Radiation Therapy for Soft Tissue Sarcomas

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What We Do in the Decorated Dungeon

Hello!!! Anybody down there
Radiation Is Energy!
Radiation Therapy for Sarcomas

- Neoadjuvant radiation therapy
- Adjuvant radiation therapy
- Radiation therapy for unresectable disease
- Radiation therapy for metastatic disease
  - Ablative therapy for salvage
  - Palliative treatments
Radiation Therapy for Sarcomas

- **Teletherapy (External Beam)**
  - Photon Beams
  - Particle Beams
    - Electron beams
    - Proton beams

- **Brachytherapy**
  - Temporary
  - Permanent

- **External Beam Radiation Therapy**
  - Two dimensional treatment
  - Three dimensional treatment
    - 3D conformal RT
    - Intensity Modulated RT (IMRT)

- Image Guided Radiation Therapy (IGRT)
- Stereotactic Radiation Therapy (SBRT)

**AN ACRONYM SOUP**
How does radiation therapy work?

First - Think on an anatomic and cellular level
How does radiation therapy work?

Radiation  Growth  Death

Our most common goal
Radiation Therapy
Radiation Therapy Planning
The energy that is imparted by a beam of radiation is dependent on its energy and mass.
Proton Vs. Photon Therapy - Physics

THE BRAGG PEAK

www.isrealprotontherapy.com
The “Best” Radiation Therapy

- Fits the clinical situation - **One size does not fit all!**
- Factors in other considerations:
  - medical issues
  - age
- Works cooperatively with other forms of therapy
  (i.e. understands the roles of surgery and systemic agents)
- Follows “Hayes’ Rules”
  - Hit what you need to hit
  - Miss what you need to miss
- Understands the limits of technology
SELECTION IS THE SILENT PARTNER OF SUCCESS!