HEM/ONC News

By Ellie Vershvovsky

Oral Care Protocol Effective in Patients Receiving Chemotherapy

Oral mucositis is a serious side effect of cancer therapy, which results in increased rates of infection and dose reductions or delay in chemotherapy. Clinical practice guidelines currently recommend regular basic oral care in patients receiving chemotherapy; however, there is a need for an evaluation of the standard of oral care, including the use of appropriate rinsing agents, frequency of brushing and rinsing, and escalation of care. At the 35th Oncology Nursing Society Congress, Jennifer Hester and colleagues examined the effectiveness of an evidence-based oral care protocol in patients receiving chemotherapy. The basis of this study was the Iowa Model of Evidence–Based Practice to Promote Quality Care. Data collected before (n=24) and after (intervention group; n=25) the oral care protocol was implemented were compared to evaluate the effectiveness of the protocol. Over a period of 8 weeks, patient demographic and disease-related data were collected, physical assessments were performed, and patients were given surveys to assess oral care practices, mouth pain, and nutritional issues. The difference in demographics was not significant in the 2 groups. Both groups thought oral care was important and stated that they were capable of caring for their mouths during chemotherapy. The intervention group was significantly more likely to follow evidence-based guidelines (brushing teeth 2× daily, rinsing 2–3 times/day, using saline rinse) compared to the group receiving usual care. The intervention group also was significantly less likely to develop oral mucositis and mouth pain. Furthermore, patients in the intervention group reported fewer mouth sores that prevented them from eating sufficiently. Study findings showed that patients receiving chemotherapy benefited from an oral care protocol.

BATTLE Trial: Personalizing Treatment for Non–small Cell Lung Cancer

At the 2010 annual meeting of the American Association for Cancer Research, Dr. Edward S. Kim and colleagues reported results of the BATTLE (Biomarker-integrated Approaches of Targeted Therapy or Lung Cancer Elimination) trial, a prospective phase II study in chemotherapy-refractory lung cancer patients. In order to predict tumor response, fresh core needle biopsy specimens were collected from patients to test for 11 biomarkers from 4 non–small cell lung cancer molecular pathways: EGFR, KRAS, and BRAF mutation (by PCR), EGFR and cyclin D1 copy number (by FISH]), and VEGF, VEGFR, 3 RXR receptors, and cyclin D1 (by IHC). Based on patients' biomarker analyses, 255 patients were randomized to erlo-

tinib (Tarceva, Genentech; 150 mg/day), sorafenib (Nexavar, Bayer; 400 mg 2×/day), vandetanib (Astra Zeneca; 300 mg/day), and erlotinib (150 mg/day) plus bexarotene (Targretin, Eisai; 400 mg/m²/day). The primary endpoint, 8-week disease control, was evaluable in 244 patients, and all 11 biomarkers were assessable in 215 patients. Biopsy sites included the lungs and liver/adrenal glands. The overall disease control rate (DCR) was 46%, and median overall survival was 9 months; 1-year survival was 39%, and progression-free survival was 1.9 months. Patients with EGFR mutation responded better to erlotinib; those with cyclin D1 IHC positivity and EGFR FISH A responded better to erlotinib plus bexarotene; those with VEGFR2 IHC had better response with vandetanib; and patients who had absence of EGFR mutation or high polysomy did better on sorafenib. Patients with KRAS mutation had better response to sorafenib compared to the other 3 regimens. The study findings suggest that identifying appropriate biomarkers will lead to molecularly targeted treatments in lung cancer.

Tamoxifen and Raloxifene: Two Effective Options for Preventing Breast Cancer

According to 8 years of follow-up data from more than 19,000 women in the STAR (Study of Tamoxifen and Raloxifene) trial, the selective estrogen receptor modulators tamoxifen and raloxifene (Evista, Eli Lilly) are effective therapeutic options for preventing disease in women who are at a high risk of developing breast cancer. There was no significant difference between the 2 agents in preventing noninvasive breast cancer; however, tamoxifen was significantly more effective in preventing invasive breast cancer. Raloxifene had significantly less toxicity. These follow-up data of the randomized, double-blind trial were presented by Dr. Lawrence Wickerman at the 2010 annual meeting of the American Association for Cancer Research. The study included 19,747 women 35 years of age or older with a 5-year predicted breast cancer risk of at least 1.66%; the update included 19,490 women (9,736 receiving tamoxifen 20 mg/day and 9,754 receiving raloxifene 60 mg/day). At the 8-year follow up, the relative risk of invasive breast cancer for patients receiving raloxifene was 1.24 compared to those receiving tamoxifen. In a previous report, raloxifene did not appear to be as effective as tamoxifen in preventing noninvasive breast cancer; however, the additional follow-up has found no significant difference between the 2 drugs. Both drugs increase the risk of thromboembolic adverse events, but there were fewer events in women receiving raloxifene. These findings prove to be promising for women who want to reduce their risk of breast cancer.