



Focus on Lung Cancer: Non-Small Cell Lung Cancer Advanced

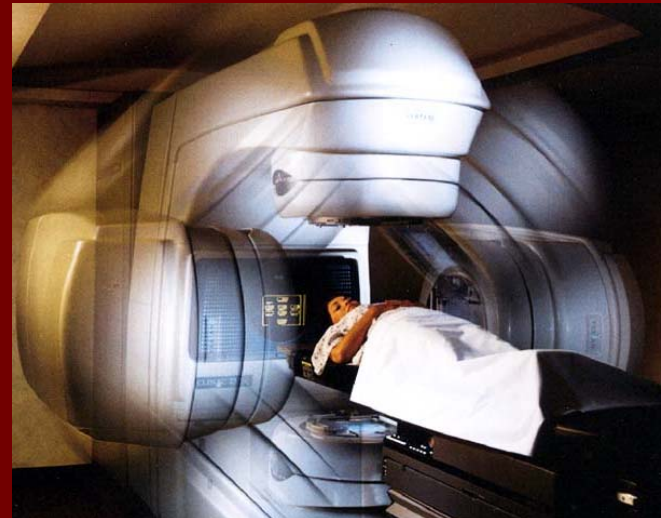
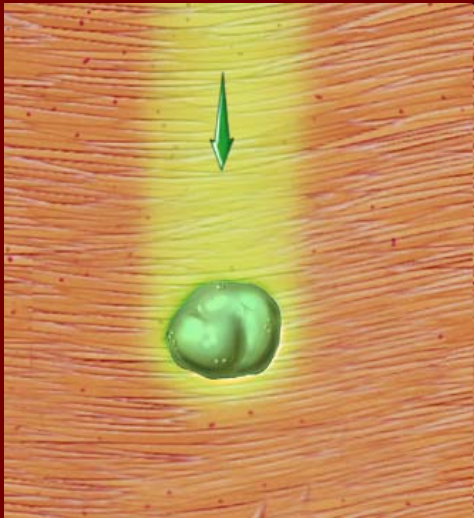
Radiation Therapy

Smith "Jim" Apisarnthanarax, M.D.

October 23, 2009

What is Radiation Therapy?

- High energy x-rays
- Kills cancer cells
- Painless
- Local treatment



Indications in Advanced NSCLC

- Brain metastases
- Local symptom relief
- Treatments: 1-3 weeks



Radiation for Brain Metastases

“Many” lesions

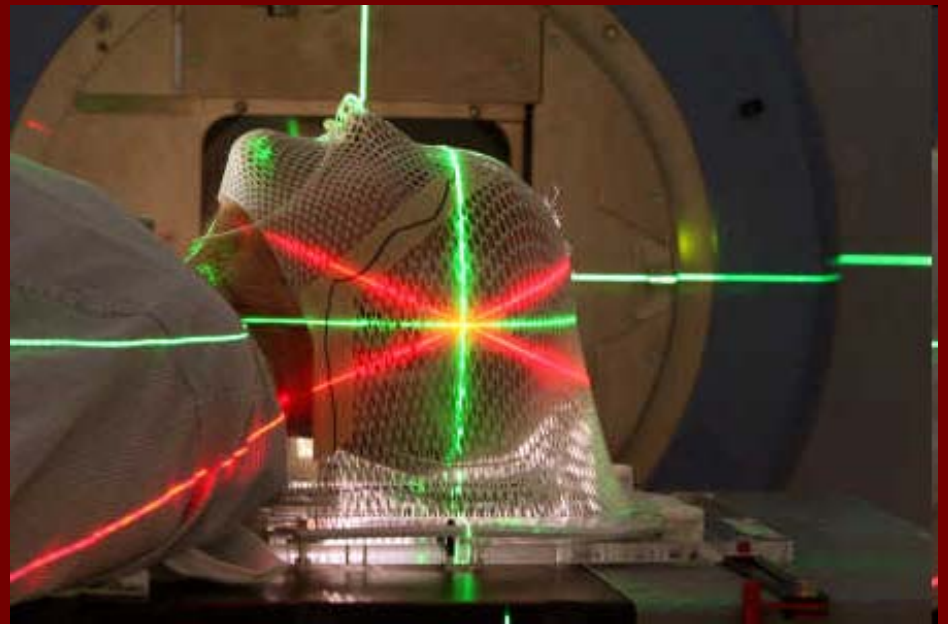
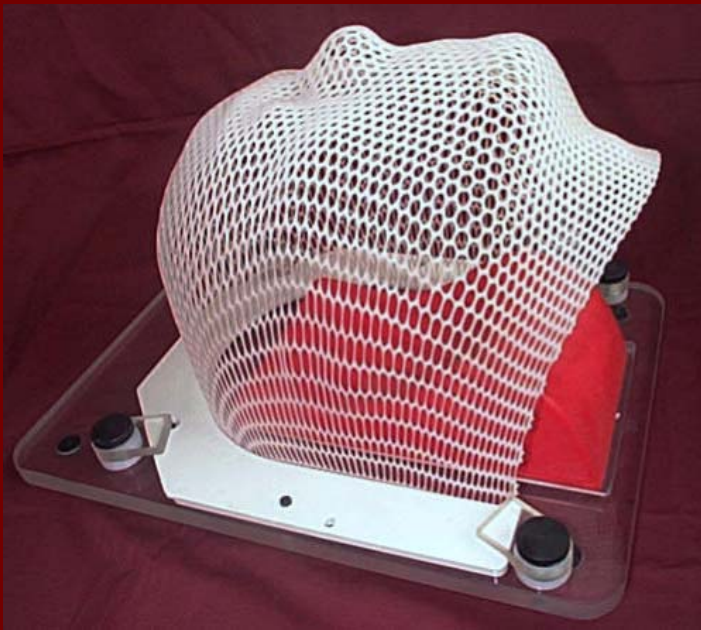
- Whole brain radiation

Single or “Few” lesions

- Whole brain radiation
- Surgery
- Stereotactic radiosurgery
(*Gamma Knife*)
- Combination of above



Whole Brain Radiation

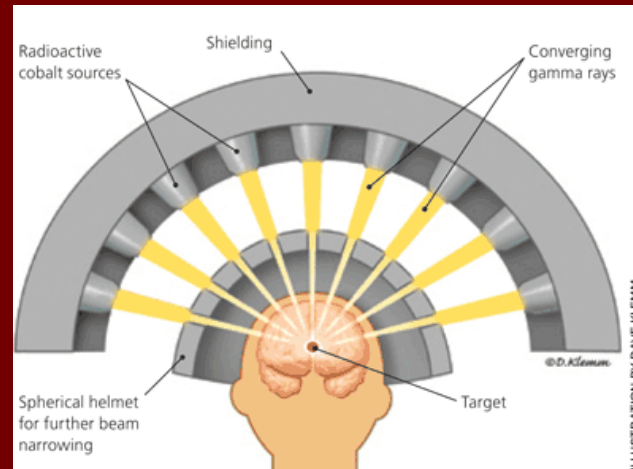


Tempol Shampoo Study at Penn

- Side effect of radiation: hair loss (alopecia)
- Clinical trial
- Decrease/prevent hair loss



Stereotactic Radiosurgery (*Gamma Knife*)



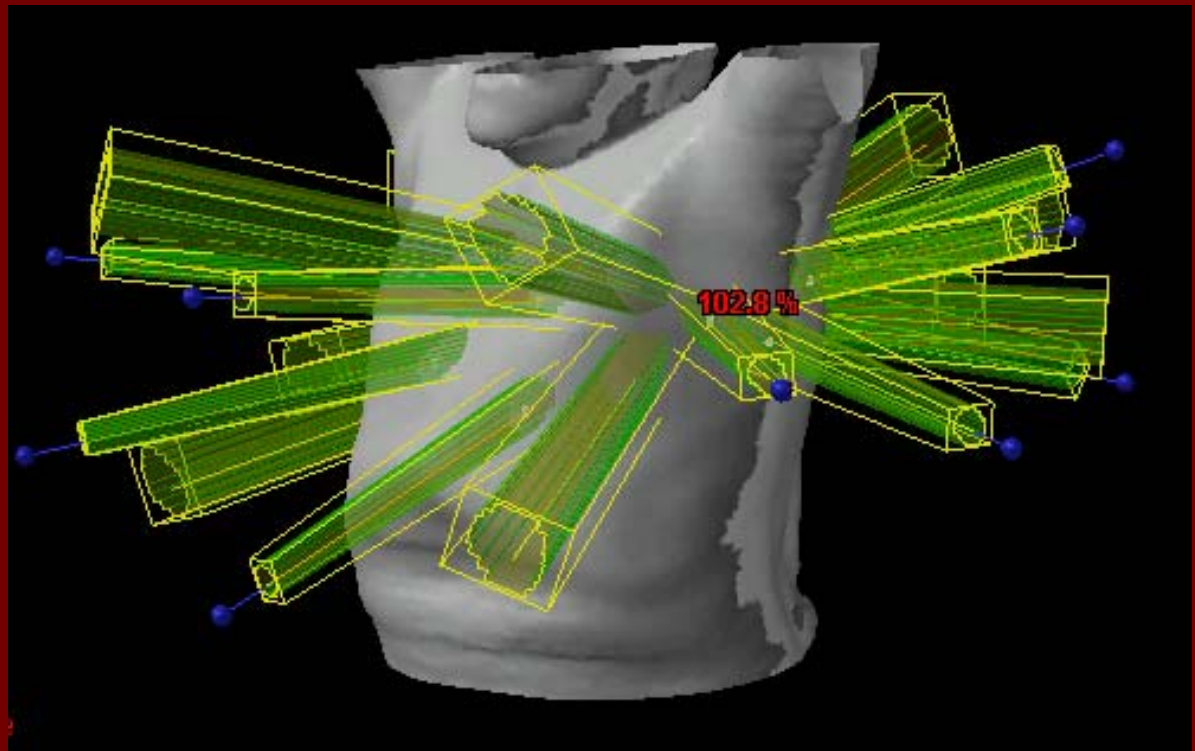
Local Symptom Relief

- Pain
- Bleeding (coughing blood)
- Difficulty breathing

- Response 40-80%



Stereotactic Body Radiation Therapy (SBRT)





The Perelman Center for Advanced Medicine

