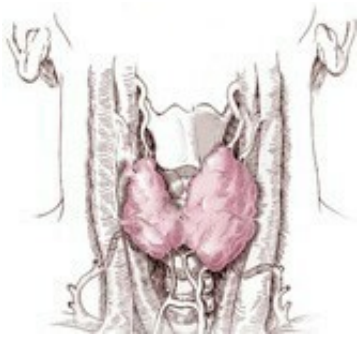
Steady rise in thyroid cancer not explained by better screening, study says

October 10 2013, by Steven Reinberg, Healthday Reporter



Researchers still baffled by tripling of cases over 30 years.

(HealthDay)—Better detection alone doesn't explain the dramatic increase in thyroid cancer cases seen in the United States over the past three decades, a new study says.

Researchers who looked at records for more than 200 patients were unable to show that advances in screening are behind the jump in thyroid cancer cases as some specialists believe.

"The incidence of thyroid cancer is on the rise and has nearly tripled in the last 30 years," said lead researcher Dr. David Goldenberg, director of head and neck surgery at Penn State Hershey Cancer Institute.

"Some researchers have attributed this increase in incidence to improved

sensitivity of diagnostic techniques," he said, referring to the discovery of small insignificant thyroid cancers via state-of-the-art imaging. "Others do not agree and say that there is a real rise in this disease."

Many thyroid cancers are discovered incidentally when a patient undergoes a diagnostic study for some other reason, such as trauma, neck pain or to detect clogged arteries in the neck, Goldenberg explained.

To try to determine whether the increase in thyroid cancer was due to better diagnosis or more actual cancer, Goldenberg's team compared incidentally discovered versus non-incidentally discovered thyroid cancers to see if the groups had different characteristics.

"We found that patients with incidentally discovered thyroid cancers were older, had more advanced disease and were more likely to be men," he said. "These findings imply that improved detection may not be the only cause for the increased incidence of thyroid cancer."

One expert who was not involved with the study said that the findings—published online Oct. 10 in *JAMA Otolaryngology Head & Neck Surgery*—add to the evidence that thyroid cancer really is on the rise.

"This study suggests that there is an actual true increase in the incidence of thyroid cancer," said Dr. Douglas Frank, director of the center for head and neck surgical oncology at Long Island Jewish Medical Center in New Hyde Park, N.Y. Although this rise is not supported directly by this study, he said, it is felt to be true generally and is supported by other current reports.

"The question has been answered," Frank said. "It is not just a matter of better detection. But it is unclear why there is an increase in true

incidence."

For the most common type of thyroid cancer, the prognosis is generally excellent, he noted. "Younger patients do the best, but older patients still generally do well," Frank added. "But older patients—generally those over age 50—with more advanced disease, with metastatic or large tumors, do not always do so well in terms of disease recurrence and ultimate survival, although they can still do quite well and survive."

For the study, Goldenberg's team compared the clinical and pathologic characteristics of 31 patients whose thyroid cancer was discovered when they had diagnostic imaging for reasons other than thyroid cancer with 207 patients who had scans specifically to diagnose thyroid cancer.

Men accounted for more than half of those whose cancer was discovered incidentally (54.8 percent) but only 13.5 percent of those screened specifically for thyroid cancer, the researchers found.

Average age at diagnosis was about 42 for those scanned for thyroid cancer and 56 for those diagnosed incidentally. The cancers found in an unrelated scan were more advanced, but no difference between the groups was noted in tumor size, amount of cancer inside the thyroid, or cancer that had spread to the lymph nodes or other organs.

But if better detection isn't behind the uptick in cases, what is?

Goldenberg has looked at exposure to radiation and radon as possible contributors.

"We recently published our work looking into the Three Mile Island vicinity as an etiological [causative] factor—no association found," Goldenberg said. The Three Mile Island accident was a partial meltdown of a nuclear reactor in central Pennsylvania in 1979. "We recently

completed a study looking at radon as a causative factor—no association found," he said.

The researchers said they need to study whether other lifestyle and environmental factors are contributing to the increase in thyroid cancer.

More information: For more information on thyroid cancer, visit the U.S. National Cancer Institute.