Researchers Continue to Make Major Strides in Thyroid Cancer Treatment

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Until about five years ago, there were no effective treatments for advanced thyroid cancer, a condition affecting the thyroid gland that can be fatal in up to 50 percent of late-stage diagnoses. Fortunately, several recent studies presented at the 2016 American Society of Clinical Oncology (ASCO) Annual Meeting have revealed a number of new drug innovations that are transforming the thyroid cancer treatment arena with the potential to save millions of lives every year, Cancer Therapy Advisor reports.

The thyroid is located at the front of the neck near the base of the throat. The butterfly-shaped gland is part of the endocrine system, a group of hormone-secreting glands that help regulate the body's functions. Thyroid cancer, which was diagnosed in approximately 63,000 Americans in 2016 and is currently on the rise across the country, occurs when cells in the thyroid gland start to abnormally mutate and eventually form tumors. Signs of the condition may include a lump or a nodule on the thyroid gland, changes to the voice, difficulty swallowing or pain in the neck and throat. In its early stages, thyroid cancer is highly treatable. But if the condition is diagnosed later on, it can be fatal.

Currently, the U.S. Food and Drug Administration (FDA) has approved four drugs to treat late-stage thyroid cancer. All the drugs, called kinase inhibitors, work by targeting tumors' vascular endothelial growth factor receptors, which interfere with thyroid cancer cell growth. Researchers said that since these new drugs were first approved in 2011, they've been key in doctors' efforts to defeat late-stage thyroid cancer. In addition, some experts said several new treatments currently being investigated might be even more effective at curing the condition.

During the ASCO presentation, researchers reviewed a recent Phase II study of 58 people in China living with medullary thyroid cancer who took a new kinase inhibitor called anlotinib. For the study, scientists gave participants an oral dose of 12 milligrams of either anlotinib or an older thyroid treatment called vandetanib each day for two weeks on and one week off. Subjects on the new drug showed a 48 percent response rate to treatment compared with a 45 percent response rate among patients on the older drug. What's more, researchers noted that common side effects, such as diarrhea and hypertension, were drastically reduced among those taking anlotinib, suggesting the drug had a much lower toxicity profile.

Researchers also presented a comprehensive genomic profiling study of 90 people diagnosed with anaplastic thyroid cancer, an extremely rare and aggressive form of thyroid cancer that currently has no effective chemotherapy or treatment options. The study identified five gene mutations that previous findings showed were common among people diagnosed with the condition.

Scientists said these findings identify genetic abnormalities that lead to the development of tumors and could lead to more novel and potentially better treatments and diagnostic tools in the future for anaplastic thyroid cancer.

Oncology experts said it’s still unclear how new immunotherapy tools will impact the treatment landscape of thyroid cancer just yet. But these studies offer plenty of hope to those facing the condition as this type of biologic treatment has drastically improved outcomes for people with other types of cancers.

To learn more about thyroid diseases, click here.
