

Cryoablation highly effective for localized kidney cancer

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NEW YORK (Reuters Health), Mar 11 - Computed tomography-guided percutaneous cryoablation is a safe and "very effective" treatment modality for localized renal cell carcinoma, according to three-year study results reported Monday at the Society of Interventional Radiology's annual scientific meeting in San Diego.



Percutaneous cryoablation "should be the gold standard and the first treatment option for all patients whose kidney cancer is 4 cm or smaller," Dr. Christos Georgiades, interventional radiologist at Johns Hopkins Hospital in Baltimore, told the conference.

"Based on our three-year data, (percutaneous) cryoablation is as effective as laparoscopic cryoablation and as effective as partial nephrectomy," he said. "We have quite conclusive data that show the rate of tumor kill for tumors that are 4 cm or smaller is close to 100%. For tumors that are between 4 cm and 7 cm, we have a similar rate of tumor kill."

Between 2006 and 2008, Dr. Georgiades and colleagues treated 84 patients (a total of 90 renal tumors measuring 1 cm to 10 cm) with CT-guided percutaneous cryoablation. Biopsy was performed in all patients prior to the cryoablation protocol, which consisted of a 10-minute freeze, an eight-minute thaw, and a 10-minute refreeze cycle.

Efficacy was determined based on a tumor's size at three-, six-, and 12-month clinic visits and then yearly -- with follow-up imaging with CT or magnetic resonance imaging.

Technical success -- defined as an ice-ball extending at least 4 mm beyond the tumor margins -- was 100%, the investigators report in a meeting abstract.

Of the 90 tumors, 88 were "completely treated" -- with no evidence of cancer (98%). Two patients had small residual tumor (roughly 1 cm); one was retreated with ablation with complete success, for an efficacy rate of 99%. "The other patient, for whatever reason, has refused to come back even though he started with a 10-cm tumor," Dr. Georgiades noted. This patient was not a candidate for surgery because of heart and lung disease.

No patient developed new local cancer or metastatic cancer after ablation and none required surgery.

"More than 75% of patients who are diagnosed with kidney cancer have tumors that are 4 cm or less in size," Dr. Georgiades noted in a written statement from the conference. "These individuals can have their tumors treated completely, effectively, without surgery, with quicker recovery and mostly on an outpatient basis (with cryoablation). At Hopkins, interventional cryoablation is the first-line treatment for small tumors. Most of our patients go home the same day they receive treatment with minimal limitation on regular activities."

"In the unlikely case that cryoablation fails, patients can still have the surgery that they would have in the first place," Dr. Georgiades added.

By Megan Rauscher

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