

SPEAKER: The current guidelines, both the American Urologic Association guidelines and the European Urology guidelines, state that ablation of renal tumors is reserved for patients who are either unfit for surgery or unlikely to live long enough to benefit from surgery. And really, ablation was a second tier option for patients.

We have noticed, with our group here, excellent results with percutaneous ablation. And thus, we decided to look at a contemporary series of patients treated with ablation and surgical removal.

We looked at a little over 1,800 patients. We required that they all had a small renal mass, so 7 centimeters or less. We required that they did not have a prior history of kidney cancer. So it wasn't a salvage situation. And then we looked at patients treated with partial nephrectomy, which is standard of care, and compared it to the percutaneous ablation using cryoablation and radiofrequency ablation.

The patient is put to sleep. A needle is inserted through the back towards the kidney and guided under imaging into the tumor. Multiple needles are then directed. A biopsy is taken, and then the tumor is either frozen with an iceball around the tumor, or it is cooked with radiofrequency ablation-- both causing tumor destruction.

There are some advantages in that an ablation procedure is a little bit less invasive. If you do a partial nephrectomy, you have to put the kidney back together. And you don't mess-- don't need to do that with ablation. Hospital stays generally last, on average, one night, as opposed to a couple nights for surgical removal of the tumor.

When you remove it, the pathologist is able to look at the margins and let you know if the entire tumor has been removed. When you ablate it, you can see, imaging-wise, if, say, the iceball encompasses the entire tumor. But you don't have the pathologic details to reassure you, or give you that sort of information.

What we found was that recurrence-free survival, or cancer control within the kidney, was essentially the same for all three procedures. We also found that metastasis-free survival was superior, for partial nephrectomy, or surgical removal-- and cryoablation, which is the freezing, when compared with the radiofrequency ablation for patients with tumors that were 0 to 4 centimeters.

For patients with tumors that were 4 to 7 centimeters, we found that cancer control within the kidney and metastasis-free control were equivalent for cryoablation and partial nephrectomy. I should mention that we don't use radiofrequency ablation for larger tumors, or those greater than 3 centimeters.

Additionally, we also found that overall survival was better for partial nephrectomy patients, and we believe that is related to the fact that younger and healthier patients were selected for partial nephrectomy to me, as compared to the ablation procedures.

As I mentioned, the guidelines currently have ablation as a second or third tier option for patients with small renal masses. And if these results are validated, an update to the clinical guidelines would be warranted, yes.