Endometrial Cancer Death Rates Are on the Rise

BY JANE SALODOF MacNEIL
Senior Editor

San Diego — Increases in the number of patients with advanced disease, high-risk histologies, and nonwhite racial backgrounds may be promoting a rise in deaths from uterine corpus cancer, Dr. Stephanie M. Ueda reported at the annual meeting of the Society of Gynecologic Oncologists.

Despite a relatively stable number of new cases, American Cancer Society data show the number of deaths has risen from about 3,000 in 1988 to more than 7,000 anticipated this year, according to Dr. Ueda of Stanford (Calif.) University.

In search of factors behind the rising death rate, she and her colleagues analyzed demographic data for all 48,150 women diagnosed with the disease and entered into the Surveillance, Epidemiology, and End Results (SEER) database from 1988 to 2001.

For study purposes, the investigators divided the women into three chronological cohorts of 13,591 cases from 1988 to 1992, 18,580 cases from 1993 to 1997, and 15,979 cases from 1998 to 2001.

Age at diagnosis dropped from 66 to 63 years during the course of the study. While this difference was not significant, the researchers found the patients who died were significantly older with a median age of 72 years vs. 62 years among those who survived.

Over time, the patients diagnosed as well as those who died increased among minority groups, according to Dr. Ueda. The proportion of white patients declined from 85.5% in the first cohort to 77.1% of the most recent group.

Meanwhile, the proportions of Hispanic patients increased from 3.6% to 7.5%, of black patients from 5.6% to 6.6%, and of Asian patients from 3.7% to 5.6%. Death rates also rose for these minority groups: from 12% to 14.2% for blacks, from 3.5% to 8.1% for Hispanics, and from 3.5% to 5.1% for Asians.

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DR. UEDA

Dr. Ueda reported that significantly more patients were diagnosed with advanced disease and with high-risk histologies such as serous and clear cell adenocarcinoma and sarcomas in the later years of the study.

The proportion of stages III and IV cancers at diagnosis rose from 14.2% to 18% and of grade 3 tumors from 19.7% to 23.3%. Deaths also increased from 52.1% to 68.8% of advanced-stage cases and from 47.5% to 60.6% of those with grade 3 disease.

High-risk histologies went from 14.7% to 17.3%. While 41.5% of patients with high-risk histology died of their disease, only 13.9% of those with less aggressive cell types succumbed.

Endometrioid histology was the most common form overall, accounting for 83.7% of all cases during the 14-year study.

Based on a multivariate analysis of the total population, the researchers concluded that independent prognostic factors for death from uterine corpus cancer were older age at diagnosis (hazard ratio 1.027), nonwhite race (HR 1.411), advanced stage (HR 2.119), grade 3 (HR 2.328), and nonendometrioid histology (1.523).

"We are finding more deaths," Dr. Ueda said in an interview. "We are seeing more of these higher-risk types that don't respond to surgery as well. So far we haven't found the right treatments."

The racial data may be indicative of societal changes, she added. While minority women accounted for only about 15% of the patients, she noted, they were disproportionately represented among those who died.

In a discussion of the study, Dr. Scott McMeekin of the University of Oklahoma, Oklahoma City, said the study did not account for changes in the population as a whole, in treatment of uterine corpus cancer, and in use of hormone replacement therapy over time.

"Why are there more bad tumors? Are more people diagnosed late, or are we doing a better job with other cancers?" he said. "I still don't believe we know why more people are dying." ■

Computer-Aided Detection Cut Mammogram Accuracy

BY MARY ANN MOON
Contributing Writer

Computer-aided detection decreased rather than improved the accuracy of mammogram interpretation in a nationwide study involving over 429,000 screening mammograms.

Compared with standard mammography, computer-aided detection (CAD) mammography "was associated with significantly higher false-positive rates, recall rates, and biopsy rates and with significantly lower overall accuracy," Dr. Joshua J. Fenton and his associates reported. In an editorial comment accompanying the report, Dr. Ferris M. Hall termed the study "the most comprehensive analysis of computer-aided detection in breast screening to date," and characterized the results as surprising and disappointing. They may not spell the demise of CAD mammography, "but they constitute a substantial hit to this technology," he said.

According to Dr. Fenton and his associates, CAD has been incorporated into mammography practices rapidly, despite only "tentative" evidence of its clinical benefit, in part because it is Food and Drug Administration approved and its use is reimbursed by Medicare and insurers.

He and his associates studied the results of routine screening mammograms and cancer outcomes for over 222,000 women screened at 43 facilities participating in the Breast Cancer Surveillance Consortium in 1998-2000. During that time, seven of the facilities (16%) implemented CAD. The study design allowed for review of the real-life experience at numerous, diverse facilities with over 150 radiologists across the country, said Dr. Fenton of the University of California, Davis, and his associates.

A total of 2,351 women were diagnosed as having invasive breast cancer or ductal carcinoma in situ within 1 year of their screening mammograms.

The use of CAD proved to be "of uncertain clinical benefit," the researchers said (N. Engl. J. Med. 2007;356:1399-409).

The technique raised the rates of false-positive results and patient recalls for further assessments, and raised the biopsy rate by nearly 20%. Diagnostic specificity decreased from 90% before implementation of CAD to 87% afterward, and the positive predictive value of screening mammograms declined from 4% to 3%.

CAD slightly increased the diagnostic sensitivity of mammography, but the difference was nonsignificant and was largely accounted for by a slight increase in detection of carcinoma in situ rather than in invasive breast cancer, Dr. Fenton and his associates said.

In his editorial comment, Dr. Hall of Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, concurred with the researchers that larger, controlled trials of CAD are needed, with a particular eye toward determining whether use of the technology has an impact on mortality.

"But such studies will be expensive, controversial, indeterminate, or quickly passé owing to the emergence of new technology. It took 2-3 decades of controversy before it was proved that screening mammography saves lives," he noted (N. Engl. J. Med. 2007;356:1464-6). ■