Medical Xpress

Differences identified in treatments of of patients with second primary lung cancers versus primary lung cancer

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Patients with second primary lung cancers (SPLC), when compared to those with one primary lung cancer (OPLC), are more likely to have localized disease at the time of diagnosis and are more likely to receive surgical treatment rather than radiation treatment. However, patients with SPLC have a 12% higher lung cancer specific mortality, Fox Chase Cancer Center researchers reported today at the annual meeting of the International Association for the Study of Lung Cancer.

"We want to identify factors that can improve and prolong lung cancer survivorship," says Linna Li, M.D., resident physician in the radiation department at Fox Chase.

It is recognized that patients who were previously treated for lung cancer are at high risk of developing SPLC, but the impact of this second cancer on treatment and lung cancer specific mortality is unknown. With this study Li and her colleagues aimed to uncover some of these unknowns.

The study used the National Cancer Institute Surveillance, Epidemiology and End Results (SEER) database and evaluated the treatment and outcomes of non-small cell lung cancer (NSCLC) survivors with SPLC. Survivors of at least 2 years, over the age of 18 and undergoing active follow-up were included. With a median follow-up of 7 years, 49,577 patient with OPLC and 2,914 patients with SPLC were identified. The

incidence, tumor characteristics, treatment, and cause of death in patients with OPLC and SPLC were analyzed.

"By studying a large population database, we can get important information to guide recommendations for treatment and follow up."

The research showed that median time to develop a second cancer is 51 months with 28% diagnosed 5 years after initial diagnosis of lung cancer. When diagnosed with OPLC versus SPLC, localized disease was 45% versus 60%, loco-regional disease was 35% versus 32%, and metastatic disease was 14% versus 5%. The data also showed that treatment of OPLC versus SPLC was 68% versus 87% with surgery, 31% versus 20% with radiation therapy, and 12% versus 12% with both surgery and radiation therapy. At the time of the last follow up, 56% of OPLC and 67% of SPLC were deceased. The leading cause of death in patients with OPLC versus SPLC was 64% versus 76% from lung cancer—showing that those with SPLC have a 12% higher lung cancer specific mortality.

"Curing second primary lung cancers is crucial in the long term care of lung cancer survivors. We should continue to follow lung cancer survivors after 5 years to detect second cancers earlier. It's unclear why SPLC are more likely to die from lung cancer even though they present with earlier disease. Perhaps they have less reserve, limited treatment options for the second treatment, or simply, that they are older. We need to study this more carefully in future clinical trials." adds Li.

Source: Fox Chase Cancer Center (news : web)