American Urological Association MediaRoom

RESEARCHERS STUDY OPTIONS IN TREATING KIDNEY CANCER
Panel to address active surveillance, nephron-sparing vs. radical nephrectomy

Washington, DC -- May 15, 2010 – Several new studies that examine clinical benefits in the rates of partial vs. radical nephrectomies and the usefulness of active surveillance for patients with small renal masses (SRMs) will be presented to reporters during a special press conference at the Walter E. Washington Convention Center on Sunday, May 15, 2011 at 2 p.m. EDT during the 106th Annual Scientific Meeting of the American Urological Association (AUA). The media session will be moderated by Jeffrey Holzbeierlein, MD.

Characteristics of Small Renal Masses Progressing To Metastases While Under Observation: A Pooled Analysis (#1663): Active surveillance (AS) for SRMs has emerged as an alternative to surgical therapy for some patients with kidney cancer. In this study, researchers from the Fox Chase Cancer Center in Philadelphia reviewed a pooled analysis of studies that investigated the natural history of SRMs with an emphasis on measuring tumor growth rates and the clinical characteristics of the lesions that progressed to metastatic cancer. They found that in a majority of cases, the SRMs exhibited slow growth rates with a low short-term risk of becoming metastatic cancer. A small proportion of SRMs did advance.

The cases of 880 patients/936 SRMs were reviewed. Mean tumor size ranged from 1.7 – 7.2 cm. 32.5 percent of all lesions exhibited zero net growth over time and did not metastasize. However, 18 cases – 2.1 percent – did grow to metastatic cancer. However, while they were considered late events, advancing disease may have been related to increased age, initial tumor size and volume, linear growth rate and volumetric growth, which may need to be considered in addition to radiographic data in order to optimally predict progression.

Partial Nephrectomy vs. Radical Nephrectomy For Non-Metastatic Renal Cell Carcinoma: Utilization Trends In The United States (#540): Removing only the cancerous portion of the kidney – partial nephrectomy, or PN – has benefits over total organ removal – radical nephrectomy, or RN – not the least of which is maintenance of kidney function. However, in this study conducted in the University of Montreal Health Center in Montreal, QC, researchers tested the theory that PN remains underutilized in North America.

The researchers examined the Nationwide Inpatient Sample and performed a retrospective cohort analysis of 48,321 patients with non-metastatic renal cell carcinoma (RCC) during the time period. Overall, PN was performed in 18 percent of the patients, and increased over time from 7 percent in 1998 to 26 percent in 2007. Over the course of the study decade (1998-2007), the rate of PN increased nearly four-fold. However significant variability was found, with higher rates of PN associated with intermediate- and high-volume institutions and contemporary year of surgery. Likewise, certain patients, a decreased rate of PN was found in octogenarians as well as in female and patients of Hispanic race. Non-academic institutions were also associated with a decreased use of PN.

The Overuse Of Nephron-Wasting Radical Nephrectomy In The Elderly: An Analysis of Trends In The United States Population from 1998 – 2007 (#1668): In a similarly themed study conducted by the Columbia University College of Physicians and Surgeons, researchers compared the rates of PN to RN in elderly patients. They found that RN is performed more often than PN in patients 75 and older, despite the fact that this patient group often has multiple comorbid conditions and are likely to benefit from nephron-sparing surgery. Using data from the Surveillance, Epidemiology and End Results (SEER) registry, the researchers identified 18,045 cases of localized Renal Cell Carcinoma of four centimeters between 1998 and 2007. The compared two groups: those over age 75 and those below age 75. Overall, 66 percent of patients
over 75 underwent RN, compared to 59 percent of patients below age 75. Of those with smaller tumors, the disparity was even more pronounced.

Has A Minimally Invasive Approach Become More Important Than Nephron Preservation In The Management Of The Clinically Localized Renal Mass? (#66): Researchers from the Fox Chase Cancer Center in Philadelphia, PA examined the impact of laparoscopy on rates of nephron-sparing techniques from 1995-2005. They found that growth rates in the laparoscopic radical nephrectomy (LRN) were rising faster than partial nephrectomy, which they deemed a cause for concern. Even though it is conducted through a less invasive procedure than open partial nephrectomy (OPN), LRN still results in removal of the entire kidney. Meanwhile, recent evidence suggests that nephron-sparing surgery reduces the risk of chronic kidney disease and may improve survival rates in patients with kidney cancer. Using SEER-Medicare data, authors examined national trends in rates of open radical nephrectomy, LRN and OPN as well as laparoscopic partial nephrectomy (LPN) in patients with localized, stage one and stage two renal masses from 1995-2005 (6,716 patients).

They found that during that time period, the number of patients receiving ORN, decreased from 86.7 percent to 36.4 percent. While there were increases in the utilization rates of OPN (6.7 percent to 13.5 percent) and LPN (.6 percent to 9.3 percent), this was offset by an even bigger growth of LRN over the same time period (6.1 percent to 40.8 percent). As a result, utilization of nephron-sparing techniques increased by only 15.5 percent during the 10-year study period, while 77 percent of patients with localized tumors still underwent radical nephrectomy as recently as 2005.

“In recent years, we’ve moved further away from radical nephrectomy to treat small renal masses and have adopted a nephron-sparing approach in order to preserve kidney function and potentially prevent future kidney-related comorbidities such as diabetes and high blood pressure,” said AUA spokesperson Jeffrey M. Holzbeierlein, MD. “Though progress is being made in terms of educating physicians about what can be done to preserve kidney function, many still have not adopted a nephron-sparing approach.”

NOTE TO REPORTERS: Experts are available to discuss this study outside normal briefing times. To arrange an interview with an expert, please contact the AUA Communications Office at the number above or e-mail Communications@AUAnet.org.

About the American Urological Association: Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is the pre-eminent professional organization for urologists, with more than 17,000 members throughout the world. An educational nonprofit organization, the AUA pursues its mission of fostering the highest standards of urologic care by carrying out a wide variety of programs for members and their patients.

Contact:
Wendy Waldachs Isett, AUA
410-977-4770
wisett@AUAnet.org