Radiation Therapy

Radiation Therapy (R/T) For Cancer

- About 99% of patients treated with Radiation Therapy (R/T) have malignancies
- Approximately 60% of patients with cancer require Radiation Therapy
  - About 60% get R/T with the aim to cure
  - About 40% get R/T to relieve symptoms (palliation)
Radiation Therapy (R/T) For Cancer

- Radiation therapy is generally painless
- Usually need several weeks of treatment
- The aim is to control cancer with the least possible damage to the patient
- Physiologic changes to superficial and deep non-target tissues are common
  - ‘Sunburn’
  - Scarring
- Newer techniques with multiple portals reduce ‘collateral’ damage

Treatment Planning
Radiation Therapy Machine (Linear Accelerator)

Lung Cancer Pre and Post Radiation Therapy
# SIDE EFFECTS and COMPLICATIONS OF RADIATION THERAPY or RADIATION EXPOSURE

- Fatigue
- Skin reactions (erythema, desquamation)
- Loss of appetite
- Temporary drop in platelet and WBC counts
- After months or years can get complications in kidney, spinal cord, lung, skin, etc
  - Scarring, ulcerations
  - Some can be lethal, such as induction of a secondary tumor