

Nephrectomy (Removal of the Kidney)

Kidney cancer is a common malignancy with over 30,000 patients afflicted in the United States per year. The incidence of kidney cancer is increasing which is partially due to the increased use of cross-sectional imaging such as CT and MRI. At the UCSF Comprehensive Cancer Center, we provide state-of-the-art care to the entire spectrum of patients with renal cancer, from those with suspicious x-rays without a diagnosis to the care of patients with advanced or recurrent kidney cancer.

Surgical removal of the cancer is the most effective form of treatment for patients whose cancer is confined to the kidney. Traditionally this has been through a procedure called radical nephrectomy. Radical nephrectomy is an open surgical procedure performed through an abdominal or flank incision during which the kidney, the fat surrounding the kidney and the adrenal gland or lymph nodes are removed. It's a major surgical procedure requiring a 3-6 day hospitalization depending on a number of factors. For most patients with renal cell carcinoma, this procedure can now be performed laparoscopically, through four small incisions. Laparoscopic radical nephrectomy has the advantage of less pain and quicker return to full activities after surgery. The typical hospitalization is one to two days after surgery.

For patients with smaller kidney tumors (under 5 cm.), or bilateral tumors (tumors on both sides), only one kidney or preexisting kidney problems, partial nephrectomy is an equally effective cancer treatment, with the advantage of saving the non-cancerous kidney tissue. For many years, UCSF has been a pioneering institution in the safe performance of partial nephrectomy. Partial nephrectomy is typically performed through a flank incision, and many patients have a 3-6 day hospitalization with recovery of kidney function. UCSF surgeons also have extensive experience removing large and or locally extensive renal cancer, including those that are associated with atrial involvement.

Laparoscopic partial nephrectomy is now performed in select patients at UCSF bringing the advantages of laparoscopy to complex, kidney preserving cancer surgery. Over the past two years, UCSF has again been a pioneer in the development of new techniques for laparoscopic partial nephrectomy. Hospitalization is usually 2-3 days and recovery is 2-3 weeks.

Some patients have a particular type of kidney cancer called transitional cell carcinoma that arises from the lining cells in the urinary collecting portion of the kidney. Most patients with transitional cell carcinoma of the kidney require removal of the kidney and the ureter (the tube which carries urine from the kidney to the bladder), a procedure called nephroureterectomy. Traditionally, this is a major operation requiring two incisions (one for removal of the kidney and the other for the ureter). Currently at UCSF, this procedure is also performed laparoscopically (through small incisions) with excellent outcomes, in select patients. This procedure is called laparoscopic nephroureterectomy and usually requires a 3-5 day hospitalization after surgery.

Many clinical trials are available for patients with all stages of kidney cancer. A complete listing can be found in the clinical trials section of our website located at <http://Urology.ucsf.edu/clinicalTrials.html>