Complementary medicine for cancer can decrease survival

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People who received complementary therapy for curable cancers were more likely to refuse at least one component of their conventional cancer treatment, and were more likely to die as a result, according to researchers from Yale Cancer Center and the Cancer Outcomes, Public Policy and Effectiveness Research Center (COPPER) at Yale School of Medicine. The findings were reported today online in *JAMA Oncology*.

Use of complementary medicine—medical therapies that fall beyond the scope of scientific medicine—is growing in the United States and often used by patients with cancer. Although many patients believe that a combination of complementary medicine and conventional cancer treatment will provide the greatest chance at a cure, there is limited research evaluating the effectiveness of complementary medicines. It is also unknown whether patients who use complementary medicines use them to improve their response to conventional medical therapies, or use them in lieu of recommended conventional therapies.

"Past research into why patients use non-medical complementary treatments has shown the majority of cancer patients who use complementary medicines believe their use will result in improved survival," said the study's senior author, James Yu, M.D., associate professor of therapeutic radiology at Yale Cancer Center. "We became interested in this topic after we reviewed the literature, and found that there was scant evidence to support this belief."

To investigate complementary medicine use and its impact on survival

and treatment adherence, the researchers studied 1,290 patients with breast, prostate, lung, or colorectal cancer in the National Cancer Database (NCDB)—a joint project of the Commission on Cancer of the American College of Surgeons and the American Cancer Society. The NCDB represents approximately 70% of newly diagnosed cancers nationwide. Researchers compared 258 patients who used complementary medicine to 1,032 who did not.

The researchers studied de-identified patients diagnosed over a 10-year period, from 2004 to 2013. By collecting the outcomes of patients who received complementary medicine in addition to conventional cancer treatments, they found a greater risk of death. Interestingly, they noted, despite having received some conventional cancer therapy, these patients were more likely to refuse other aspects of recommended care like chemotherapy, surgery, radiation and/or hormone therapy. The researchers concluded patients who chose to use complementary medicines as cancer treatment, were more likely to refuse other conventional cancer treatments and as a result, had a higher risk of death than those who used no complementary medicine.

"The fact that complementary medicine use is associated with higher refusal of proven cancer treatments as well as increased risk of death should give providers and patients pause," said lead author Skyler Johnson, M.D., chief resident in radiation oncology at Yale School of Medicine. "Unfortunately, there is a great deal of confusion about the role of complementary therapies. Although they may be used to support patients experiencing symptoms from cancer treatment, it looks as though they are either being marketed or understood to be effective cancer treatments."

Cary Gross, M.D., co-author of the study, called for further research, "The sources of misinformation need to be better understood, so that patients aren't being sold a false bill of goods."

Henry Park, M.D., is also a study author.

More information: *JAMA Oncology* (2018). jamanetwork.com/journals/jamao … /jamaoncol.2018.2487

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