A research team headed by surgical oncologist Dr. Shane Morita has found that the majority of Filipino thyroid cancer patients carry a genetic mutation that makes their disease worse than other ethnic groups. Morita performed a follow-up exam at the Queen’s Medical Center’s Cancer Center on Kanani Correa, who is recovering from thyroid cancer surgery. (Photo by Jamm Aquino / jaquino@staradvertiser.com)
Filipinos with thyroid cancer may be at a greater risk for an acquired genetic mutation in tumor cells associated with a worse outcome for the disease.

A research team led by Queen’s Medical Center surgical oncologist Shane Morita found that nearly 85 percent of Filipino patients with thyroid cancer had the BRAF genetic mutation, as compared with the average 45 percent in all papillary thyroid cancer patients.

“That clearly is what we call a disparity,” Morita said.

“This type of research is important because we’re looking at other ethnicities that are fairly unique to our islands. We hope that this research in thyroid cancer will advance knowledge of the disease, especially how it affects particular groups in Hawaii’s diverse population.”

The research is significant because it could help doctors tailor therapy to a patient and help scientists learn more about the biology of the disease in unique ethnic groups.

For instance, a doctor who finds the gene in a thyroid cancer patient could potentially be more aggressive with treatment — including extensive surgery, a higher dose of radioactive iodine and increased thyroid hormonal therapy — to improve disease outcomes.

The BRAF gene is associated with aggressive tumor behavior, a higher chance of treatment failure, increased recurrence and a worse outcome.

Physicians do not routinely test for the gene in every thyroid cancer patient.

“Perhaps we should be doing so in selected groups, such as our Filipino population, since the rate appears to be so high,” said Morita, a native of Hilo.
“The end goal is to improve patient care and to understand a little bit more about the ethnic disparities we see in Hawaii,” said Morita, who is also an assistant professor at the University of Hawaii John A. Burns School of Medicine and clinical faculty member at the UH Cancer Center.

“In Hawaii we have a unique opportunity because we get to study these ethnic groups that may not be as common in the rest of the country.”

The research, which began in 2008, was highlighted at an American Association for Cancer Research conference in Washington, D.C., in September, where Morita won the Faculty Scholar award for the study titled “Thyroid Cancer Ethnic Disparity in Hawaii: BRAF Mutation Within the Filipino Population.”

After noticing that an increasing number of his patients with thyroid cancer were of Filipino ancestry, Morita researched the state’s registry and confirmed that Filipinos were indeed the most commonly affected by the disease, which prompted him to further investigate.

In August the U.S. Food and Drug Administration approved a drug proven to fight against the BRAF gene in connection with melanoma.

The same drug is being tested for use with thyroid cancer patients, Morita said.

The Filipino population in Hawaii increased by more than 15 percent in the last decade to nearly 200,000 from 170,000.

Filipinos are the most common ethnic group affected by thyroid cancer in Hawaii.

Thyroid cancer has more than doubled in the United States over the past decade.
Locally the number of cases has grown to nearly 200 in 2008 from about 100 in 1998.

The study is the first time researchers have examined this particular gene and thyroid cancer within the Filipino population.

Morita said the research will be expanded with a goal to investigate further health disparities to determine whether and why inequalities in outcomes exist in select minority groups.

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