

**REPORT TO PHYSICIANS**

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THE UNIVERSITY OF TEXAS  
**MD ANDERSON  
CANCER CENTER**

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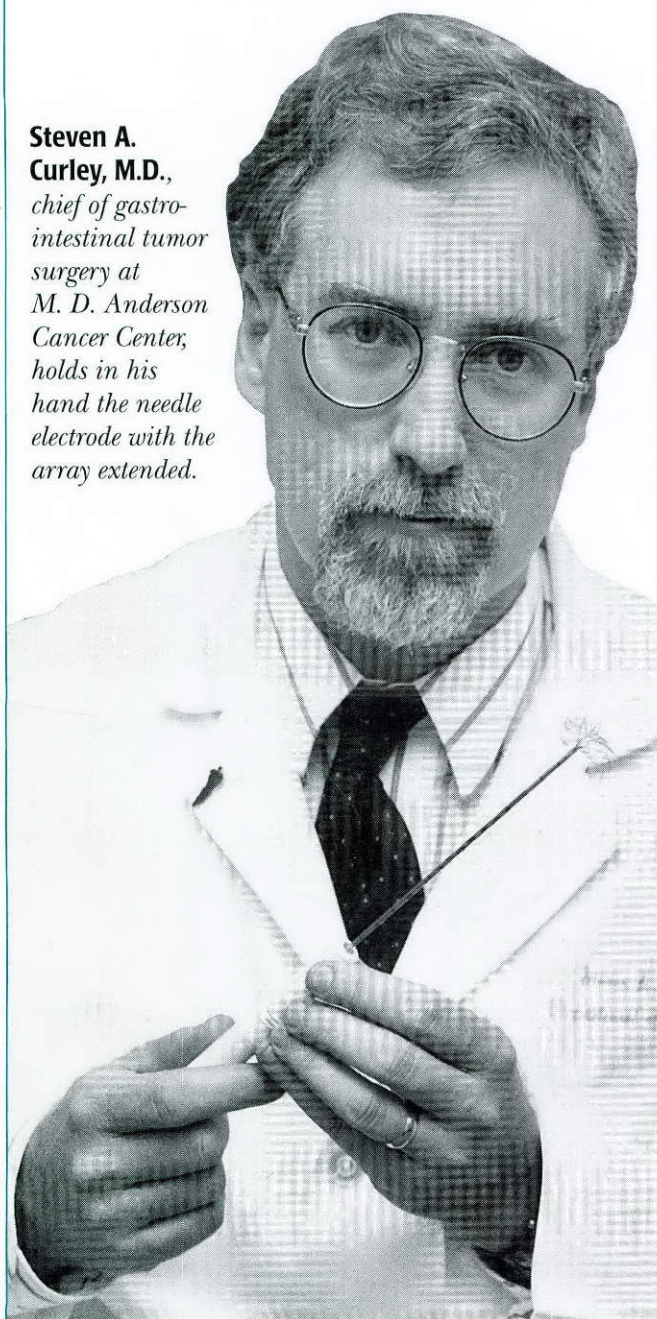
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**When Someone You Know Has Cancer**  
What can you do? *House Call* writes a prescription.



# MD Anderson Oncology

**Steven A. Curley, M.D.**, chief of gastrointestinal tumor surgery at M. D. Anderson Cancer Center, holds in his hand the needle electrode with the array extended.



## Promising Radio Frequency Treatment

## New Option for Patients With Unresectable Liver Tumors

by Sunita Patterson

**A** diagnosis of liver tumors or liver metastases, delivered by a surgeon, once left little to talk about.

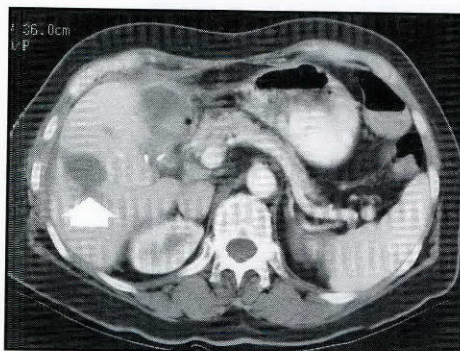
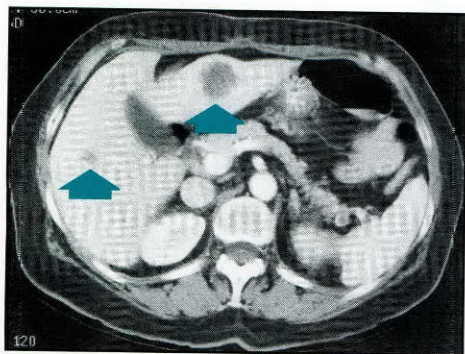
“There was a tendency to think, ‘You’ve got liver metastases—that’s it. Go home and get your affairs in order,’” said Steven A. Curley, M.D., associate professor of surgical oncology and chief of gastrointestinal tumor surgery at The University of Texas M. D. Anderson Cancer Center.

But a new treatment, radio frequency (RF) ablation, which Dr. Curley helped test, is inspiring new optimism for patients with unresectable liver tumors.

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## Radio Frequency Treatment

(Continued from page 1)



Two liver metastases (left, blue arrows) from colorectal cancer are visible in a computed tomography scan taken before radio frequency ablation of the right lobe. Ablated area is evident (right, white arrow) one month after surgery, and no evidence of viable tumor is present. Appearance of coagulated lesion remained identical in scans performed three and six months after treatment.

"If we see the patient while disease is still confined to the liver and occupies no more than about a third of the liver, we can treat aggressively," he said. In the 18 months that the treatment has been used, it has been associated with fewer complications and recurrences than the standard approach, cryoablation, and it has presented a treatment option to some patients whose tumors were unsuited for other surgical therapy.

Though primary liver cancer accounts for only about 1% of all new cancer cases annually in the United States, it is the most common solid tumor worldwide, and the liver is second only to the lymph nodes as the most frequent site of metastasis. Associated with single-digit five-year survival rates, liver tumors are unresectable in 80% to 90% of patients because of size or location. Fewer than 10% of cases respond to chemotherapy. In the past five years, cryoablation has helped many, but recent data associate it with fairly high rates of complications and recurrence, Dr. Curley said.

Dr. Curley began experimenting with the RF ablation technique in 1995. "We had good results," he said of the tests using pigs. "We found it to be safe and well tolerated. There were no complications. We could kill larger areas than we could with cryoablation, and we didn't have the problem with bleeding from the liver that we did after cryoablation."

In the summer of 1996, Dr. Curley and collaborators at the G. Pascale

National Cancer Center in Naples, Italy, began testing RF ablation in patients with hepatocellular carcinoma, which is common in southern Italy because of high rates of hepatitis B and C infection. After approval by M. D. Anderson's Institutional Review Board in July 1997, Dr. Curley initiated the procedure at M. D. Anderson. In the United States, few patients have primary liver cancers like hepatocellular carcinoma and cholangiocarcinoma; more have liver metastases from colorectal cancer, breast cancer, or more unusual tumors like leiomyosarcoma.

In Houston and Naples, 80 patients have undergone the treatment as part of two ongoing pilot studies. The first study is for patients with unresectable liver tumors; the second for patients with resectable tumors. Patients with resectable tumors undergo RF ablation before resection.

"In both studies, we wanted to show that the treatment can be done safely," Dr. Curley said. "A second purpose of the resectable tumor study was to look at the specimens to see the pathological response," he explained.

Dr. Curley says the results have been very good, and the pathological analysis has shown that the treatment completely coagulates the entire tumor, creating a cavity in the liver. Follow-up with computed tomography and magnetic resonance imaging scans every three months in the patients with unresectable tumors

## Trials Open to Patients With Biliary Tract and Hepatocellular Carcinoma

Clinical trials currently in progress at The University of Texas M. D. Anderson Cancer Center include studies of the effects of several drugs on biliary tract and hepatocellular carcinoma and of radio frequency (RF) ablation of liver tumors. Patients eligible for these trials include those who have biliary tract carcinoma, those who have hepatocellular carcinoma with or without metastasis, and those with metastases in the liver from other sites. Contact the M. D. Anderson Information Line or the M. D. Anderson clinical trials listing on the World Wide Web (see numbers and addresses below) for more information.

- A phase II trial of Platinol, recombinant human interferon-alpha, Adriamycin, and 5-fluorouracil for the treatment of biliary tract carcinoma (ID95-132). *Physician: Yehuda Z. Patt, M.D.*

Associate Professor of Medicine Yehuda Z. Patt, M.D., of the Department of Gastrointestinal Oncology and Digestive Diseases is studying the effectiveness of several drug combinations against liver cancer. In this trial, the combination of cisplatin (Platinol), recombinant interferon- $\alpha$  (rIFN $\alpha$ 2b), doxorubicin (Adriamycin), and 5-fluorouracil (5-FU) will be given to patients with biliary tract cancer. On day 1, cisplatin and doxorubicin will be given through a central venous catheter over two hours each. Then 5-FU will be

has found no recurrent tumors at the treated sites.

The LeVeen needle electrode is made by RadioTherapeutics Corporation of Mountain View, California. Strategic instrument placement is achieved by placing an ultrasound probe directly on the liver. Once the needle is in position, Curley extends from its housing an umbrella rib-like array through which electrical

infused through the catheter over days 2 through 4. Patients will receive one injection of rIFN $\alpha$ 2b per day over days 1 through 4. The four-day treatment course will be repeated every 28 days.

- A phase II trial of a hepatic arterial infusion of Platinol, recombinant human interferon-alpha, Adriamycin, and 5-FU for the treatment of hepatocellular cancer confined to the liver (ID93-024). *Physician: Yehuda Z. Patt, M.D.*

This trial, one of three being conducted by Dr. Patt to examine the effectiveness of drug combinations against hepatocellular carcinoma, involves the same drug combination in Dr. Patt's biliary tract carcinoma trial (above) but in a slightly different regimen. Cisplatin and doxorubicin will again be infused over two hours each on day 1; however, rIFN $\alpha$ 2b and 5-FU will be given on shorter schedules. This treatment course will also be repeated every 28 days.

- A phase II trial of hepatic arterial infusion of FUDR, leucovorin, Adriamycin, and Platinol for the treatment of hepatocellular cancer confined to the liver (ID92-024). *Physician: Yehuda Z. Patt, M.D.*

Though Dr. Patt is studying a new drug combination in this trial, the drugs will be administered in the same method as in the biliary carcinoma study. Drugs include floxuridine, leucovorin, doxorubicin, and cisplatin. Patients who have histologically proven hepatocellular cancer without metastasis to other sites

may be enrolled in this trial, including those who have disease that extends into the inferior vena cava or the portal vein. Patients who have received systemic chemotherapy may be enrolled in the trial, but patients who received arterial therapy are ineligible. Also, patients who have tense ascites are ineligible.

- A phase II trial of subcutaneous recombinant human interferon-alpha and continuous intravenous 5-fluorouracil for the treatment of hepatocellular carcinoma (DM97-040). *Physician: Yehuda Z. Patt, M.D.*

This trial differs from the other two hepatocellular carcinoma trials that Dr. Patt is conducting in that only two drugs are being studied and patients with either metastatic disease or disease confined to the liver may be enrolled. However, only patients who have received no treatment or regimens of higher priority may be enrolled. Patients may not be enrolled if they have received rIFN $\alpha$ 2b and 5-FU. Also ineligible are patients who have tense ascites as well as those who have brain metastases (excluding those who have received specific treatment for brain metastases).

According to Dr. Patt, the concerted effort to find an effective drug combination in the treatment of liver cancer has a simple goal. "The common objective of all these trials," Patt said, "is to accomplish adequate tumor shrinkage such that tumors may eventually become resectable."

- A pilot study of radio frequency ablation of resectable liver tumors (IDP97-221). *Physician: Steven A. Curley, M.D.*

In collaboration with other physicians who are treating liver cancer, Steven A. Curley, M.D., associate professor of surgical oncology and chief of gastrointestinal tumor surgery, is investigating RF ablation of liver tumors. After making a large incision in the abdominal wall, the surgeon inserts an electrode into the tumor. After as much as 20 minutes of electrocauterization, the surgeon removes the ablated tissue, which a pathologist studies to help evaluate the success of the procedure.

- A pilot study of radio frequency ablation of unresectable liver tumors (GS/P97-013). *Physician: Steven A. Curley, M.D.*

This trial is very similar to Dr. Curley's other trial (described above); however, only patients who have unresectable liver tumors will be eligible for enrollment. In it, patients will undergo laparoscopy or laparotomy.

**FOR MORE INFORMATION** about these clinical trials, physicians or patients should call the M. D. Anderson Information Line. Those within the United States, call (800) 392-1611; those in Houston or outside the United States, call (713) 792-6161. Visit the M. D. Anderson Cancer Center clinical trials Web site at <http://www.clinicaltrials.org> for a more complete listing of treatment research protocols.

current is transmitted. The instrument can destroy an area of tissue about 3 to 3.5 centimeters thick and 5 centimeters in diameter. The body can slowly absorb the destroyed tissue over time.

Dr. Curley attempts to position the probe to ensure margins free of disease as well as destroy the entire tumor. By positioning the needle in several different spots, six to eight

scattered tumors or single tumors as large as 10 or 11 centimeters in diameter can be ablated, as long as the total tumor mass occupies no more than 30% to 40% of the liver.

In part because it depends on hyperthermia and a thinner probe, RF ablation supersedes cryoablation: it boasts fewer complications, better control near blood vessels, and briefer hospitalization.

A preliminary comparison of complication rates indicated that only two of 72 patients (3%) who underwent RF ablation had postoperative complications, whereas 24 of 54 patients (44%) undergoing cryoablation did. Less dramatic than cryotherapy's, RF ablation's 15° to 20° temperature change has proven less traumatic and less risky.

(Continued on page 4)

## Radio Frequency Treatment

(Continued from page 3)

When tumor size and location permit laparoscopy, patients return to walking and a regular diet in one day and go home in two to three days. Open RF ablation requires hospitalization of five to seven days, and sometimes cryoablation requires more. The percutaneous approach, even less invasive than laparoscopy, can occasionally be used for RF ablation in patients with only one or two small peripheral tumors.

Because it is a local therapy, RF ablation is only appropriate for patients with disease confined to the liver. The problem with any local therapy—resection, cryoablation, or RF ablation—is that disease recurs if microscopic disease escapes detection at treatment. Dr. Curley thus believes that combination therapies are promising: resection or RF ablation of all measurable disease plus some kind of adjuvant treatment to eliminate residual microscopic deposits. A phase II study anticipated to begin this spring, headed by Lee M. Ellis, M.D., assistant professor of surgery, will pair chemotherapy and RF ablation in patients with unresectable colorectal cancer liver metastases.

Dr. Curley anticipates that RF ablation will enable him to double the number of patients with liver tumors he treats by surgery. The new procedure allows him to treat patients whose tumors were too inaccessible for resection or cryoablation and patients for whom cryoablation's associated complications prevented their consideration for surgical treatment. The projection also includes patients with scattered tumors that together would result in resection of too much of the organ. In such cases, Dr. Curley can sometimes ablate tumors in one lobe and resect the rest. ●

**FOR MORE INFORMATION**, contact Dr. Curley at (713) 794-4957 or call the M. D. Anderson Information Line at (800) 392-1611 or (713) 792-6161.

# International Patient Center Offers Help, Haven to Patients Far From Home

by Don Norwood

**S**tress and worry often accompany a diagnosis of cancer, and for patients who travel to another country for treatment, the distance from loved ones, language barriers, and cultural incompatibilities can make a troubling situation even worse. But for international patients at The University of Texas M. D. Anderson Cancer Center, the predicament is less troublesome, thanks to the International Patient Center (IPC).

This home-away-from-home helps patients negotiate the day-to-day trials of cancer treatment far from their native land.

"Here at the International Patient Center, we are the one gateway for the international patient," said Wendeline Jongenburger, IPC administrative director. Now in its fifth year, the IPC has six representatives providing language assistance in 13 languages. With advance notice, Jongenburger says she can meet the language needs of any patient, including providing sign language translators for the deaf. But the center provides more than that.

Even before patients arrive at M. D. Anderson, they can benefit from airport greeter services, coordinated by IPC, to assist them through customs. The IPC can also arrange transportation from the airport, reserve accommodations, and help patients access banking and business services. While they are at M. D. Anderson, the IPC coordinates translation services, offers guidance in getting around the institution, and opens its arms to offer emotional support. When patients

return home, the center coordinates setting up follow-up appointments and assists with obtaining prescription refills.

International patients most commonly come from Latin America, the Middle East, and Europe. This range of cultures spans almost half the globe.

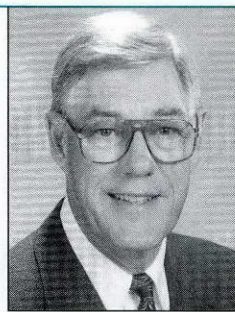
"That's obviously the challenge, but that's what we are trained to do," Jongenburger said of handling the diversity. "I have on staff two Arabic speakers, one Turkish speaker, and three Spanish speakers. One of those Spanish speakers also speaks French, German, and Italian. For the other languages, we utilize the translators. They speak a number of languages."

The IPC also helps patients manage a long absence from work, including writing a letter to verify length of stay at M. D. Anderson. The IPC provides services to facilitate resolution of patients' visa problems. It also provides patients with copies of their X-ray films and copies of medical reports when they leave.

Understanding cultural milieu is essential: "I've got some staff who

*"The idea of the IPC is that both patient and family will have a place to come where they can feel comfortable because they can speak their own language."*

**—Wendeline Jongenburger,**  
IPC administrative director



*"We have a large number of faculty members who are very supportive and do a great deal to encourage the international effort."*

**—David Tubergen, M.D.,**  
IPC medical director

are native to the country they serve," said Jongenburger. She said staff members not native to the country they serve are culturally trained. This comprehensive approach to international patient care is the center's hallmark.

When patients first arrive at M. D. Anderson, Jongenburger explained, they are greeted at registration and provided an orientation session on what their first day at the clinic will be like: "Many patients don't come from an area where they do things the way we do here. They don't know that there's going to be a clipboard and that they need to sign in, then sit down, and be called." She said the IPC helps them understand the typical sequence of care and interaction with nurses and physicians.

"This relieves some of the anxiety and some of the unknown," she said.

"One way to make them feel confident is to empower them with the ability to do things on their own," said Jongenburger. "That's what we try to do," she continued, "but we're always here for them. They want to come to the IPC because they feel more comfortable here.

"We're here to talk to the family and be a source of comfort. The idea of the IPC is that both patient and family will have a place to come where they can feel comfortable because they can speak their own language. There are staff here who understand that these patients are used to having things done differently and who are not going to look upon that as being wrong."

Adding to that comfort is IPC's effort to address the financial issues involved with medical care in the 1990s, according to David Tubergen, M.D., IPC medical director and a professor in the Department of Clinical Pediatrics.

"Those are the kinds of really nitty-gritty things that the people at the international center have figured out," Dr. Tubergen said. "The foreign countries who are sponsoring the patients here are increasingly concerned about the cost, just like all of the local companies and agencies. So we are looking at a variety of ways in which they can reduce their costs, and they're asking us to provide them with more and more information to justify what we do."

Jongenburger said that the IPC has started to work more closely with M. D. Anderson faculty and staff to make treatment easier for international patients already under care who did not enter through the IPC "gateway."

"We're a liaison and resource for the faculty and staff at the institution," Jongenburger said. When patients do not enter the institution through the IPC, she said the faculty plays a vital role: "They are our eyes and ears to what the patient might need."

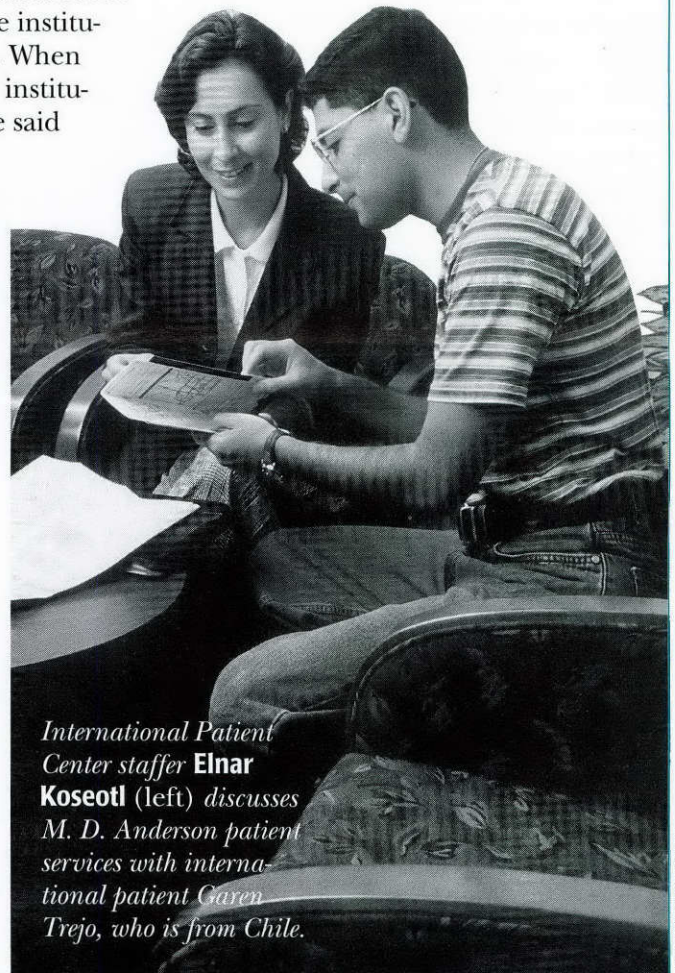
As for the future of the IPC, Jongenburger said, it can be summed up in one word—growth.

Dr. Tubergen said that more and more M. D. Anderson faculty members are finding out how important the IPC is in communicating the needs of the international patient. Furthermore, Tubergen said, physicians are attracting patients from other countries to Anderson.

"We have a large number of faculty

members who are very supportive and do a great deal to encourage the international effort," he said. "We've got a lot of faculty who travel internationally, and, as a result, their reputations attract patients to the institution." He concluded, "I think we've gradually come to recognize the importance that these patients have for the entire institution." ●

**FOR MORE INFORMATION,** call Jongenburger at (713) 745-0450 or write her at the International Patient Center—Box 313, The University of Texas M. D. Anderson Cancer Center, 1515 Holcombe Boulevard, Houston, Texas 77030.



*International Patient Center staffer Einar Koseotl (left) discusses M. D. Anderson patient services with international patient Garen Trejo, who is from Chile.*

Photo by Ellis Vener

# Nurse Practitioners Go Beyond Traditional Nursing Boundaries

by Alison Ruffin

**T**hey not only elicit histories, examine, and educate; they also diagnose, prescribe, and refer. Neither fish nor fowl—that is, neither narrowly nurses nor broadly physicians—they are the nurse practitioners of The University of Texas M. D. Anderson Cancer Center.

A product of the continuing evolution of health care provision, nurse practitioners assume expanded responsibilities because of advanced classroom education and clinical training that equips them to perform some clinical tasks that, in the past, were reserved for physicians only.

Of M. D. Anderson's nearly 1,070 registered nurses, about 10% are advanced practice nurses, a category that includes nurse practitioners and clinical nurse specialists. Three work in the Cancer Prevention Center.

Marita Lazzaro, R.N.C., C.S., A.N.P., Vicky Mizell, R.N., C.S., F.N.P., and Mervianna Thompson, R.N., C.S., A.N.P., A.O.C.N., together bring 64 years of nursing experience to their practice in the Cancer Prevention Center. Working under the direction of Therese Bevers, M.D., medical director of the center, they collaborate with her to plan and coordinate the care of patients who come for

cancer screening and early detection services.

In the Cancer Prevention Center, the nurse practitioners are specialists in cancer screening and diagnosis, cancer prevention education, and health promotion. They have been trained specifically in diagnosing many types of cancer, including skin, breast, cervical, ovarian, and prostate, and identifying people at risk for cancer. Additionally, they are specially trained in women's health care. Qualifications include a master's degree in nursing and national board certification.

"We work hard to stay current in fields as dynamic as oncology and primary care," Lazzaro says. They perform physical assessments and exams, identify health problems, exercise limited prescription authority, and determine whether they should treat the patient or make a referral.

Those at the Cancer Prevention Center came to their positions with a strong background in oncology.

"One of the differences about being a nurse practitioner in the Cancer Prevention Center is seeing patients on the other end of the spectrum, those who don't have cancer," Mizell said. "I still think of myself as an oncology nurse because I am familiar with the

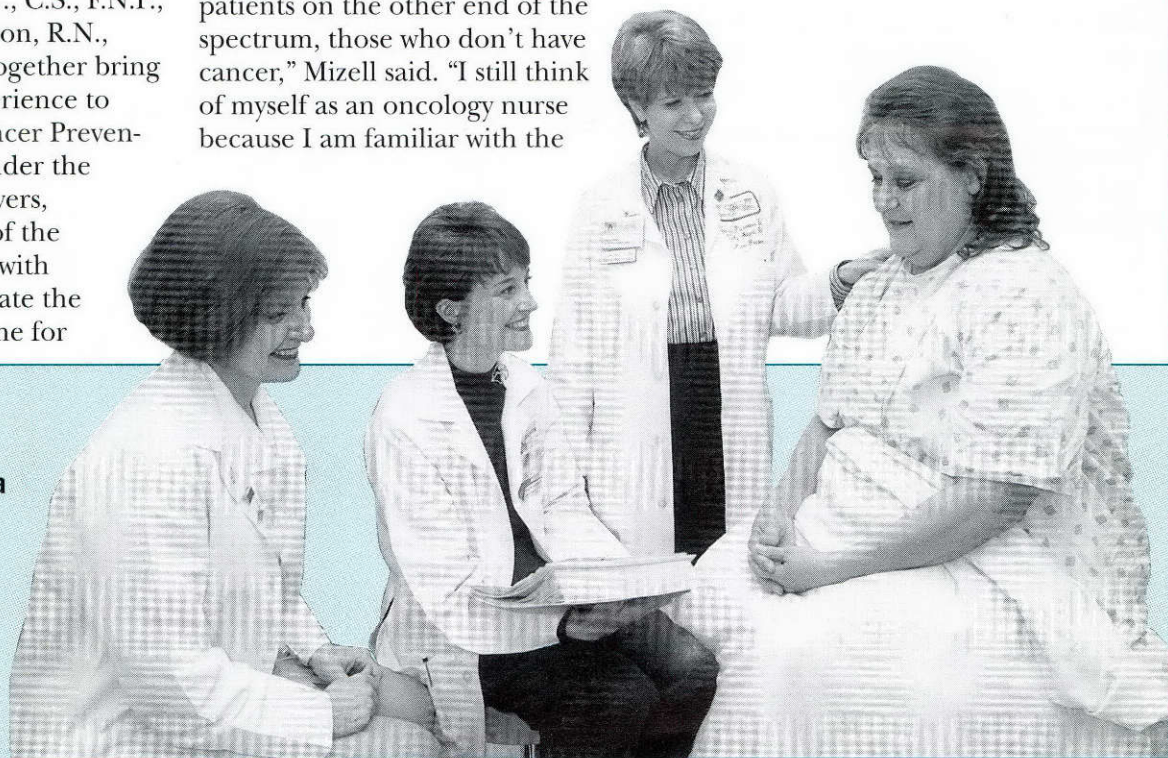
protocols, treatments, and side effects. What I knew as an oncology nurse I bring to this job," she said.

Some patients treated at the clinic return not for a checkup, but to check in with their caregivers. "It's wonderful to see them and hear how they're doing," says Thompson.

When their screening efforts identify a case beyond their scope, the nurse practitioners refer the patient for treatment. These patients, too, return. Mizell recounted one case: "When we diagnosed one patient with breast cancer, she had been so frightened about chemotherapy and surgery. Six months later, she looked absolutely wonderful. She threw her arms around me and thanked me. She said she owed a lot of her strength and ability to deal with the situation to me because I was there for her when she had questions." In this case, Mizell identified an undiagnosed lump in the patient's breast, ordered additional testing, and told the patient the diagnosis after results were in.

"When you go through something so personal and traumatic, a bond develops," she said. ●

*Cancer Prevention Center nurse practitioners Marita Lazzaro, Mervianna Thompson, and Vicky Mizell (left to right) enjoy some conversation with a patient after an examination.*



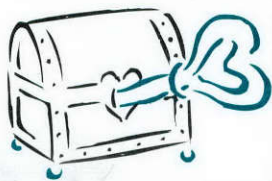


# Old Friends, New Context: When Someone Close Has Cancer

**W**e all know people with cancer. They're our relatives, coworkers, neighbors, and friends. Because they're part of our lives, their lives touch ours and our lives touch theirs.

But something sometimes happens when people get cancer. Suddenly the people around them change. It's as if the signs and the landmarks in the relationship were changed, with the result that everyone feels lost. However, this is a time when the important people in a patient's life should act and be the same as always. In many ways, they're an important part of the success of treatment. If someone you know has cancer, help them with this four-part prescription: listen, try to understand, show you care, and be yourself.

**Rx**  
**Listen with Ears, Eyes, and Heart**



*Listening* is one of the most important things you can do to help a person with cancer. But this listening is done more than just with the ears. It also involves the eyes and heart.

Sometimes people with cancer want to talk about their cancer—that's where your ears come in; sometimes people with cancer don't want to talk—that's where your eyes come in. If you can see by the way they act that they don't want to talk, let them be silent. At these times, the American Cancer Society recommends that your heart do the "listening." Sometimes you can feel that

they want to talk by the way they are spending more time around family members than usual, talking a lot about unimportant things, or appearing anxious. To help them unlock their feelings and start talking, ask them how they are feeling and what they are feeling. If they're ready to talk, this may get them started. Then your ears can do the work.

**Rx**  
**Try to Understand**



*Understanding* is also very important. It, too, takes several forms. First and foremost, you should try to understand what the patient is going through. Accept that your friend will be changed both physically and emotionally at least for a while.

Physically patients will be affected not just by cancer but also by treatment. Understand and respect their physical limitations. On the other hand, encourage them to do as many of the things as they possibly can of what they used to do before they got sick. So, if you used to play cards with this person, suggest a game of cards. Or if you used to go to the movies with them, continue to enjoy them together.

Having cancer can make anyone angry, childish, depressed, or frightened. These are all normal reactions to cancer, and your understanding will go a long way in helping the patient deal with and come to terms with these emotions and the disease.

Another important aspect of understanding is learning about the cancer the patient has. Understanding the disease and its treatment may help you better understand and meet the patient's needs.

**Rx**

**Show You Care**



*Caring* means caring for the patient in ways that doctors and nurses can't. Help them with housework, yard work, cooking, child care, or shopping. Do little thoughtful things for them. Visit them at home and in the hospital. Do what you would want people to do for you if you were sick.

**Rx**

**Be Yourself**



*Being yourself* is the best gift you can give. This is the most important advice. Remember that, no matter how much patients change outwardly, inwardly they are the same friends you have always known. In these new circumstances, they want and need you to be an unchanged part of their lives—listening, understanding, caring, and being yourself—the friend you have always been.

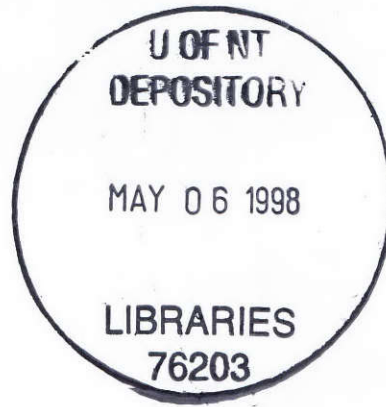
For more information, contact your physician or contact the M. D. Anderson Information Line:

 **(800) 392-1611** within the United States, or

 **(713) 792-6161** outside the United States.

March 1998

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## DiaLog

### Searching for Opportunity? Look First for Disaster

**Linda White Hilton, R.N., M.S.N., F.A.A.N.**  
**Director, Clinical Cancer Prevention Programs**

In the same way reporters have a nose for news, nurses have a sixth sense for need. And like the reporter whose skills are proved by covering a disaster, the nurse who takes on a chal-



lenge can create opportunity out of crisis.

Nurses who met the needs of wounded soldiers in a far-off war in the mid-19th century in a hospital without mattresses or medicine reduced the mortality rate from 50% to 2% and changed forever the care of wounded soldiers. When urbanization created a breach in the health care of the poor later in the century, nurses established neighborhood clinics, saving lives and creating a nursing specialty—community health nursing—along the way.

Changes in today's health care system have held a similar crisis-opportunity dichotomy for nurses. They met the challenge with advanced training. Today advanced practice nurses, including nurse practitioners and clinical nurse specialists, practice a new genre of nursing characterized by broadened clinical authority. To the basic role of nursing—caregiver—they add consultant, coordinator, researcher, health promoter, and administrator, and they expand their role as educators by enlarging their audience. No longer relegated to a shift

or confined to episodic care, their skills are joined collaboratively with those of physicians and care maps to ensure patients' needs are met across health care settings and the patient care continuum, including preventive care, my specialty.

At The University of Texas M. D. Anderson Cancer Center, it was a response to a gap in care that created the cancer control program for nurses in 1975. After a plea from more than two dozen medically underserved counties in Texas for a plan to improve early cancer detection services, we responded by training nurses to span the breach, to fill the gap, to meet the need. The program became the first in the country to incorporate clinical training in a cancer prevention and detection program.

Within two years, nurses trained in the program were practicing not only in Texas but worldwide, providing cancer prevention education and performing physical examinations and diagnostic tests to find cancer at its earliest, most treatable stage. Participants have come from more than 40 states and eight foreign countries. Out of this local crisis came global opportunity.

Twenty years ago when I went to England for an international conference on cancer nursing, of more than 50 speakers I was the only one whose topic was nurses' "extended role" in diagnostic services and cancer prevention. Now it is common within oncology practice. What will come in the next 20 years? We need only look to the next crisis for the opportunities.

The University of Texas  
M. D. Anderson Cancer Center

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