New study shows that primary upper tract TCC has a better prognosis than bladder TCC that has spread up the urinary tract:

Bladder Cancer as a Prognostic Factor for Upper Tract TCC:

CONCLUSIONS: This study demonstrates that a history of bladder TCC (invasive or superficial) has an adverse effect on the prognosis of patients diagnosed with upper tract TCC independent of primary tumor stage.

Mullerad, M; Russo, P; Golijanin, D; Chen, HN; Tsai, H; Donat, S; Bochner, BH; Herr, H; Sheinfeld, J; Sogani, PC; Pramod, C; Kattan, Mw; Dalbagni, G+


PubMed Abstract

The renal pelvis is an area in the center of the kidney where urine drains into the ureter, the tube which directs urine flow to the bladder. Primary upper tract urothelial tumors of the renal pelvis and ureters are relatively rare. Tumors of the renal pelvis account for approximately 10% of all renal tumors and approximately 5% of all urothelial tumors. Ureteral tumors are even more uncommon, occurring with one quarter the incidence of renal pelvis tumors.

For those with TCC of the bladder, the risk of upper tract recurrence may be as high as 25%.

TCC is on the inner lining of the kidney; RCC-renal cell carcinoma- is cancer of the kidney itself. Upper tract TCC is treated much like TCC of the bladder. Fortunately, TCC is also much more treatable than RCC, which is very resistant to most forms of chemotherapy and radiation.

Staging is much the same as with bladder cancer, based on the depth of tumor invasion and classified using the tumor, node, metastases (TNM) system.

Tis - Carcinoma in situ
   Ta - Superficial/papillary
   T1 - Lamina propria invasion
   T2 - Muscularis propria invasion
   T3 - Peripelvic/periureteral/renal invasion
T4 - Contiguous organ involvement

N0 - Negative nodes

N1 - Metastasis in single node less than 2 cm in diameter

N2 - Metastasis in single node 2-5 cm in diameter or metastasis to multiple nodes less than 5 cm in diameter

N3 - Metastasis in lymph node greater than 5 cm in diameter

M0 - No distant metastasis

M1 - Distant metastasis

Therapy

For localized disease, your treatment may be one of the following:

1. Surgery to remove the kidney, ureter, and the top part of the bladder (nephroureterectomy).

2. Surgery to remove part of the ureter or kidney (segmental resection).

3. A clinical trial of electrosurgery or laser therapy.

4. A clinical trial of intrapelvic or intraureteral chemotherapy or biological therapy.

Medical treatment of upper tract urothelial tumors involves the instillation of chemotherapeutic agents mitomycin C, thiotepa, or the immunotherapy bacille Calmette-Guérin (BCG). These agents can be administered either percutaneously, through a ureteral catheter, or intravesically in patients with vesicoureteral reflux. This approach is most appropriate for patients with multiple superficial disease or carcinoma in situ who also have bilateral disease and/or limited renal function. This appears to be safe as adjuvant therapy, but its efficacy is not firmly established. Thus, it should be considered second-line therapy.

The potential benefits of systemic chemotherapy for localized diseases have not been established at the current time.

Surgery

Nephroureterectomy with excision of the bladder cuff is considered standard treatment. This procedure is indicated in patients with renal pelvis TCC, regionally extensive disease, and high-grade or high-stage lesions. Typically, the operation is performed through one abdominal incision or a flank incision combined with a lower abdominal incision. An ipsilateral pelvic lymphadenectomy can be performed for staging purposes and may have therapeutic benefit.

Laparoscopic nephroureterectomy: Operative time is approximately
doubled when compared to the standard open procedure. Benefits associated with this minimally invasive operation include decreased patient analgesic requirements, shorter hospitalization, and patients usually are able to resume normal activity more quickly. Currently, it is being used in a more widespread fashion and appears equivalent to the open procedure with regard to cancer cure.

Reports are coming in stating that cancer-free survival is not adversely effected:

aDepartment of Urology, SLK Kliniken Heilbronn, Am Gesundbrunnen 20, D-74078 Heilbronn, Germany; bDepartment of Urology, Fundacion Puigvert, Barcelona, Spain; cInstituto di Urologia, Università di Padova, Padova, Italy

Conclusions: Open radical nephroureterectomy still represents the golden standard for the management of upper tract transitional cell carcinoma, however, laparoscopic radical nephroureterectomy offers the advantages of minimally invasive surgery without deteriorating the oncological outcome. In case of advanced tumors (pT3,N+) open surgery is still recommended. European Urology Volume 46, Issue 6, December 2004, Pages 690-697

Transurethral Approach to the Distal Ureter in Nephroureterectomy: Transurethral Extraction vs. Pluck Technique with Long-Term Follow-Up
Burkhard Ubrig, Michael Boenig, Michael Waldner and Stephan Roth
Department of Urology, Klinik für Urologie und Kinderurolgie, University of Witten/Herdecke, HELIOS Klinikum Wuppertal, Heusnerstr. 40, D-42283 Wuppertal, Germany

Conclusions: Both techniques proved technically and oncologically safe. Bladder tumor recurrence rate was in the range reported for classic nephroureterectomy. No extravesical tumor recurrence in the former ureteral bed or on the scar of the resected ureteral orifice occurred. European Urology Volume 46, Issue 6, December 2004, Pages 741-747

Two more favorable articles on laparoscopic surgery for upper tract TCC appear in European Urology Volume 51, Issue 6, June 2007, Pages 1639-1644 and Pages 1633-1638

Segmental ureterectomy coupled with ureteral reimplantation is a procedure indicated for patients with ureteral tumors located in the (far end near the bladder) distal ureter. Unfortunately, due to the multifocal nature of TCC, the ipsilateral (same side) recurrence rate is 25% after segmental ureterectomy.

Renal-sparing surgery, including segmental ureterectomy and endoscopic therapy, maintains a vital role in the urologic management of upper tract urothelial tumors. Typically, patients with small, lower-grade superficial lesions are best approached in this manner. Some investigators use this approach more frequently in patients with one kidney, bilateral disease, compromised renal function, or greater operative risk.
In the case of regional (pelvic) spread, distant metastases or recurrent disease, systemic chemotherapy and/or radiation may be used in attempt to control symptoms, though cure is unlikely.

Information made available in March, 2007 states that systemic adjuvant or neoadjuvant chemotherapy with Cisplatin does provide significantly better long term survival. Radiation therapy did not contribute to longer survival. 1

Total nephroureterectomy - 5-year survival by stage

Stage Tis, Ta, T1 - 91%
Stage T2 - 43%
Stage T3/T4 or N1/N2 - 23%
Stage N3/M1 - 0%

New data on the usefulness of adjuvant chemotherapy in advanced upper tract TCC: Clinical studies investigating the role of adjuvant radiation therapy after radical nephroureterectomy failed to show protection from progression to metastatic disease. However, systemic chemotherapy, either as neoadjuvant or adjuvant therapy, appears to have a positive impact on patient survival (2): Articles at European Urology Supplements

Volume 6, Issue 8, March 2007, Pages 549-554

Trends in Modern Management of Uro-oncological Diseases, 4th Fall Meeting of the European Society of Oncological Urology (ESOU)

doi:10.1016/j.eursup.2007.01.009 2."Neo/Adjuvant Therapy in Upper Tract Urothelial Carcinoma" Levent N. Türkeri, a, aDepartment of Urology, Marmara University School of Medicine, Tophanelioglu cad No. 13&ndash;15, Altunizade, 34662, Istanbul, Turkey

Must Reads:

*N' tl Cancer Institute: PDQ Statements; Treatment: Patients Professionals

ARTICLES

*Endourologic Management of Upper Tract Transitional Cell Carcinoma

Peter E. Clark, M.D. Stevan B. Streem, M.D. Cleveland Clinic Foundation, Department of Urology Cleveland, OH-Digital Urology Journal

*Urothelial Tumors of the Renal Pelvis and Ureters Excellent article from emedicine.com, a professional resource

*Potassium and Renal Diet - What is potassium and why is it important to youou?*: http://www.kidney.org/atoz/atozitem.cfm?id=103
For some first hand experiences see; Tale From the Trenches -TCC of the renal pelvis/ureter, here on WebCafe

1. European Urology Supplements Volume 6, Issue 8, March 2007, Pages 549-554 Trends in Modern Management of Uro-oncological Diseases, doi:10.1016/j.eursup.2007.01.009 European Association of Urology Ne Neo/Adjuvant Therapy in Upper Tract Urothelial Carcinoma Levent N. Türkeri, a, aDepartment of Urology, Marmara University School of Medicine, Tophanelioglu cad No. 13–15, Altunizade, 34662, Istanbul, Turkey