

ASCO15 Plenary Study

Neck Dissection at Time of Primary Oral Cancer Surgery Extends Survival

BY ROBERT H. CARLSON

CHICAGO—A Phase III trial of 500 patients with clinically node-negative, early-stage oral cancer may have answered the long-standing question of what to do about lymph nodes in the neck—elective neck dissection at the time of primary surgery or surveillance until nodal relapse?

Elective neck dissection came out ahead, said Anil D’Cruz, MD, Professor and Chief of the Department of Head and Neck Surgery and Director of the Tata Memorial Hospital in Mumbai, India, who presented the data here at the plenary session of the American

the node develops and then treating with a therapeutic neck dissection.

“There is no conclusive survival disadvantage from this approach, but the additional surgical procedure when required is associated with surgical morbidities, including shoulder dysfunction. This may be unnecessary in up to 70 percent of patients.”

The second school of thought is to perform the elective dissection, a single-stage procedure in which both the primary and the neck are treated. This offers better control and survival.

In the study D’Cruz reported at the ASCO meeting, both study arms were balanced for site and stage. There were 427 tongue, 68 buccal mucosa, and five floor-of-mouth tumors; 221 were T1 and 279 T2.

Follow-up visits were required to determine if adjuvant therapy was needed for adverse features after neck dissection. That involved a second randomization, to either physical examination or physical exam plus ultrasonography. At a median follow-up of 39 months there were 146 recurrences in patients who had therapeutic neck dissection and 81 in those who had elective neck dissection, respectively.

Three-year overall survival was significantly higher in the elective-neck-dissection group compared with the therapeutic-neck-dissection group (80% vs. 67.5%) as was three-year disease-free survival (69.5% vs. 45.9 percent).

“Elective neck dissection should be the standard of care for early-stage node-negative oral cancers,” D’Cruz concluded. “For every eight patients



ASCO/Scott Morgan

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who undergo elective neck dissection, one death is prevented; and for every four patients who undergo elective neck dissection, one recurrence is prevented.”

The moderator of a news conference that included the study, Jyoti D. Patel, MD, Associate Professor of Medicine-Hematology/Oncology at Northwestern University Feinberg School of Medicine, said the study provides long-awaited answers to a questions doctors worldwide have struggled with: “We never want to do more surgery than we have to, but for patients with early oral cancer, we now know that more extensive surgery prolongs lives.”

‘Less is Not More’

“In this case, less is not more,” said the study’s Discussant, Hisham Mehanna, MD, PhD, Chair of Head and Neck Surgery and Director of the Institute of Head and Neck Studies



Society of Clinical Oncology (*Abstract LBA3*).

“Elective neck dissection in patients with early oral squamous cell carcinoma resulted in a 37 percent reduction in mortality and should be considered the standard of care,” he said.

For the first 500 patients in the trial, patients randomly assigned to elective neck dissection had significantly improved three-year overall survival rates than patients in the watch-and-wait surveillance arm (80% vs. 67.5%, respectively), as well as increased three-year disease-free survival (69.5% vs. 46%).

All patients had lateralized T1 or T2 squamous carcinoma of the oral cavity amenable to per-oral excision. Between January 2004 and June 2014, 255 patients were randomly assigned to surveillance and 245 to elective neck dissection.

Two Schools of Thought

D’Cruz noted that oral cancer is linked particularly to excessive consumption of tobacco and alcohol. And while head and neck cancer is considered to be a disease of low-resource countries, with a high incidence in Melanesia, South-Central Asia, and Central and Eastern Europe, the incidence is increasing globally.

For management of the neck there are two schools of thought, he explained: One is therapeutic neck dissection—wait-and-watch, waiting until

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‘Potentially Practice-Changing’

ASCO 2014-15 President Peter Paul Yu, MD, called the report potentially practice changing. “This surgical question has been vexing head and neck surgeons for 50 years—what to do about the nodal draining



basin in the neck in patients who have oral cavity cancers in the anterior-oral cavity,” he said in an interview before the meeting discussing the key studies.

“In the U.S., the custom has been to do an elective lymph node dissection to clean out the nodal basin, because a recurrence in the neck is hard to control and has a lot of morbidity, disfigurement, and carotid artery involvement. The approach here is commonly not to wait but to go ahead with the dissection, but in many other places in the world the standard is watch-and-wait.”

Seeking Ways to Improve Interpretation of Mammograms

BY PEGGY EASTMAN

WASHINGTON—In an effort to improve the interpretation of screening mammograms, the Institute of Medicine's National Cancer Policy Forum and the American Cancer Society hosted a comprehensive one and a half day workshop here. Speakers agreed that while the technical quality of mammography has improved since the national Mammography Quality Standards Act (MQSA) of 1992, the interpretation of

mammograms remains variable, which limits the detection of early breast cancer.

"Improving interpretive performance would have a large public health impact," said Diana Buist, PhD, MPH,



chair of the workshop planning committee and Senior Scientific Investigator at the Group Health Research Institute within the Group Health Cooperative

in Washington State. A summary report of the workshop is expected to be published by the IOM in a few months.

The committee's findings could be relevant to radiology more broadly and not just to mammography, said Patricia

A. Ganz, MD, a member of the workshop planning committee, Vice Chair of the National Cancer Policy Forum, Distinguished Professor of Health Policy & Management and Medicine at the UCLA Fielding School of Public Health and David Geffen School of Medicine, *continued on page 38*

NECK DISSECTION

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and Education at the University of Birmingham in the U.K.

Less—the surveillance approach—avoids overtreatment, is inexpensive, and is not associated with the complications of neck dissection, but it is associated with higher recurrence rates, and significantly shorter survival. "Some patients actually present with non-salvage, non-resectable disease—a death sentence essentially," he said.

Elective neck dissection, on the other hand, Mehanna continued, reduces the risk of recurrence, with low morbidity and a negligible effect on quality of life. Elective surgery was also shown to produce better survival rates than surveillance, although those data were from two small randomized, controlled trials reported more than 20 years ago.

The results of this new study had "astounding results"—a 12.5 percent overall survival benefit for elective neck dissection, he said, noting, though, that



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the significantly better survival rate for elective neck dissection may have occurred because surveillance patients who had a recurrence had more advanced, unresectable nodal disease.

"Among elective-dissection patients, 30 percent had nodal metastases, all of which were resectable. But among surveillance patients, 45 percent had a relapse, 18 percent of which were unresectable."

And there were more adverse nodal features in the surveillance patients who relapsed—30 percent N2/N3 disease versus 14 percent for elective dissection, and 42 percent extra-capsular spread versus 15 percent for elective dissection.

"But surveillance patients received only slightly more adjuvant therapy—60 percent versus 57 percent for elective surgery—so my question is, why didn't more of the relapsed surveillance patients with adverse features get adjuvant therapy? It is protective and may

improve survival, albeit at considerably higher toxicity and financial cost."

Trial Limitation—Absence of Data

Mehanna said the limitations of this trial were mainly lack of data on factors that could have influenced outcomes—for example, on the quality and dose of adjuvant radiotherapy given. There was also no data on survival differences between patients who received adjuvant treatment and those who did not, or on recurrence by lymph node level, he said. Elective neck dissection removes all nodes on one side of the neck from levels 1, 2, and 3, but there is some controversy about whether to also include level 4 nodes.

"Data on recurrence in level 4 lymph nodes that were not dissected would certainly be of interest to surgeons, and may help resolve that surgical controversy," he said.

There was also an absence of data on outcomes of follow-up with ultrasound versus clinical exam in the surveillance arm. "That limits the ability to make full recommendations," Mehanna said. "Ultrasound surveillance may detect recurrence at an earlier stage than clinical exam, and therefore less adverse features. Potentially, surveillance by ultrasound may have the same, or even better survival than elective neck dissection."

Finally, there was no data on quality of life, functional outcome, or cost effectiveness—"a lost opportunity," he said.

Mehanna concluded with a recommendation: "For early node-negative oral cancer, centers that do surveillance by clinical follow-up only—which is more likely in low resource settings—should change the standard of care to elective neck dissection. But at this point we cannot give recommendations regarding surveillance with ultrasound follow-up."

There were eight excess deaths for every 15 excess recurrences in the patients who underwent therapeutic neck dissection.



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