SCC Perineural Invasion Responds to Radiation

BY DOUG BRUNK
San Diego Bureau

SANTA ANA PUEBLO, N.M. — Perineural invasion can occur in 2.5% to 15% of patients with squamous cell carcinoma, and 60% to 70% of patients are asymptomatic on presentation, Dr. Trí H. Nguyen said at a meeting of the American Society for Mohs Surgery.

Patients with perineural involvement have symptoms, and perineural invasion most commonly have paresthesia, followed by sharp or achy pain, motor deficits, and formation (sensation of bugs crawling on the skin), said Dr. Nguyen, director of Mohs micrographic and dermatologic surgery at the University of Texas M.D. Anderson Cancer Center, Houston.

Clinical risk factors for perineural invasion include male gender, large tumor size (2 cm or greater), central face location, and recurrent tumor. Histologic risk factors for perineural invasion include moderate to poorly differentiated histiogy, intravascular or lymphatic invasion, deep invasion, and extensive subcutaneous infiltration. Imaging studies are valuable in staging and prognosis. For bony invasion, a CT scan is best. To evaluate lymph nodes, a CT scan followed by MRI is preferred. “However, if you have access to an expert radiologist and ultrasound, needle aspiration of suspicious nodes in real time. If large nerve involvement is suspected, consider an MRI, he said.

“Recurrence morbidity would be catastrophic,” Dr. Nguyen said. “As a result, we feel that patients with perineural invasion should be aggressively evaluated.”

Despite the risks, most adjuvant radiotherapy for cutaneous skin cancer is relatively well tolerated.

DR. NGUYEN

Indications for Adjuvant Radiation Therapy After Surgery

By Jane Salodof McNeil
Senior Editor

CHICAGO — Screening melanoma patients by ultrasound and fine needle aspiration cytology can avoid sentinel lymph node biopsies in half of node-positive patients, according to the results of a prospective study.

All 503 consecutive patients in a German and Dutch study underwent scintigraphy followed by ultrasound prior to scheduled sentinel lymph node biopsy. If ultrasound revealed a suspicious deposit, the patient went on to fine needle aspiration in an attempt to determine whether the node was positive. Dr. Gregor Schäfer-Hesterberg reported at the annual meeting of the American Society of Clinical Oncology.

Interim data on 400 patients for whom outcomes were available showed that ultrasound identified positive sentinel nodes in 51 of 79 (65%) patients who turned out to be node positive after dissection. Fine needle aspiration confirmed nodal disease in 12 cases—a group the investigators concluded could have skipped their scheduled biopsies and gone directly to total lymph node dissection.

Using ultrasound, the needle is guided into a suspicious lymph node.

“If we can verify that there is a metastasis in the sentinel node or another node, we can spare the patient an operation,” Dr. Schäfer-Hesterberg said in an interview.

The majority of biopsied patients were node negative, added Dr. Schäfer-Hesterberg, a dermatologist at Charité Universitätsmedizin Berlin. In this study, 321 patients still underwent the surgical procedure without a positive finding. The investigators, led by Dr. Christiane Voit of the same institution, previously reported an overall sensitivity of 82% for the combination of ultrasound and fine needle aspiration cytology (Ann. Surg. Oncol. 2006;13:1682–9).

In the new data based on outcomes collected at an average of 10 months’ follow-up, the group reported the combination became more sensitive in higher-staged tumors. Sensitivity was 65% overall, ranging from 40% in T1 disease to 79% in T4. Overall specificity was 99% with a range of 100% in T1 disease to 97% in T4.

Measurement of histologic nest sizes in 65 of the node-positive patients showed submicroscopic involvement of less than 0.1 mm in 13 patients, only 3 of whom were identified by ultrasound and fine needle aspiration cytology. As tumor load increased, the combination became more sensitive, identifying 11 of 24 tumors (46%) in the 0.1- to 1.0-mm range and 24 of 28 tumors (86%) larger than 1 mm.

“Ultrasound of the sentinel node and ultrasound guided fine needle aspiration cytology is highly accurate,” the authors concluded in their poster. In a discussion of the study, Dr. Vernon K. Sondak called for “further exploration but with a healthy skepticism.”

Preoperative ultrasound has many potential roles in evaluating melanoma, particularly when patients are not eligible for sentinel lymph node biopsy, said Dr. Sondak, chief of cutaneous oncology at the H. Lee Moffitt Cancer Center in Tampa, Fla.

On the basis of the total study population, however, only a small percentage of all patients would be divested from sentinel lymph node biopsy. At his own institution, Dr. Sondak said the experience with preoperative ultrasound in 93 patients would have spared no more than 8%.

“The numbers are very much against us when we do this in an unselected fashion,” Dr. Sondak said.

Fine Needle Aspiration May Reduce Need for Sentinel Biopsies

BY JANE SALODOF McNEIL
Senior Editor

CHICAGO — Screening melanoma patients by ultrasound and fine needle aspiration cytology can avoid sentinel lymph node biopsies in half of node-positive patients, according to the results of a prospective study.

All 503 consecutive patients in a German and Dutch study underwent scintigraphy followed by ultrasound prior to scheduled sentinel lymph node biopsy. If ultrasound revealed a suspicious deposit, the patient went on to fine needle aspiration in an attempt to determine whether the node was positive. Dr. Gregor Schäfer-Hesterberg reported at the annual meeting of the American Society of Clinical Oncology.

Interim data on 400 patients for whom outcomes were available showed that ultrasound identified positive sentinel nodes in 51 of 79 (65%) patients who turned out to be node positive after dissection. Fine needle aspiration confirmed nodal disease in 12 cases—a group the investigators concluded could have skipped their scheduled biopsies and gone directly to total lymph node dissection.

Using ultrasound, the needle is guided into a suspicious lymph node.

“If we can verify that there is a metastasis in the sentinel node or another node, we can spare the patient an operation,” Dr. Schäfer-Hesterberg said in an interview.

The majority of biopsied patients were node negative, added Dr. Schäfer-Hesterberg, a dermatologist at Charité Universitätsmedizin Berlin. In this study, 321 patients still underwent the surgical procedure without a positive finding. The investigators, led by Dr. Christiane Voit of the same institution, previously reported an overall sensitivity of 82% for the combination of ultrasound and fine needle aspiration cytology (Ann. Surg. Oncol. 2006;13:1682–9).

In the new data based on outcomes collected at an average of 10 months’ follow-up, the group reported the combination became more sensitive in higher-staged tumors. Sensitivity was 65% overall, ranging from 40% in T1 disease to 79% in T4. Overall specificity was 99% with a range of 100% in T1 disease to 97% in T4.

Measurement of histologic nest sizes in 65 of the node-positive patients showed submicroscopic involvement of less than 0.1 mm in 13 patients, only 3 of whom were identified by ultrasound and fine needle aspiration cytology. As tumor load increased, the combination became more sensitive, identifying 11 of 24 tumors (46%) in the 0.1- to 1.0-mm range and 24 of 28 tumors (86%) larger than 1 mm.

“Ultrasound of the sentinel node and ultrasound guided fine needle aspiration cytology is highly accurate,” the authors concluded in their poster. In a discussion of the study, Dr. Vernon K. Sondak called for “further exploration but with a healthy skepticism.”

Preoperative ultrasound has many potential roles in evaluating melanoma, particularly when patients are not eligible for sentinel lymph node biopsy, said Dr. Sondak, chief of cutaneous oncology at the H. Lee Moffitt Cancer Center in Tampa, Fla.

On the basis of the total study population, however, only a small percentage of all patients would be divested from sentinel lymph node biopsy. At his own institution, Dr. Sondak said the experience with preoperative ultrasound in 93 patients would have spared no more than 8%.

“The numbers are very much against us when we do this in an unselected fashion,” Dr. Sondak said.

Fine Needle Aspiration May Reduce Need for Sentinel Biopsies