



The obstetric gynecologic oncology team at the Siteman Cancer Center.

A Victor, Not a Victim

Christina Carr knew something was wrong, but the symptoms just didn't add up. In the spring of 1994, the 42-year-old trade-show coordinator for an office products company felt unusually bloated and nauseated. She was plagued with heartburn, and occasionally coughed hard enough to lose control of her bladder. She had pain in her legs and in her rectum, but the strangest sensation was in her feet, which were so swollen they seemed to slosh when she walked. "I knew the symptoms didn't make a complete picture," she says, "but they were real."

Her primary care physician sent her to an ear-nose-and-throat doctor, who thought the cough and heartburn might be reflux of stomach acid. Then, a gynecologist suggested that she might be experiencing early signs of menopause, and a urologist offered her medication for

bladder control. "Everyone pretty much said, 'these are the aches and pains of being in your 40s—learn to live with them,'" Mrs. Carr says.

So she did—for 11 months, until one morning she woke up with belly pain so severe she was sweating through her clothes. At a local emergency room, she finally received a CAT scan and a diagnosis—ovarian cancer. She had tumors in both ovaries, and the cancer had spread into her abdomen. Because of the extent of the disease—categorized as the next-to-worst of four possible stages—doctors told the happily married mother of a 15 and an 18-year-old that she had a 35 percent chance of surviving five years.

Experts in Two Fields

Where does one turn with such odds? Mrs. Carr's primary care physician wasted no time getting her to the Siteman

Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine. Her treatment began with **Thomas J. Herzog, M.D.**, a board-certified specialist in gynecology-oncology, a field that combines a thorough understanding of women's biology with the best in cancer care. Nationwide, there are only 5,400 gynecologist-oncologists, who have completed a four-year residency in obstetrics and gynecology and a three-year fellowship treating precancerous and cancerous gynecologic conditions. The Ovarian Cancer National Alliance reports that these specialists can increase women's survival dramatically.

"Because we deal solely with gynecological cancers, our patients have an advantage," explains **David G. Mutch, M.D.**, who directs the team of Washington University gynecologist-oncologists at Siteman. "We can offer more thorough pre-operative evaluations, like ultrasound,

exploratory laparotomy, and lymph node dissection, to determine the stage of the cancer. We're also able to perform everything from minimally invasive laparoscopy to more aggressive surgery to remove as much of the tumor as possible."

The medical team at Siteman includes **Janet S. Rader, M.D.**, who trained as a gynecologist-oncologist at Johns Hopkins University and has been on faculty at Washington University since 1990, and **Randall K. Gibb, M.D.**, who joined this year after directing gynecology-oncology care at the University of Louisville School of Medicine.

These doctors work as part of a larger, multidisciplinary team of physicians, who develop a unique treatment plan for each patient at Siteman. The team includes radiologists, medical oncologists, oncologic surgeons, and other physicians at Barnes-Jewish Hospital. There also are dedicated nurses and sup-

port groups to help guide patients such as Carr through the physical and emotional rigors of treatment. All together, as many as 351 new patients with gynecological cancer have been among the more than 4,000 newly diagnosed patients who seek care at the Siteman Cancer Center each year.

Trials and Tribulations

The first step of treatment for Mrs. Carr was surgery to remove the tumor. Then came chemotherapy. "Gynecologist-oncologists are trained to treat the cancer through every stage," notes Dr. Mutch. "That means fewer doctors visits for the patient and greater continuity of care." Another advantage of being treated at a research center, Mrs. Carr learned, was the availability of cutting-edge therapies and the most up-to-date information. Dr. Herzog offered her a chance to enter a Phase III clinical trial, an experiment testing the effectiveness of a new drug regimen. The trial is one of close to 300 clinical trials available at Siteman.

Carr chose instead the standard treatment of the often-effective drugs taxol and carboplatin, but the idea of participating in a trial stuck in her mind. When the tumor returned two years after she was initially diagnosed, Carr discovered that her chances of surviving five years dwindled to a mere 5 percent. She decided to enroll in a trial comparing the drug topotecan to one called doxorubicin, and received treatment for six



Dr. Randall K. Gibb—the newest member of the obstetric gynecologic oncology team at the Siteman Cancer Center.

months. Frequent CAT scans at Barnes-Jewish Hospital during the first few months revealed that her tumor had shrunk 56 percent.

After seven months, the cancer had started growing again, and Carr enrolled in a first-round test of the toxicity of doxorubicin combined with the drug gemcitabine. By the time she had taken the medications for four months, she and her doctor were astounded to find that a CAT scan showed the cancer to have shrunk 96 percent. By October 1999, Mrs. Carr's scan showed no evidence of disease.

"I consider myself a victor, not a victim," states Mrs. Carr, now 48, who continues to work and has three new grandchildren. Still in remission, she devotes herself to ovarian cancer advocacy and travels the country, speaking about the merits of participating in clinical trials. And, she adds, she recommends to patients she meets who have cancers similar to hers that they seek the care of a gynecologist-oncologist. "I believe that's why I'm alive today," she says.

For an appointment or more information, contact the Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine, by calling (314) 747-7222 or toll-free (800) 600-3606, www.siteman.wustl.edu

Delving Into a Seldom-Studied Cancer

In a laboratory not far from where gynecologist-oncologists take care of patients, Washington University molecular biologist **Paul J. Goodfellow, Ph.D.**, is tackling a women's cancer that hasn't been the focus of much research. He collaborates with the obstetric gynecologic oncology division in studies of endometrial cancer, which strikes as many as 35,000 women a year. The malignancies are often caught and treated early because of the visible symptoms of vaginal bleeding. "There hasn't been a lot of opportunity to study advanced endometrial disease," Goodfellow says.

But the cancer remains an important window into how certain tumors work. Because endometrial cancer is promoted by hormones, it's similar to breast and prostate cancer, and there may be broad applicability of what he learns as he compares normal and abnormal growth in the post-menopausal uterine lining. Ultimately, he hopes to reveal the genetic errors that make one in twenty women have an inherited susceptibility to endometrial cancer. Some of these women, and their relatives, also are more susceptible to other cancers, such as colon cancer.

Dr. Goodfellow is tracking down several mutations that contribute to uncontrolled cell growth. Already, his work has led to insights about who's at risk for endometrial cancer—important educational information for patients and physicians. His research is just one example of the in-depth approach to cancer care at Siteman, which has 460 such research studies underway, in addition to offering thousands of others the opportunity to participate in cancer detection and prevention trials each year.

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Paul Goodfellow, Ph.D., evaluates endometrial cancer DNAs for changes in the tumor cells that might suggest an inherited risk for the disease.