Low-Dose Chemotherapy Effective for Older People With Gastroesophageal Cancer

A low dose of platinum-based chemotherapy worked as well as higher doses for elderly and frail people with esophageal and stomach cancer.

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The Phase III GO2 trial, which included more than 500 people with advanced gastroesophageal cancer, found that the lowest tested dose of oxaliplatin (Eloxatin) plus capecitabine (Xeloda) was comparable to the highest dose when it came to delaying disease progression and minimizing side effects, according to a study to be presented next month at the 2019 American Society of Clinical Oncology (ASCO) annual meeting in Chicago.

“Previous trials of palliative chemotherapy for gastric and esophageal cancer have not included frail or older patients, therefore the benefit of chemotherapy in these groups was unknown,” lead study author Peter Hall, PhD, of the University of Edinburgh said in an ASCO press release. “We hope our finding helps patients make a more informed choice, between low-dose chemotherapy and no chemotherapy at all, with the knowledge that that low-dose chemotherapy can prove beneficial and still allow them to maintain some quality of life while slowing the progression of the disease.”

More than 17,600 people in the United States will be diagnosed with esophageal cancer this year, according to the American Cancer Society. Cancers of the esophagus, stomach and gastroesophageal junction (where the swallowing tube meets the stomach) are often diagnosed late and are difficult to treat. A majority of people with these cancers are older or frail, and many are unable to tolerate standard combination chemotherapy, Hall said at an ASCO advance press briefing.

The GO2 trial was designed to determine the optimum dose of oxaliplatin (which inhibits DNA replication) and capecitabine (which inhibits tumor cell division) for older or frail patients with advanced gastroesophageal cancer. A previous Phase II trial in a similar population found that oxaliplatin plus capecitabine was more effective than capecitabine alone, and this dual combination was also more effective than a triple combo of oxaliplatin, capecitabine and epirubicin (Ellence), which proved to be too toxic for many patients, Hall noted as background.

The Phase III study included 514 older and frail people, ages 51 to 96, in the United Kingdom. They were randomly assigned to one of three chemotherapy dose levels:

- Level A: oxaliplatin at 130 milligrams per square meter of body area administered once every 21 days plus 625 mg/m^2 of capecitabine twice daily
- Level B: oxaliplatin and capecitabine at 80% of the Level A doses
- Level C: oxaliplatin and capecitabine at 60% of the Level A doses

After nine weeks, the participants were evaluated using an assessment tool known as Overall Treatment Utility, or OTU, which incorporates clinical benefit, tolerability, quality of life and patient satisfaction. GO2 was the third U.K. study to use OTU as an outcome for older and frail patients.

Not surprisingly, people who received the lowest chemotherapy doses experienced fewer toxicities than those who received the medium or high doses. Severe (Grade 3 or higher) side effects were seen in 56% of people who used the high or medium dose, compared with 37% of those assigned to the low dose.

In addition, the low-dose regimen also led to better OTU outcomes than the two higher doses, Hall reported. In fact, the low dose produced the best outcomes even among younger and less frail people, who traditionally would be candidates for more intensive treatment.

Overall survival duration was comparable across all three dose levels: a median of 7.5 months with the highest dose, 6.7 months with the medium dose and 7.6 months with the low doses. Progression-free survival, meaning patients were still alive without worsening of disease, was also comparable, at 4.9 months, 4.1 months and 4.3 months, respectively. In the low-dose group, 43% had good OTU scores, compared with 35% and 36%, respectively, in the high and medium dose groups.

"'Less is more' is becoming a common refrain in some areas of cancer treatment, and one that is paying off for patients' quality of life," commented ASCO President Monica Bertagnolli, MD, of Dana-Farber Cancer Institute in Boston. "This trial seeks to balance quality of life and increased survival for older and frail people receiving palliative treatment for gastroesophageal cancer, providing data that we sorely need for this patient population. These data are important because they provide a potential new option for patients to slow the progression of the disease."

Click here to read the study abstract.

Click here to read an ASCO press release about the study.
