

HEALTH

It's Not Cancer: Doctors Reclassify a Thyroid Tumor

By GINA KOLATA APRIL 14, 2016

An international panel of doctors has decided that a type of tumor that was classified as a cancer is not a cancer at all.

As a result, they have officially downgraded the condition, and thousands of patients will be spared removal of their thyroid, treatment with radioactive iodine and regular checkups for the rest of their lives, all to protect against a tumor that was never a threat.

Their conclusion, and the data that led to it, was reported Thursday in the journal *JAMA Oncology*. The change is expected to affect about 10,000 of the nearly 65,000 thyroid cancer patients a year in the United States. It may also offer grist to those who have been arguing for the reclassification of some other forms of cancer, including certain lesions in the breast and prostate.

The reclassified tumor is a small lump in the thyroid that is completely surrounded by a capsule of fibrous tissue. Its nucleus looks like a cancer but the cells have not broken out of their capsule, and surgery to remove the entire thyroid followed by treatment with radioactive iodine is unnecessary and harmful, the panel said. They have now renamed the tumor. Instead of calling it “encapsulated follicular variant of papillary thyroid carcinoma,” they now call it “noninvasive follicular

thyroid neoplasm with papillary-like nuclear features,” or NIFTP. The word “carcinoma” is gone.

Many cancer experts said the reclassification was long overdue. For years there have been calls to downgrade small lesions in the breast, lung and prostate, among others, and to eliminate the term “cancer” from their name. But other than the renaming of an early stage urinary tract tumor in 1998, and early stage ovarian and cervical lesions more than two decades ago, no group other than the thyroid specialists has yet taken the plunge.

In fact, said Dr. Otis Brawley, chief medical officer at the American Cancer Society, the name changes that occurred went in the opposite direction, scientific evidence to the contrary. Premalignant tiny lumps in the breast became known as stage zero cancer. Small and early-stage prostate lesions were called cancerous tumors. Meanwhile, imaging with ultrasound, M.R.I.’s and C.T. scans find more and more of these tiny “cancers,” especially thyroid nodules.

“If it’s not a cancer, let’s not call it a cancer,” said Dr. John C. Morris, president-elect of the American Thyroid Association and a professor of medicine at the Mayo Clinic. Dr. Morris was not a member of the renaming panel.

Dr. Barnett S. Kramer, director of the division of cancer prevention at the National Cancer Institute, said, “There’s a growing concern that many of the terms we use don’t match our understanding of the biology of cancer.” Calling lesions cancer when they are not leads to unnecessary and harmful treatment, he said.

At major medical centers, many patients with encapsulated thyroid tumors are already being treated less aggressively. But, thyroid experts say, that is not the norm in the rest of the country and the rest of the world.

The word cancer is a problem, said Dr. Bryan R. Haugen, a thyroid cancer specialist at the University of Colorado, Denver, who was also not a member of the renaming panel.

“If you keep cancer in there a lot of people are going to be aggressive,” he said.

The reclassification drive began two years ago when Dr. Yuri E. Nikiforov, vice

chairman of the pathology department at the University of Pittsburgh, was asked his opinion about a small thyroid tumor in a 19-year-old woman. It was completely encased in a capsule and the lobe of her thyroid containing it had been removed to establish a diagnosis.

Over the last decade, Dr. Nikiforov had watched as pathologists began classifying noninvasive tumors as cancers and attributed the change to rare cases in which patients had a tumor that had broken out of its capsule, did not receive aggressive treatment and died of thyroid cancer. Worried doctors began treating all tumors composed of cells with nuclei that looked like cancer nuclei as if they were cancers. But this young woman's story drove Dr. Nikiforov over the edge.

"I told the surgeon, who was a good friend, 'This is a very low grade tumor. You do not have to do anything else.'" But the surgeon replied that according to practice guidelines, she had to remove the woman's entire thyroid gland and treat her with radioactive iodine. And the woman had to have regular checkups for the rest of her life.

"I said, 'That's enough. Someone has to take responsibility and stop this madness,'" Dr. Nikiforov said.

He brought together the international panel of experts — 24 renowned pathologists, two endocrinologists, a thyroid surgeon, a psychiatrist who knew the impact a cancer diagnosis could have, and a patient. The group collected a couple of hundred cases from multiple centers throughout the world — patients who had tumors that were contained within fibrous capsules and those that had broken out. All agreed that by the current criteria every one of those tumors would be classified as a cancer. And all of the patients had been followed for at least 10 years. The patients with the encapsulated tumors had not been treated after their tumors were removed.

None of the patients whose tumors stayed within their capsules had any evidence of cancer after 10 years. But some of the patients whose tumors had broken out of their capsules had complications, including death, from thyroid cancer despite treatment.

"This study said it is not the presence of nuclear features but the presence of

invasion that can make the difference between cancer and noncancer,” Dr. Nikiforov said. Patients whose tumors are confined within their capsules “have an excellent prognosis,” he said. “They do not need a thyroidectomy. They do not need radiotherapy. They do not need to be followed up every six months.”

But if those tumors are not cancers, what should they be called?

“Ten different names were submitted and the voting went on, back and forth,” said one member of the panel, Dr. Gregory W. Randolph, director of the thyroid and parathyroid surgical clinic at Harvard’s Massachusetts Eye and Ear Infirmary. They finally settled on NIFTP, in part because its acronym, which he pronounced “Nift-P,” was catchy, he said. The new name, the reclassification, he added, is “just awesome,” because it explicitly defines those small nodules in the thyroid as nonmalignant.

In an editorial he and his colleagues submitted to the journal *Thyroid*, they report that eight leading professional societies from around the world signed on to the declassification and to the new name. They write in the editorial that doctors may be violating the principle of “first, do no harm” in treating patients with these tumors as though they have invasive cancer.

Dr. Nikiforov says he owes it to patients with reclassified tumors to tell them they never had cancer after all. At the University of Pittsburgh Medical Center, he and others are going to start reviewing medical records and pathology reports to identify previous patients and contact them. He estimates there have been about 50 to 100 each year at the medical center. They no longer have to go back for checkups. They lose the shadow of cancer that the diagnosis hung over their lives.

Informing these patients, Dr. Nikiforov said, “is a moral obligation of doctors.”

Correction: April 14, 2016

An earlier version of this article misstated the profession of one of the members of the panel. It included one psychiatrist, not one psychologist.

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