Returning to Life
What to Expect Years After Radiotherapy
Radiotherapy-related Toxicity

- Toxicities depend on:
  - Site(s) treated
  - Dose delivered
  - Age at treatment
  - Other modifiers (other risk factors, radio-sensitizers, etc.)
- Breast Cancer
- Pelvic Cancers (gynecologic, rectal, prostate)
Breast RT: Heart
Breast: Effect of RT on Heart

Risk Factor = diabetes, high blood pressure, high cholesterol, smoking

Increase per gray, 7.4% (95% CI, 2.9–14.5)
P < 0.001
Breast: Prone Position
Breast: Deep Inspiration Breath Hold

Free Breathing

DIBH
Breast: Beam Arrangements
Breast: Malignancy

- RT carries very small risk of malignancy
- Esp. in sliver of lung in smokers
- QUIT!!
Pelvic RT

- GU
- GI
- Vagina
- Uterus/Ovaries
- Bone
- Malignancy
Pelvic RT: GU

• Genitourinary:
  - Fibrosis in bladder with decreased capacity – *anticholinergics*
  - Focal injury with bleeding – *cautery/argon laser, hyperbaric oxygen*
  - Fistula – *surgical repair or diversion*

Work closely with a urologist
Pelvic RT: GI

- Gastrointestinal
  - Chronic diarrhea – antidiarrheal medications
  - Vitamin Malabsorption – replacement (e.g., vit B12)
  - Bile Salt Malabsorption – cholestyramine
  - Ilius or obstruction – conservative vs. surgery
  - Rectal bleeding – sucralfate enema, coagulation, formalin, hyperbaric oxygen

Work closely with a gastroenterologist
Pelvic RT: Vagina

- Vagina
  - Stenosis – vaginal dilator
  - Dryness – lubricant, vaginal estrogen

- Ovaries
  - Menopause – HRT
  - Fertility loss – Oncofertility
Pelvic RT: Other

- Osteopenia in RT field – vitamin D and calcium
- Pelvic/Sacral insufficiency fractures
- Hematologic (bone marrow)

- Malignancy risk – colonoscopic screening
Pelvic: RT Techniques

- Multiple fields
- High energy photons
- IMRT
Pelvic: Image-guided Brachy
Tools You Can Use

• Tools to Use from this presentation include:
  - Optimize cardiac risk factors (diabetes, high blood pressure, high cholesterol)
  - Quit smoking!
  - Pursue long-term follow-up care
Survivorship

Survivorship Services at Robert H. Lurie Comprehensive Cancer Center

• Lynn Sage Breast Cancer Survivorship Program
• Cancer Survivorship Specialty Clinics
  - Currently seeing the following:
    • Lung
    • Colon
    • Prostate
    • Testicular

• Eligibility
  • Diagnosed with stage I-III of any of the above listed cancers.
  • Have completed any recommended surgery, chemotherapy or radiation therapy

• Contact Information
  • To speak with Survivorship Program please call 312-695-0990.
  • http://cancer.northwestern.edu/survivorship/