Not All Thyroid Cancer Patients Need Follow-Up

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SAN DIEGO — Patients with stage I thyroid cancer who have a negative first follow-up test performed within 1 year after iodine-131 ablation have a low risk of recurrence and do not require further thyroid stimulation tests, results from a single-center French study showed.

"Some authors suggest periodic testing [with] recombinant human thyroid-stimu-

lating hormone [rhTSH] in all thyroid cancer patients, but there is no consensus" on the issue, Dr. Paolo Zanotti-Fregonara said at the annual meeting of the Society of Nuclear Medicine. "Follow-up recommendations are likely to have economic consequences."

He and his associates evaluated 129 thyroid cancer patients referred to the department of nuclear medicine at Saint Antoine University Hospital, Paris, between 2002 and 2004 for rhTSH testing.

They classified the patients into three groups based on the International Union Against Cancer TNM (primary tumor, regional lymph nodes, distant metastasis) risk classification and the results of their first control test.

All patients had undergone a first control test after thyroxine withdrawal within 1 year of ¹³¹I ablation. Testing consisted of a thyroglobulin measurement and a diagnostic total body scan after administration of 200 MBq (5.41 mCi) of ¹³¹I. The

researchers defined a negative first control as a thyroglobulin level of less than 2 $\rm ng/mL$ and no $^{131}\rm I$ uptake on the diagnostic total body scan.

Of the 129 patients, 75 had stage I thyroid cancer and a negative first control (group 1), 19 had stage I disease and a positive first control (group 2), and 35 had stage II-IV disease (group 3). The researchers performed rhTSH testing an average of 6 years after the first control test.

Dr. Zanotti-Fregonara reported that diagnostic scanning after rhTSH was negative in all patients in group 1. Only one patient in this group had detectable thyroglobulin after rhTSH injection. However, this patient's level of thyroglobulin at baseline was the same as that after stimulation. Therefore, it was considered a false-positive result, probably due to antibody interference.

Seven patients in group 2 had residual thyroglobulin and two had residual ¹³¹I uptake, but none of them had signs of cancer progression. Five patients in group 3 had a positive rhTSH result, which Dr. Zanotti-Fregonara said was suggestive of disease progression in at least two of the patients.

He concluded rhTSH testing is not necessary in stage I thyroid cancer patients who have a negative first follow-up test 1 year after ¹³¹I ablation but should be reserved for higher-risk patients.

More Thyroid Tumors Being Found in Women

CALGARY, ALTA. — The incidence of well-differentiated thyroid carcinoma in Ontario, Canada, jumped 230% between January 1990 and December 2001, apparently because of an increase in small tumors in female patients, researchers reported during a poster session at the annual Canadian Surgery Forum.

"This phenomenon may be explained by the identification and resection of clinically relevant occult microcarcinomas incidentally found in women, who are more likely to see their primary care physician and undergo radiological investigations," wrote Dr. Stephen Frederick Hall of the department of otolaryngology at Queen's University, Kingston, Ontario, and colleagues. "Alternatively, it may be that females have selectively been exposed to an environmental carcinogen or hormonal factor that has resulted in thyroid cancer."

The researchers identified 8,100 cases of well-differentiated thyroid cancer from the Ontario Cancer Registry between January 1, 1990 and December 31, 2001. They compared the incidence of disease across the time period and obtained pathology reports from a random 10% of cases.

Incidence of the cancer increased 230% during that period, but the mean tumor size decreased, with significantly more small tumors (less than 2 cm) being resected in 2001 than in 1990. When male and female patients were compared, this effect was only seen in the female population.

