

**Conclusions:** All stages management were compliant with the current available guidelines except for mixed tumour stage I. Highly curative rates can be attained by all three modalities. Standard treatment with radiotherapy is challenged by surveillance and chemotherapy. Higher percentage of cases with mixed cell tumour as well as Stage II seminoma.

**Poster session 4: Benign and Malignant renal diseases and Kidney transplant**  
**Friday, 23 October 2009, 14:30–16:30**  
**Poster room 1**

**C51**

**Nephron sparing surgery for renal cancer – expanding indications and advancement in minimal invasive surgery**

T. Ūrge<sup>1</sup>\*, P. Stránský<sup>2</sup>, M. Hora<sup>2</sup>, O. Hes<sup>3</sup>, V. Eret<sup>2</sup>, J. Ferda<sup>4</sup>, Z. Chudáček<sup>4</sup>, <sup>1</sup>University Hospital Plzen, Department of Urology, Plzeň, Czech Republic; <sup>2</sup>Faculty Hospital Plzen, Dept. of Urology, Plzen, Czech Republic; <sup>3</sup>Faculty Hospital Plzen, Dept. of Pathology, Plzen, Czech Republic; <sup>4</sup>Faculty Hospital Plzen, Dept. of Radiology, Plzen, Czech Republic

**Introduction and Objectives:** A program for the nephron sparing treatment of kidney tumours was established at our institution in January 1992, laparoscopic approach is used since September 2004. As of June 2009, 302 open resection and 68 laparoscopic resection have been accomplished.

**Material and Methods:** Since 1992 to June 2009 1340 patients were treated for renal tumours, 370 (27.6 %) underwent tumour's resection.

**Results:** Nephron sparing surgery composed approximately 23.5±11.8 % per a year. It was 8.0 % in 1992, 25.5 % in 2000 and 40.3 % in 2008. There is so higher application of nephron sparing surgery and lower in nephrectomy, regress equation for nephrectomy:  $y = -0.02x + 0.9552$  vs.  $y = -0.02x + 0.0448$  for resections; reliability value 0.8123. We did not find any statistical significant differences in operation time (mean 115±28 min), but there is a higher application of category T1b (0 % in 1992 vs. 22.7 % in 2000 vs. 32.3 % in 2008). We provided only open surgery for T1b.

**Conclusions:** Way to relatively good results of nephron sparing surgery is in careful selection of tumours using two phase CTA and superspecialisation of surgeon. OR still remains gold standard in nephron sparing surgery mainly in bigger tumours. The work was supported by Czech government research project MSM 0021620819.

**C52**

**Prognostic factors and survival of clear cell renal carcinoma patients with bone metastasis**

A. Szendrői<sup>1</sup>\*, E. Dinya<sup>2</sup>, A.M. Szasz<sup>3</sup>, Zs. Németh<sup>3</sup>, M. Kardos<sup>3</sup>, J. Kiss<sup>4</sup>, K. Ats<sup>5</sup>, I. Antal<sup>4</sup>, A. Szendrői<sup>4</sup>, I. Romics<sup>1</sup>. <sup>1</sup>Semmelweis University, Dept. of Urology, Budapest, Hungary; <sup>2</sup>Egis Pharmaceuticals Pld, Medical Division, Budapest, Hungary; <sup>3</sup>Semmelweis University, 2nd Department of Pathology, Budapest, Hungary; <sup>4</sup>Semmelweis University, Department of Orthopedics, Budapest, Hungary; <sup>5</sup>National Institute of Rheumatology and Physiotherapy, Dept. of Reumatology, Budapest, Hungary

**Introduction and Objectives:** The clinical factors influencing the survival of renal clear cell carcinoma patients with bone metastasis was examined in a retrospective study setting.

**Material and Methods:** We analyzed the data of 65 patients operated between 1990 and 2008. Descriptive statistical method was also utilized, clinical data regarding survival were evaluated with Life table and Kaplan-Meier method, moreover, for multivariable analysis Cox regression method was applied.

**Results:** Based on Kaplan-Meier curves age, sex, clinical symptoms, pathological fracture, progression to the soft tissues, localization of tumor (spinal metastases are excluded), size of metastasis, whether the occurrence of multiplex metastases is multiorganic or localized in the skeletal system only, and the stage and grade of the primary renal cancer did not influence the survival. The survival was significantly improved if the bone metastases were late onset (occurred more than four years after the renal surgery); moreover, it was solitary, Fuhrmann grade 1 and radical surgery was performed. Based on Cox regression analysis, the results indicated that survival after bone surgery was influenced by the multiplicity and grade of metastasis and radicality of the surgery, whereas survival after nephrectomy was significantly influenced by the time of onset and grade of metastasis. As for the patients surviving bone surgery more than five years, there were more patients who had solitary, grade 1 metastases operated on by radical surgery than in the group where patients died earlier than five years. When the solitary metastasis was radically removed, 75.0% of the patients survived the first, 61.6% the second, 51.3% the third, 39.9% the fourth, 35.5% the fifth postoperative years. If the metastasis was multiple or the surgery was not radical, the 40.9% of patients survived the first, 16.0 % the second, 6.8% the third, 3.4% the fourth and none of the patients survived the fifth year.

**Conclusions:** According to our results we can conclude that in case of multiple or surgically unremovable metastases, minimal invasive surgery is much preferred. Moreover, in the case of solitary, low grade, operable metastases especially when they occur more than four years, we have to go ahead for a radical removal since in this way longer survival time could be expected (more than 10 years in certain cases). According to our best knowledge, the prognostic relevance of Fuhrman grade of bone metastases was not published before.

**C53**

**Risk factors in renal cell carcinoma with venous extension**

C. Gingu<sup>\*</sup>, S. Patrascoiu, C. Chibeleian, C. Surcel, M. Harza, M.A. Manu, V. Cerempei, D. Tica, C. Balsanu, I. Sinescu. *Fundeni Clinical Institute, Center of Urological Surgery Dialysis and Renal Transplantation, Bucharest, Romania*

**Introduction and Objectives:** Venous extension is a particularity of RCC and is registered in 5–25% of the cases, 1% having atrial extension. Identification of the risk factors, especially the influence of the adherence and the level of the thrombus in patient's survival provides valuable informations for the treatment and prognosis of these patients.

**Material and Methods:** Two cohorts of patients were studied: Cohort A – 108 patients with RCC and subdiaphragmatic venous extension (renal vein – RV and subdiaphragmatic inferior vena cava – IVC) operated in our center between January 2000 – December 2006. Cohort B – 26 patients with RCC and supradiaphragmatic venous extension operated in our clinic between 1994 and 2007. Statistic significance of the potential risk factors was evaluated with several tests: chi<sup>2</sup>, Yates correction of chi<sup>2</sup>, Fisher test, relative risk and confidence interval. The confidence interval was 0.05

**Results:** The main statistic significant survival risk factors were: sarcomatoid feature (p=0,049), Fuhrman grade III and IV (p=0,00003), tumoral stage T4 (significance only in cohort B – p=0,033); lymph node metastases N (p=0,0047), distant metastases M (p=0,00005), tumoral stage IV (p=0,00001). There were not validated as statistic significant risk factors: the sex of the patient (p=0,668); left sided tumour (p=0,420), tumour size >10 cm (p=0,540), adherence of the thrombus (p=0,214) and the level of the thrombus (subdiaphragmatic IVC vs RV p=0,2834; supradiaphragmatic IVC vs RV – p=0,2163; supradiaphragmatic IVC vs subdiaphragmatic IVC p=0.36).

**Conclusions:** The statistic significant survival risk factors in RCC with venous extension were in our study: sarcomatoid feature, Führman grade III, IV, tumoral stage T4, lymph node metastases N+, distant metastases M+ and tumoral stage IV. The adherence and the level of the thrombus were not statistically significant risk factors.

#### C54

##### Management of renal oncocytoma – a single centre experience

I. Sinescu, M.A. Manu\*, C. Gingu, R. Varsandan, V. Mitroi, M. Lisa, R. Manu, C. Surcel, R. Lazar, C. Savu, M. Mihai, M. Hortopan. *Fundeni Clinical Institute, Center of Urological Surgery, Dialysis and Renal Transplantation, Bucharest, Romania*

**Introduction and Objectives:** The positive and differential diagnostic, classification, management and follow-up of renal oncocytoma still represent a subject of controversy. The aim of the study was to present our experience in managing oncocytoma.

**Material and Methods:** Between June 1997 and January 2009 in our department were operated 72 patients with renal oncocytoma, 49 males and 23 females with an average of 64 years old. Clinical findings were minor, especially lumbar pain, hematuria (18 cases), fever (17 cases), abdominal pain and 39 cases were discovered incidentally. Investigational protocol included: clinical examination, IVP, abdominal ultrasound with Doppler exam, CT and in some selected cases MRI and renal angiography. Prior to surgery, based on preoperative data, the diagnostic of renal oncocytoma was considered in 21 cases.

**Results:** In our department, therapeutic attitude in RCC is radical trans-peritoneal nephrectomy. This procedure was performed in all cases, as long as the preoperative criteria for diagnose the oncocytoma remains unclear. Fine needle aspiration under CT control and nephron-sparing surgery were not performed. Classification for tumors was as follows: T2 – 37 cases, T3a – 25 cases and T4 – 10 cases. We did not find lymph-nodes invasion or distant metastasis and standard lymphadenectomy was performed in all cases. Pathological examination indicated renal oncocytoma in all cases. Low-grade anaplastic oncocytoma was proved in 56 cases, 5 cases proved a combination of renal oncocytoma and angiomyolipoma and in 11 cases high-grade anaplastic renal oncocytoma were found. Postoperative complication were minor. Follow-up protocol included: clinical examination, ultrasound, CT and/or MRI, and was proceeded at every 6 months in first 2 years and then yearly. No major complications were noticed.

**Conclusions:** In our center, renal oncocytoma respects the international incidence among renal tumors. Our attitude was radical nephrectomy – in all cases, considering that no preoperative investigation could certify the diagnosis. Evolution after surgery was good for all tumors despite the size, type or invasion. The confirmation of diagnostic was pathological. Short term and long term surviving rate after surgery was 100%.

#### C55

##### The impact of selected surgical approach on postoperative morbidity in the management of advanced renal cell carcinoma (pT3, pT4)

J. Sachová<sup>1</sup>\*, P. Palascak<sup>2</sup>, M. Urban<sup>1</sup>, W. Gomez-Orozco<sup>2</sup>, J.L. Sauvain<sup>2</sup>, N. Nader<sup>2</sup>. <sup>1</sup>Faculty Hospital Královské Vinohrady, 3rd Medical Faculty, Charles University, Dept. of Urology, Prague, Czech Republic; <sup>2</sup>C.h.i. Hopital Paul Morel, Dept. of Urology, Vesoul, France

**Introduction and Objectives:** The aim of our work is a comparison of postoperative morbidity, assessment of the importance of choice of surgical approach – thoracophrenolaparotomy (TFL), lumbotomy (LT) and simple

laparotomy (LP) – with regard to postoperative quality of life of the patients. Renal cell carcinoma (RCC) has worst prognosis among urological cancers – killing urologic malignancy. In recent years it became an object of extreme interest due to the increasing incidence and also introduction of target therapy. We are also highlighting the new aspects of the disease obtained from compilation of information from recent clinical trials.

**Material and Methods:** Study included a total of 160 patients, who undergone surgical treatment in our departments during the years 2000–2008 for advanced RCC (pT3, pT4). Patients were divided into 3 groups. Each patient included in the study filled out questionnaires: 1. regarding the evaluation of postoperative pain (pain assessment using a standardized questionnaire and visual analog scale) – pain in the first postoperative day, pain on the day of discharge from hospital and 30<sup>th</sup> postoperative day, 2. concerning the beginning of normal daily activities, 3. related to resumption to work. Furthermore, we evaluated postoperative complications and duration of hospitalization.

**Results:** Patients were divided into 3 groups – 30 TFL, 30 LT and 100 patients LP. 70% men, mean age 68.5 years. The results concerning postoperative morbidity – postoperative complications, pain – in the group TFL, LT resp. LP showed no statistically significant difference. We have not experienced serious complications. The average length of hospitalization in the different groups of patients: 7.3 of TFL, LT 8 days, 6.9 on LP. Most of the patients return to work after 12 weeks.

**Conclusions:** Even if postoperative morbidity appears to be higher after TFL than after LT or LP for larger pleural and diaphragmatic opening, this presumption has not been confirmed in our study. If TFL is indicated (especially in large upper pole tumors, extension to the adrenal gland) it is more comfortable, because of the optimum exposure to operational field to the surgeon – allowing for faster performance with less blood loss.

#### C56

##### Characteristics of dendritic cells and regulatory T-lymphocytes in the blood and tumor tissue in patients with renal cell carcinoma

I. Minárik<sup>1</sup>\*, J. Lašt'ovička<sup>2</sup>, V. Budínský<sup>2</sup>, I. Kawaciuk<sup>1</sup>, J. Bartůňková<sup>2</sup>. <sup>1</sup>Charles University 2nd Faculty of Medicine and University Hospital Motol, Urology, Prague, Czech Republic; <sup>2</sup>Charles University 2nd Faculty of Medicine and University Hospital Motol, Immunology, Prague, Czech Republic

**Introduction and Objectives:** Determine ratio of myeloid and plasmacytoid dendritic cells (DC) in patient blood, compare expression of CD83 and costimulatory molecules CD80 and CD86 by DCs in tumor and blood, and determine the fraction of regulatory T-lymphocytes

**Material and Methods:** We defined percentage of myeloid and plasmacytoid DCs in the whole blood of 26 patients using flow cytometer (FACS Aria). In order to distinguish DC populations we stained blood with CD45, HLA-DR, BD lineage, CD11c and CD123. After isolation of peripheral blood mononuclear cells or tumor infiltrating cells on Ficoll-Paque we determined the expression of CD83, CD80 and CD86 on myeloid DCs using flow cytometer. Regulatory T-lymphocytes were detected as the cell population expressing CD4, CD25, FoxP3.

**Results:** Myeloid DCs comprise 0.29% and plasmacytoid DCs 0.14% of peripheral blood leukocytes. Expression of maturation marker CD83 and costimulatory molecule CD86 is significantly higher in tumors (CD83 – blood 9.565%, tumor 24.85% p=0.015, CD86 – blood 3.7%, tumor 11.59% p=0.015). Expression of CD80 is higher in tumors (1% × 0.31%), however, this difference is not significant (p=0.14). Regulatory T-lymphocytes represent 5.8% of blood leukocytes, but their number rises to 14% in tumors (p=0.0002).