
• On my skin? Skin problems are rare and it will not affect wound healing.
• On my bones? Bone and bone marrow problems are rare.

How can I prepare for radiotherapy?
• There is nothing special you need to do before this treatment.
• You may want to use the bathroom before leaving your room.
• You will sign a consent form after talking with your doctor in the clinic.