Research Highlights

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Hormone Replacement Therapy May Decrease Survival in Women With Lung Cancer

Postmenopausal women may be prescribed hormone replacement therapy (HRT); however, little research has been conducted on the relationship between HRT and lung cancer in women. Some research has suggested that estrogen may be a factor in lung cancer prognosis in women. Because lung cancer is the leading cause of cancer death in women today, the relationship needs further investigation.

Researchers conducted a retrospective chart review of women diagnosed with lung cancer from January 1994–December 1999. Patients' age, stage of lung cancer, smoking history, cancer history, family history of cancer, HRT use, and overall survival data were obtained. The sample was comprised of 498 women who had a history of lung cancer; their ages ranged from 31–93 years, with a median age of 67. The majority of the sample (429 women) had a history of smoking. Only 17% (n = 86) had taken HRT. Three hundred twenty-nine had a positive family history for cancer, but only 106 had ever received a previous cancer diagnosis themselves.

Survival was higher in women who never received HRT when compared to women who had received HRT (79 months versus 39 months, respectively; hazard ratio = 1.97). The effect was more prominent in women who also had a history of smoking. Results demonstrated that HRT may have a negative effect on women with lung cancer. Further research is imperative in women diagnosed with lung cancer who have histories of smoking and HRT use.

Ganti, A.K., Sahmoun, A.E., Panwalkar, A.W., Tendulkar, K.K., & Potti, A. (2006). Hormone replacement therapy in women is associated with decreased survival in women with lung cancer. *Journal of Clinical Oncology, 24,* 59–63.

Prognostic Scoring System Can Predict Survival From Renal Cell Carcinoma Recurrence

Patients who were diagnosed with localized renal cell carcinoma (RCC), had undergone nephrectomy, and, subsequently, had a recurrence were studied. A validated prognostic scoring system was used to rate patients following documentation of metastasis. The total risk score ranged from 0–5, with one point assigned for each identified variable: recurrence in fewer than 12 months after nephrectomy was performed, serum calcium greater than 10 mg/dl, hemoglobin at the lower limit of normal value, lactate dehydrogenase greater than 1.5 times the upper normal limit, and Karnofsky performance score lower than 80%. Patients were classified as being at low risk (0), intermediate risk (1–2), or high risk (3–5) for recurrence of RCC based on their assigned score.

A final cohort of 118 patients was enrolled. Median survival time was 21 months, and median follow-up time for those who survived was 27 months. Survival was found to be associated with patients' risk-group category ($p < 0.0001$). Survival time was longer for low-risk patients (as many as 72 months) compared with high-risk patients who may live only six more months. Survival rates two years later followed the same trend. Low-risk patients had survival rates of 88%, whereas only 51% of the intermediate-risk patients survived. High-risk patients had a two-year survival rate of only 11%.

The authors concluded that a risk stratification system such as this can be of prognostic value to patients who have been diagnosed with recurrent RCC following nephrectomy for localized disease. Further use of such a prognostic system can assist physicians in counseling patients as well as providing information when recommending entry into a clinical trial.

Eggener, S.E., Yossepowitch, O., Pettus, J.A., Snyder, M.E., Motzer, R.J., & Russo, P. (2006). Renal cell carcinoma recurrence after nephrectomy for localized disease: Predicting survival from time of recurrence. *Journal of Clinical Oncology, 24,* 3101–3106.

Young Women May Experience Sexual Problems After Breast Cancer Surgery

Researchers used a descriptive study to examine sexual problems in young women following breast cancer surgery. In the past, research has documented that breast cancer therapies can have a negative effect on women's sexual functioning. The overall purpose of the present study was to describe sexual problems following diagnosis and compare them to retrospective reports of sexual problems six months before diagnosis. Moreover, the study was designed to investigate postsurgical changes in specific domains of sexual problems and to determine how sociodemographic, medical, body image, partner relationships, and health-related quality of life are associated with sexual problems.

The sample consisted of 209 sexually active women younger than age 50, who had new breast cancer diagnoses and had undergone surgery. At various time points, study participants completed surveys addressing sexual problems (Medical Outcomes Study Sexual Functioning Scale [MOS-SFS]), sociodemographic variables (Index of Marital Satisfaction), and quality of life (Functional Assessment of Cancer Therapy–Breast [FACT-B] Scale). After completing a baseline survey, the subjects were assigned randomly into two groups to receive an educational intervention, either a videotape or pamphlet, describing ways to cope with breast cancer.

The women who participated in the study had a median age of 43 years (range = 29–50 years). Most were married and Caucasian and had at least a college education. At the baseline survey, most women were premenopausal and had received chemotherapy or radiation. In addition, 45% had mastectomies; of that group, most also had reconstructive surgery.

The mean sexual problem score before cancer diagnosis was 16.7 (higher scores reflect more problems); after diagnosis, the mean scores were 35.6 at baseline (time 1), 26.1 at time 2, and 27.6 at time 3. All of the scores were statistically significantly higher than prior to diagnosis ($p < 0.0001$). Sexual problems in younger women decreased over time but still were worse one year following surgery than they were prior to surgery ($p < 0.0001$). Sociodemographic variables (e.g., age at diagnosis, marital status, level of education) were not related to sexual problems in younger women following breast cancer surgery. A decrease in a woman's perception of her sexual attractiveness, however, was one predictor of sexual problems in the multivariate analysis. Further analyses were run to determine associations between predictors and MOS-SFS scores at each survey. Vaginal dryness, chemotherapy, body image, feeling sexually attractive, relationship satisfaction, global quality of life, and the FACT-B subscales were significantly related to sexual functioning at some time point.

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