

# MAKING STRIDES AGAINST A DEADLY CANCER

Increased awareness and better treatments are helping women with ovarian cancer live longer

Five years after being diagnosed with ovarian cancer, Ann Gore celebrated both her 80th birthday and her 50th wedding anniversary. The theme for her birthday party was Paris, where Gore spent three months in 1964 working in the U.S. Embassy. When the state department transferred Gore to Libya, she met her husband, Marion, who was serving in the Air Force there.

"It's been an interesting life," says Gore, who celebrated her birthday surrounded by family and her anniversary over a quiet dinner for two with Marion in their backyard.

She was celebrating something else as well, a remarkable recovery from ovarian cancer.



## MORE TIME FOR WOMEN WITH ADVANCED CANCER

Gore is like most women with ovarian cancer, age 60 or older and diagnosed when the cancer is advanced and can rarely be cured. But new and better treatments are extending life. "We work to give women extra time, and quality time," says Dirk Pikaart, DO, a gynecologic oncologist at Southern Colorado Gynecologic Oncology. In 2011, Pikaart operated on Gore, removing her uterus and ovaries, part of her colon, and dozens of lymph nodes. Then Gore had chemotherapy to kill the remaining cancer cells.

The cancer came back five times through the summer of 2016. Each time, Gore had more chemotherapy. Today, she's doing well and has no evidence of disease. She sees Pikaart every three months for monitoring.

## SUBTLE CHANGES COULD BE CANCER

"It's really hard to catch ovarian cancer early. Most of the time, early on it doesn't cause a lot of discomfort or symptoms," Pikaart says. That's why it's so important to be tuned into subtle changes

in your body. All too often, women explain away bloating, feeling full quickly, persistent pelvic or abdominal pain, or changes in the menstrual cycle as something minor. And changes from menopause make it harder to know what's normal.

"If the symptoms are new and don't go away, they need to be explained," Pikaart says. "Most of the time, it's not going to be cancer." See your doctor if mild or moderate symptoms don't go away after a few weeks, and sooner if the symptoms are severe.

Being persistent about getting a diagnosis is important, too. Gore had been having abdominal pain for months, but her doctor kept telling her it was constipation. When she told her gastroenterologist about the pain, he ordered a CT scan, which showed an ovarian cyst. The gastroenterologist sent Gore to a gynecologist, who called in Pikaart. It is also important to see a gynecologic oncologist as soon after diagnosis as possible, as outcomes are dramatically improved by seeing a physician who specializes in gynecologic cancers. "You can avoid extra surgeries, begin treatments sooner, and likely have a better quality and longer life," says Pikaart. He is currently the only gynecologic oncologist in southern Colorado.

## ADVANCES LEAD TO BETTER TREATMENTS

New drugs and better understanding of genetics are helping women like Gore live longer and better, including:

- PARP inhibitors, which inhibit the enzyme poly ADP ribose polymerase, are designed to kill cancer cells by inhibiting the cancer cells' repair genes. As the cancer cells die, the tumors shrink, resulting in better survival rates. One PARP inhibitor — Lynparza — is already being used in women with mutations in the BRCA1 and BRCA2 genes, which are best known for their role in increasing the risk of breast cancer. (This is the genetic mutation Angelina Jolie fought with mastectomy and removal of her ovaries.)
- Targeted therapies, like Avastin, block specific pathways in the cancer cells that are required for them to live and grow. Avastin stops the cancer cells from being able to form new blood vessels. Without a blood supply, the cancer cannot grow. Avastin is used with other chemotherapy agents for recurrent ovarian cancer.

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Dr. Dirk Pikaart

## SCREENING FOR OVARIAN CANCER: SHOULD YOU OR SHOULDN'T YOU?

Routine ultrasound and blood tests that screen for ovarian cancer may reduce deaths, say recent studies, yet the Food and Drug Administration and leading medical societies discourage routine screenings. "These methods don't catch enough ovarian cancers early to make a difference," says Dirk Pikaart, DO, a gynecologic oncologist at Southern Colorado Gynecologic Oncology. But they can lead to unnecessary surgery because of the high number of positive results that turn out not to be cancer. Right now, an annual pelvic exam is the only recommended screening for ovarian cancer in women with no known risk factors. Women with a BRCA mutation, family history of ovarian cancer, or another risk factor may need additional screenings as recommended by their doctors.

### LADIES: PAY ATTENTION!



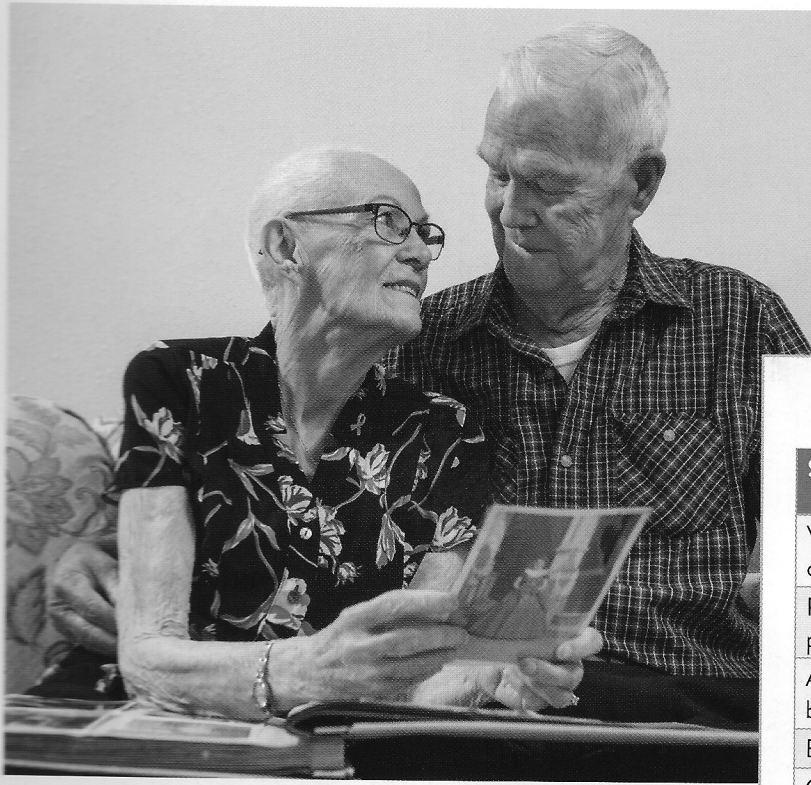
About 70 percent of ovarian cancers aren't diagnosed until they've spread because there are often only subtle changes that women frequently ignore.

#### Symptoms to report to your doctor include:

- Feeling full quickly
- Bloating
- Persistent pelvic or abdominal pain
- Changes in the menstrual cycle, particularly bleeding after menopause



Last year, Ann Gore celebrated her 80th birthday, 50 years of marriage to Marion, and five years of survivorship after ovarian cancer.



### SYMPTOMS OF OVARIAN, CERVICAL, AND ENDOMETRIAL CANCER

Symptom	Ovarian Cancer	Cervical Cancer	Endometrial Cancer
Vaginal bleeding or discharge	x	x	x
Pelvic pain or pressure	x	x	x
Abdominal or back pain	x	x	
Bloating	x		
Changes in bathroom habits	x	x	

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## GENETIC BREAKTHROUGHS

The identification of genetic mutations linked to some ovarian and endometrial cancers and the availability of genetic tests to find those mutations have led to breakthroughs in prevention and treatment. "The field of genetics is exploding with new knowledge," says Pikaart.

### INHERITED OVARIAN AND ENDOMETRIAL CANCER

Women with mutations in the BRCA genes (BRCA1 and BRCA2) have a high risk of developing ovarian and/or breast cancer. Fewer than 2 percent of all women will develop ovarian cancer, according to estimates. But for women with a BRCA mutation, the risk increases to:

- BRCA1 mutation: 39 percent
- BRCA2 mutation: 11-17 percent

Having a genetic mutation called hereditary nonpolyposis colon cancer syndrome, or Lynch syndrome, may also increase the risk for endometrial and colon cancer. The most common genetic risk factor for cancer, Lynch syndrome is caused by mutations in any of several genes.

Women with Lynch syndrome have an estimated:

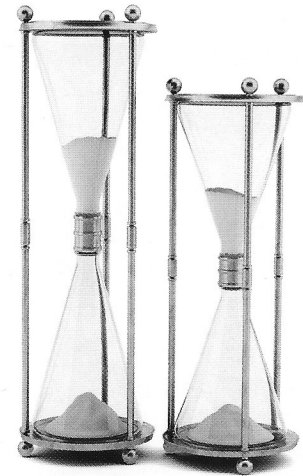
- 9-12 percent chance of developing ovarian cancer
- 20-60 percent chance of developing endometrial cancer

### GENETIC TESTING FOR PREVENTION AND BETTER TREATMENT

If genetic testing shows BRCA mutations or Lynch syndrome, surgery to remove the ovaries, uterus, or breasts prevents those cancers. Other ways to reduce cancer risk include oral birth control pills, a healthy lifestyle, and (for ovarian cancer) tubal ligation. Some drugs can also help reduce the risk of developing these cancers.

Genetic testing is also sometimes used to find the best treatment for a specific patient if cancer is found. "We're trying to figure out which drugs work for each individual based on the cancer cells' genetic profile," Pikaart explains. The drug Lynparza, for example, is currently used in some ovarian cancer patients with BRCA mutations. Research shows that PARP inhibitors may benefit more patients with different genetic profiles, too.

The Hereditary Cancer Service at Penrose Cancer Center provides cancer risk assessment, genetic counseling, and testing services for individuals and families with concerns about inherited cancer predispositions. To learn more or schedule an appointment, call **719-776-5279**. To contact Dr. Dirk Pikaart, call **719-776-6222**.



### HOW TOO MUCH FAT INCREASES CANCER RISK

Being obese, or even overweight, increases your risk for both ovarian and endometrial cancer. "Fatty tissue creates estrogenlike hormones," explains Pikaart, "which stimulate the uterine lining continuously, causing changes that eventually become cancer." Compared to women who are a normal weight, endometrial cancer is:

- Twice as common in overweight women
- More than three times as common in obese women

Obesity increases the risk for ovarian cancer, too, but its role isn't as well-understood. "It may have to do with the same reason as endometrial cancer: higher estrogen levels," Pikaart says.