Increasing physical activity improves survival in lymphoma patients, researchers say

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An observational study by researchers at Mayo Clinic has found that increasing physical activity not only decreased the risk of death from all causes but also decreased the risk of death specifically from lymphoma. Lymphoma is a cancer of the lymphatic system, the part of the body's germ-fighting network which includes the lymph nodes (lymph glands), spleen, thymus gland and bone marrow. Lymphoma can affect those areas as well as other organs throughout the body. Study results were presented today at the 59th American Society of Hematology annual meeting in Atlanta by Priyanka Pophali, M.B.B.S., a hematologist at Mayo Clinic.

"As physicians, we recommend physical activity for all cancer survivors to improve overall quality of life," says Dr. Pophali. "But we did not know if physical activity would have an impact on survival in lymphoma patients."

Dr. Pophali and her colleagues wanted to assess how physical activity affected survival in all subtypes of lymphoma patients both before and after diagnosis. Specifically, they wanted to know if changing the level of a lymphoma patient's physical activity after diagnosis could affect survival.

In order to answer these questions, researchers studied a cohort of 4087 lymphoma patients enrolled prospectively (within 9 months of diagnosis) at Mayo Clinic between 2002 and 2012. At enrollment, participants completed questionnaires that asked about their usual physical activity before their lymphoma diagnosis. Researchers regularly contacted patients to collect information on exposures and outcomes and contacted them for a three-year follow-up. Researchers used this information to calculate a Godin Leisure Score Index, a physical activity score which is a validated tool for measuring physical activity in oncology patients. Patients were also asked about their perception of any change in their level of physical activity (increase, decrease or no change) at three years after their diagnosis compared to baseline. Researchers then evaluated the association of physical activity with overall and lymphoma-specific survival.

Researchers found that patients who had a higher level of usual adult physical activity prior to a lymphoma diagnosis had significantly better overall and lymphoma-specific survival compared to those who were less physically active. They also found that patients who increased their level of physical activity after their lymphoma diagnosis (at three-year follow-up) had significantly better overall and lymphoma-specific survival compared to those who were less physically active.

"Our findings show that physical activity can have a positive impact on survival in lymphoma patients," says Dr. Pophali. "Importantly, our study shows a survival benefit in patients who increase their level of physical activity. Therefore, since physical activity behaviors can be modified, physicians should counsel patients and survivors on the importance of physical activity and encourage them to maintain and, if possible, increase their level of physical activity."

Provided by Mayo Clinic