

N65

Survival analysis for localized low-differentiated renal cell carcinoma

A. Gołubiński*, B. Gliniewicz, M. Stojewski, A. Sikorski.
Pomerania Medical University, Dept. of Urology, Szczecin, Poland

Introduction and Objectives: Renal cell cancer (RCC) represents 2-3% of all malignant tumors in adults. Nuclear grading according to Fuhrman, pathological stage of primary tumors, lymph nodes metastases and presence of distant metastases at diagnosis are independent predictors of cancer-specific mortality in patients with RCC. Majority of renal tumours are diagnosed by ultrasound performed for different reasons. Despite increased detection rate survival has not improved. RCC characterized by high mortality, reaching about 40% of all surgically treated patients. To describe survival patients after nephrectomy due to low-differentiated RCC.

Material and Methods: A total of 40 patients with low-differentiated RCC (mean age 61.5 years), treated between January 2005 and November 2007, were included into the study. Mean observation period was 23.6 months (range from 14 to 36 months). In all cases histological confirmation of G3 or G4 RCC was received. G3 tumors were present in 31 patients (pT1b-3; pT2-9; pT3a-13; pT3b-5; pT4-1) and G4 in 9 patients (pT1b-1; pT2-3; pT3a-5). In all cases chest X-ray and abdominal CT were performed as a standard procedure. There were no metastases before surgery. After surgery all patients were followed strictly by urologist. Deaths information has been received from families and discharge cards.

Results: 14 patients (35%) out of 40 died during observation, including 6 (67%) out of 9 with G4 tumors (pT1b-1; pT2-2; pT3a-3) and 8 (25.8%) out of 31 with G3 tumors (pT2-1; pT3a-3; pT3b-3; pT4-1). In all cases RCC progression was the reason of death. 4 patients died in the first year after surgery, 8 patients in the second and next 2 in the third year. Metastases were found in 21 patients (52.5%) during postoperative observation. Most of them were present in lungs (12 cases, 30%) but in 7 cases (17.5%) coexisted with enlarged lymph nodes, in 2 cases (5%) with liver metastases, and in 1 case with local recurrence. Isolated bone metastases were observed in 4 cases (10%) and isolated liver metastases in 2 (5%). Among other 3 patients brain metastases, local lodge recurrence or disseminated malignant disease were found.

Conclusions: In spite of development in medicine and modifications in surgical technique, prognosis in low-differentiated RCC is invariable.

N66

Protective value of a folkloric medicinal plant extract against mortality and hemorrhage in acute renal trauma model in heparinized rats

H. Tokgoz¹, K. Karakaya², V. Hanci³, M. Abdusoglu³, B. Erol¹*, O. Turksoy⁴, B. Akduman¹, N.A. Mungan¹. ¹Karaelmas University, Dept. of Urology, Zonguldak, Turkey; ²Karaelmas University, Dept. of General Surgery, Zonguldak, Turkey; ³Karaelmas University, Dept. of Anesthesiology, Zonguldak, Turkey; ⁴Karaelmas University, Dept. of Radiology, Zonguldak, Turkey

Introduction and Objectives: We evaluated the efficacy of a folkloric medicinal plant extract (Ankaferd Blood Stopper® [ABS]) compared with oxidized cellulose (Surgicel®) in an acute renal injury model. ABS is a mixture of 5 plants that has historically been used in Turkish traditional medicine. It has been approved by the Ministry of Health to manage external hemorrhage and dental surgery bleeding in Turkey.

Material and Methods: Twenty-two Wistar albino rats underwent partial nephrectomy after intravenous heparin anticoagulation (2000 units per kg). The cut surface received 1 of 3 therapies, namely no treatment, Surgicel® (Johnson &

Johnson, New Brunswick, New Jersey, USA) or ABS (Trend Teknoloji İlaç A.Ş., Istanbul, Turkey). Blood pressure was continually monitored. Survival time, total blood loss and mean arterial pressure (MAP) were recorded for 60 min or until death. Rats which were alive (MAP > 20 mmHg) at the end of 60 min were sacrificed with blood withdrawal from catheters.

Results: All animals that received no treatment died within 60 min of follow up period. One out of 7 in Surgicel group, and 5 out of 7 animals in ABS group, survived. Mean survival times for Surgicel and ABS groups were 42.7 and 53.4 min, respectively (Table 1). Rats in the ABS and Surgicel groups survived significantly longer than rats in the control group (p < 0.05). There were no significant differences between the ABS and the Surgicel groups in survival (p = 0.128).

Table 1: Comparability of groups treated and treatment results in ABS, Surgicel and control groups

	Control group mean±SD (n=8)	Surgicel group mean±SD (n=7)	ABS group mean±SD (n=7)	p values*		
				Control vs Surgicel	Control vs ABS	Surgicel vs ABS
Weight (gr)	392.4±34.3	357.3±26.4	368.4±21.4	0.189	0.232	0.902
Excised Kidney (mg)	437.5±5.1	414.3±3.78	428.6±7.55	0.463	0.955	0.620
TRW% excised	33.3±3.4	34.1±4.4	32.4±3.3	0.867	0.694	0.535
BW% excised	0.10±0.01	0.11±0.01	0.11±0.02	0.779	0.694	0.805
Initial MAP (mmHg)	125.12±8.79	130.00±10.04	129.71±5.49	0.536	0.281	0.902
Final MAP (mmHg)	0	9.8±26.07	33.28±31.25	0.694	0.021	0.097
Net Blood Loss (mg)	6.41±1.32	6.45±1.29	5.54±1.49	0.955	0.397	0.383
Net Blood Loss (mg/ kg)	16.42±3.46	18.13±3.63	15.04±4.11	0.397	0.694	0.097
Survival time (minutes)	14.25±10.45	42.71±11.54	53.43±13.11	0.002	0.001	0.128
Sixty-minute-survival/	0/8 (0%)	1/ 7 (14.3%)	5/7 (71.4%)	0.467	0.007	0.051
Total (n)(%)						

*Mann-Whitney U test ABS: Ankaferd Blood Stopper® MAP: Mean arterial pressure TRW % excised: The percentage of excised kidney portion to the total renal weight BW % excised: The percentage of excised kidney portion to the total body weight

Conclusions: ABS is as effective as Surgicel in achieving hemostasis and lengthening survival time following partial renal excision in an experimental rat model.

N67

RFA of the tumors in the solitary kidney

M. Matuszewski*, J. Michajłowski, K. Krajka. Medical University In Gdańsk, Dept. of Urology, Gdańsk, Poland

Introduction and Objectives: Along with abetter access to a better imaging technologies the number of small renal cell carcinomas (RCC), that are diagnosed has been increased. Smaller lesions are more possible to be treated with little invasive, nephron-sparing methods. Unfortunately even the most promising laparoscopic partial nephrectomy is not without drawbacks. Additionally there are more and more data that some of these small lesions may be not very aggressive. So especially in older or otherwise-not-healthy patients any aggressive techniques may appear to be not justified. This is causing that new modes of treatment such as radiofrequency ablation (RFA), that is based on thermal destruction of abnormal tissue with the heat delivered by needle probe introduced into the lesion under ultrasound control, seems to be an interesting alternative.

Material and Methods: We are presenting results of a treatment of 13 patients with RCC in the single kidney that have been subjected to RFA since 2003. 17 lesions were treated with 23 RFA sessions performed. The average age of the patients was 66 (55-75). The medium size of the tumor was 33 mm (21-45). Patients were qualified to this treatment because of a poor general health status or concomitant oncological disease in other organs, or because of multiple lesions in the kidney. The protocol was approved by local Ethical Committee. The tumor were diagnosed by CT with features characteristic for renal cell carcinoma. The result was assessed by CT, where no growth and no contrast enhancement were considered as a good result. Medium follow-up was 30.7 months.

Results: There were no complications during the RFA. In one case with multiple tumoursa ureteral stricture developed and