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Is Bigger Better in Lung Cancer?

Lung cancer outcomes better in obese patients early on but obesity linked to overall higher risk of death

(dailyRx News) Though obesity can increase the risk of developing many diseases, the link between obesity and cancer outcomes is still not clear.

According to a new study, obese patients with lung cancer initially had better outcomes after treatment with chemotherapy compared to thinner patients.

However, this study's results also showed that, over a longer period of time, obesity was associated with an overall higher risk of death.

"Ask your doctor about lifestyle changes to help prevent cancer."

This study was conducted by Suzanne Dahlberg from the Dana-Farber Cancer Institute in Boston, Massachusetts and colleagues.

The aim of this study was to examine the effect of obesity on the clinical outcomes of patients with a common type of lung cancer called non-small cell lung cancer.

Obesity has been associated with better outcomes for certain cancers, such as cancer of kidney cells, and with poorer outcomes for other cancers, such as colon, prostate and breast cancers. But according to this study, the link between lung cancer and obesity had not previously been studied in detail.

The researchers looked at 2,585 patients being treated with chemotherapy for non-small cell lung cancer between the

years 1993 and 2004. The body mass index (BMI) of these patients was calculated.

BMI is a measure that is calculated by looking at a person's weight in relation to their height to determine whether they are normal weight, overweight or obese.

Patients were classified according to their BMI as underweight (BMI less than 18.5), normal weight (BMI between 18.5 and 25), overweight (BMI between 25 and 30) or obese (BMI equal to or greater than 30).

Of the participants, 4.6 percent were classified as underweight, 44.1 percent as normal weight, 34.3 percent as overweight and 16.9 percent as obese.

The researchers found that the overall survival with chemotherapy among underweight patients was 7 months, among normal weight patients was 8.6 months, among overweight patients was 9.3 months and among obese patients was 11 months.

However, the researchers also found that the risk of death from any cause increased significantly for obese patients after 16 months of observation.

According to this study, these findings may indicate that the better outcome for obese patients was for a limited time. But after a certain period of time, obese patients had an overall higher risk of death due to any cause.

This study also pointed out limitations of previous studies that showed that obesity had a positive effect on survival. As stated by the authors, this effect may be because obese patients adhered to their treatment due to lower toxic effects.

According to Associate Professor of Medicine/Oncology at the University of Colorado Cancer Center and dailyRx Contributing Expert D. Ross Camidge, MD, PhD, "This is a very thought-provoking analysis. Elevated BMI was associated with better initial overall survival.

"If chemotherapy dosing was based on height and weight, bigger people may just have got 'more' chemotherapy. Or there may have been an interaction between the chemotherapy and the body's hormones associated with being obese.

"On a practical level, however, this data does not change practice — patients are the weight that they are when they present — but it does raise a lot of interesting questions, especially those that could be explored further in subsequent studies relating to hormone or drug interactions," said Dr. Camidge.

The study authors recommended that additional studies be conducted to study the obesity-lung cancer link further. Understanding this link and the mechanisms involved will help identify dietary and lifestyle changes that might be beneficial to patients.

The results of this study were published July 25 in the *Journal of Thoracic Oncology*.

The study received funding from the National Cancer Institute, National Institutes of Health, the Department of Health and Human Services and Public Health Service Grants.

Conditions: [Non Small Cell Lung Cancer](#) [Cancer](#) [Obesity](#) [Healthy Eating and Diet](#)

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International Association for the Study of Lung Cancer, "Effect of obesity on patients with advanced non-small cell lung cancer"
Centers for Disease Control, "How is BMI Calculated and Interpreted?"

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