Some of the cultural barriers we expected turned out to be myths while we discovered others that had not been well-documented. We had to design a program that was responsive but not overstep our boundaries and alienate the community,” Ballard said.

This emphasis on cultural sensitivity has also included efforts to develop training programs in “cultural competence” for area hospital staff and health care providers as well as partnerships with religious organizations.

One successful program developed by the Michigan-based Oasis Communications, Inc., involves a facilities assessment followed by a Continuing Medical Education-approved seminar for health professionals. This includes Muslim dietary requirements, developing bilingual signs and educational materials, and bioethical and religious concerns.

“Decision making that may include unrelated people, the distinct boundaries the home represents, modesty, and an approach to disease as something to be endured rather than overcome has made cancer prevention and control among these individuals unique and problematic,” said M. Kay Siblani, Oasis president.

— Lou Fintor

Erratum

In an article on spirituality and medicine in the Sept. 2 News section, Christina M. Puchalski, M.D., an assistant professor in George Washington University’s department of health care science and medicine, was incorrectly identified as Christina Larson, associate professor in that department.

Are Lumpectomies for Kidney Cancer Shifting Towards Acceptance?

Partial nephrectomies, if not exactly the rage, are being seriously considered for growing numbers of patients with renal cell carcinoma.

The ideal candidate for this procedure is a patient who has a single, small (less than 4-cm) tumor in one kidney and whose other kidney is at high risk for present or future kidney failure, or a patient with only one functioning kidney. In the absence of metastatic disease, a patient with cancer in both kidneys may also be considered for a partial nephrectomy.

More recently, the indications for this type of so-called “nephron-sparing surgery” to preserve renal function and to keep patients off dialysis have expanded even further. Some patients with a normal opposite kidney — at no risk of shutting down — are having a partial nephrectomy in the one with cancer. Others with the hereditary disease von Hippel-Lindau syndrome, in which their kidneys contain hundreds of tumors, are having them individually excised, leaving the rest of the kidney intact.

This change in attitude about whether the procedure should be done at all, and who is eligible to have it, has come about gradually as study results show no difference — up to around 5 years of follow-up — in outcome for selected patients who undergo either radical or partial nephrectomy.

Many of these studies were conducted at the Cleveland Clinic Foundation, which probably has the largest experience with 700 cases, as well as studies from the Mayo Clinic, Rochester Minn., Memorial Sloan-Kettering Cancer Center, New York, the University of Texas M. D. Anderson Cancer Center, Houston, and the National Cancer Institute, where there is considerable experience with patients with von Hippel-Lindau syndrome.

Andrew Novick, M.D., chairman of urology at the Cleveland Clinic Foundation, said that at least half of the estimated 30,000 new cases of kidney cancer diagnosed each year present as localized tumors. “And if the number eligible for nephron-sparing surgery is in the 30% to 40% range, which is a conservative figure,” he said, “you’re talking about 9,000 to 12,000 people with localized disease,” who would be eligible for the less radical procedure.

Age a Factor

Novick added that people with renal cell carcinoma are usually older, and many have comorbid conditions such as hypertension, diabetes, renal artery stenosis, or some other condition that puts their remaining kidney at risk. These people also may need good kid-
ney function in the future to withstand cytotoxic chemotherapy if they develop other cancers. Older people, he added, also do not do as well as younger patients on dialysis.

**Earlier Detection**

Another factor which favors the increasing use of nephron-sparing surgery is that more kidney cancers are being detected early because they are discovered incidentally, before symptoms appear, when the patient is imaged for some other reason.

The risk of a localized recurrence after a partial nephrectomy also appears to be low, at least for the first 5 years. In an analysis of results at his institution for the first 500 partial nephrectomy patients, the overall incidence of local recurrence was 3.5%, Novick said, although it is slightly higher when all institutional study patients are included — between 4% and 6%.

Also, there was a 100% cancer-specific survival for those with lowest stage disease, which means patients did not die of kidney cancer but may have died from some other cancer or medical condition. Even patients with more aggressive disease (stage three) had a 5-year cancer-specific survival rate of around 68%, Novick said, with similar results reported in the Mayo Clinic series.

"We initially started doing partial nephrectomies in the mid-1970s in people who had only one kidney or who had cancer in both of their kidneys, and the only alternative would have been to take out all their kidney tissue and put them on dialysis," Novick recalled. "Little by little, we collected patients in these categories, and, as we looked at our results, we were surprised at how good they were."

These patients are being followed closely, not only for recurrences but to see if they develop new tumors in either kidney, he said. "Of course we recognize that complications can occur 8, 9, or 10 years later, but the 5-year data are pretty good. My view is that, from the standpoint of cancer control, we have two standards of care. For patients with cancers less than 4 cm, the results with radical nephrectomy and partial nephrectomy are clearly equal."

Novick said that the results with nephron-sparing surgery "reflect the biology of renal cell carcinoma.

Renal cell carcinoma is a type of malignancy with an unpredictable natural history, where the host immune system appears to play a role, so that the specific type of surgical approach may not be as important, as long as the entire tumor is excised. It is the same concept as in breast cancer, where some patients do just as well with partial mastectomy."

Unlike breast cancer, however, adjuvant chemotherapy or radiation therapy has not improved results in renal cell carcinoma.

**Risks Told**

David Swanson M.D., professor and chairman of urology at M. D. Anderson, said that the number one reason to consider partial nephrectomy is to prevent loss of kidney function, although there is always a risk of inadequate resection or of having a new tumor develop in the organ remnant. The risk of recurrence, he added, is related to the size and location of the tumor, the possibility that there is a remote, unrecognized lesion, "and the experience of the surgeon."

Moreover, Swanson stressed, not everyone is convinced of the value of nephron-sparing surgery. "I will often get referred a patient where the referring urologist said he needed a radical nephrectomy for his renal cell cancer, and I say, 'No, I think we can treat this with nephron-sparing surgery,' and have the patient flat-out refuse, because he had already prepared mentally to have the whole thing out."

Even more problematic is doing a partial nephrectomy on patients with hereditary types of kidney cancer whose main feature is the sheer multiplicity of such tumors.

W. Marston Linehan, M.D., chief of urologic surgery at the NCI, said that although it may seem strange to do nephron-sparing surgery in a patient with von Hippel-Lindau syndrome, who might have 600 kidney cancers along with 1100 precancerous cysts, the object is not to cure but to buy time.

"When the tumors get to a certain size — our [criterion] is about 3 cm — then we start to recommend surgical intervention. We take a very aggressive approach. Our strategy is to remove every tumor and every cyst that we see — so that we can set back the clock."

— Jean McCann