Patterns Of Practice And Outcomes For Stage-I Non-Small Cell Lung Cancer (NSCLC): Analysis Of SEER-17 Data 1999-2008

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Background:

• Lung cancer is among the most common cancer diagnoses and the most common cause of death from cancer.

• For stage I (the earliest stage) of lung cancer, surgery is the primary treatment.

• For patients too sick for surgery, radiation treatments offer an alternative, non-invasive, painless chance for cure.

• Recent advances in radiation technology have increased the dose we can give to the tumor and reduce the dose to the healthy surrounding lung.
Background:
Stereotactic Body Radiation Therapy (SBRT) is one way we have increased radiation dose to the tumor while sparing the healthy surrounding tissue.
Methods

• SEER-17 database identified 53,764 patients with Stage I NSCLC (1999-2008)

• Patterns of care analyses and survival curves were generated from these data

• Patients from two eras were compared:
  27,469 from 1999-2003 vs.
  26,195 from 2004-2008
Key Findings (1/2):
Outcomes in 2004-2008 vs 1999-2003

Survival for all stage I lung cancer patients improved by 27%

Survival for stage I lung cancer patients treated with only radiation improved by 31%
Key Findings (2/2)

Fewer patients are getting radiation, more patients are getting surgery. 1 in 6 are still not getting curative treatments (either surgery or radiation).

1999-2003
(27,469 total)

- Surgery: 16,447 (60%)
- Surgery + RT: 1,016 (4%)
- RT only: 3,969 (14%)
- No treatment: 5,514 (20%)
- Unknown: 523 (2%)

2004-2008
(26,295 total)

- Surgery: 17,571 (67%)
- Surgery + RT: 754 (3%)
- RT only: 3,504 (13%)
- No treatment: 4,218 (16%)
- Unknown: 238 (1%)
Conclusions (3):

Survival for stage I lung cancer patients improved for almost all treatment groups and improved the most for patients treated with radiation alone.


The number of patients who do not receive a potentially curative therapy decreased, but 1 in 6 patients still did not get a curative surgery or radiation between 2004-2008.