Quality of life predicts cancer survival, U-M study finds

Assessment could help identify more aggressive head and neck tumors

ANN ARBOR, Mich. — Head and neck cancer patients who reported lower physical quality of life were more likely to die from their disease, according to a new study from the University of Michigan Comprehensive Cancer Center. The findings could mean that identifying patients with poor quality of life could also identify patients with particularly aggressive tumors.

"Low quality of life may have value in screening patients for recurrence. By identifying patients with poor quality of life, we may also be able to identify early on those who have particularly aggressive tumors," says lead study author Carrie A. Karvonen-Gutierrez, M.P.H., research associate at the U-M School of Public Health and the VA Ann Arbor Healthcare System.

Results of the study appear in the June 1 issue of the Journal of Clinical Oncology.

The researchers surveyed 495 people at four hospitals who had been diagnosed with head and neck cancer within the previous two years. Participants responded to questions about physical and emotional quality of life, including pain, eating and swallowing, speech and emotional well-being.

The researchers found that general physical health and quality of life issues were highly associated with survival. And in particular, patients who reported difficulty with pain, eating and speech were significantly less likely to survive. The researchers suggest that pain and declines in other physical quality of life measures could be a marker for cancer recurrence.

"Our findings validate the concept that doctors have long recognized: that persistent or increasing pain is a worrisome clinical finding. Perhaps in the future, quality of life data will be routinely collected in a standardized way, and trends in pain scores will trigger more aggressive examinations for cancer recurrence," says study author Sonia A. Duffy, Ph.D., R.N., a research scientist at the VA Ann Arbor Healthcare System, associate professor of nursing at the U-M School of Nursing and research assistant professor of otolaryngology at the U-M Medical School.

"While patients are monitored and screened after cancer treatment, small recurrences of cancer may be difficult to detect, even with standard imaging techniques. But, for example, small islands of cancer near a nerve can cause substantial pain before the cancer is detected on routine examination or imaging scans," says study author Jeffrey Terrell, M.D., associate professor of otolaryngology at the U-M Medical School.

The next question for the researchers is to understand whether treatments that improve quality of life can improve survival.

"Although it is not yet clear how the association works between survival and quality of life related to head and neck pain, it is clearly advantageous to minimize pain for patients. And, if in doing that, the chance of cancer recurrence or patient survival is improved, the effort is worthwhile, regardless of why these factors are related. Patients want improved quality of life after cancer treatment—whether it be to improve survival or simply to improve everyday living and feel better," Duffy says.

Based on their findings, the study authors recommend routine quality of life assessments of patients with head and neck cancer, before treatment and again after six months, one year and two years.
Additional study authors were David L. Ronis, Ph.D., associate research scientist at the U-M School of Nursing and research scientist at the VA Ann Arbor Healthcare System; Karen E. Fowler, research associate at the U-M Medical School and VA Ann Arbor Healthcare System; and Stephen B. Gruber, M.D., Ph.D., H. Marvin Pollard Professor of Internal Medicine at the U-M Medical School.

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