Conclusions: The statistic significant survival risc 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, clasification, 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: Beetwen 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 incidentaly. 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, therapeutical atitude 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. Clasification 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 examinatin indicated renal oncocytoma in all cases. Low-grade anaplastic oncocytoma was proved in 56 cases, 5 cases proved a combination of renal oncocytoma and angiomiolipoma 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 proceded at every 6 months in first 2 years and then yearly. No major complicatons 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[1]*, P. Palascak[2], M. Urban[1], W. Gomez-Orozco[2], J.L. Sauvain[2], N. Nader[2]. [1]*Faculty Hospital Královské Vinohrady, 3rd Medical Faculty, Charles University, Dept. of Urology, Prague, Czech Republic;* [2]*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 30th 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[1]*, J. Lašťovička[2], V. Budínský[2], I. Kawaciuk[1], J. Bartůňková[2]. [1]*Charles University 2nd Faculty of Medicine and University Hospital Motol, Urology, Prague, Czech Republic;* [2]*Charles University 2nd Faculty of Medicine and University Hospital Motol, Immunology, Prague, Czech Republic*

Introduction and Objectives: Determine ratio of myeloid and plasmocytoid 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 plasmocytoid 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 a 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 plasmocytoid 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 ($1\% \times 0.31\%$), 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 ($p = 0.0002$).

Conclusions: The portion of myeloid and plasmocytoid dendritic cells in the peripheral blood corresponds to healthy population. We observed partial maturation of DCs in tumors, however, the presence of higher number of regulatory T-lymphocytes point to the possibility of the suppression of local immune response aimed at tumor cells. All these findings will contribute to the preparation of DC vaccination protocol for patients with renal cell carcinoma. Supported by Grant Agency of Charles University no.7753/2007.

C57
Histological finding of the tumor necrosis in the renal cancer specimen as a negative prognostic factor

J. Pacovský[1]*, M. Brodak[1], L. Holub[1], P. Hušek[1], J. Košina[1], P. Navratil[1], M. Podhola[2]. *[1]University Hospital and University Medical School Charles University, Dept. of Urology, Hradec Kralove, Czech Republic; [2]University Hospital and University Medical School Charles University, Dept. of Pathology, Hradec Kralove, Czech Republic*

Introduction and Objectives: Histological finding correlates with tumor grow, biological activity and could be essential for the patient future. We have tried to confirm relationship between the histological presence of the tumor necrosis and patient's prognosis.
Material and Methods: Retrospective analysis of the histological finding of the renal cancers removed by total or partial nephrectomies since 2001 to 2005 was carried out. Histological type, tumor necrosis presence, tumor size, signs of the sarcomatoid transformation and nuclear grade according to the Fuhrman's grade were focuses of our interest. The follow-up was 4 to 8 years. We have evaluated progression disease rate and censored death due to cancer generalization.
Results: Overall 228 renal cancers were removed, tumor necrosis was found in 61 patients (26.8%) – 53 patients with clear cell cancer (86.9%), 8 patients with papillary cancer (13.1%). Tumor size in this group was from 30 mm to 170 mm, median 70 mm. Tumor stage: pT1a in 5 pts (8.3%), pT1b in 16 pts (26.3%), pT2 in 11 pts (18%), pT3a in 14 pts (22.9%), pT3b in 14 pts (22.9%), pT3c in 1pt (1.6%), pT4 in 0 pts.(0%). N+ was found in 20 pts (32.8%), N0 in 41 pts (67.2%), M+ was confirmed in 17 pts (27.9%), M0 in 44 pts (72.1%). Nuclear grade GI was in 0 pts, GII in 6 pts (9.8%), GIII in 33pts (54.1%), GIV in 22 pts (36.1%). Overall 39 pts (63.9%) from these 61 pts have died in median 8 months after nephrectomy. Simultaneous presence of the tumor necrosis and sarcomatoid transformation were confirmed in 6 pts, all of them have died in median 6.5 months after surgery.
Conclusions: Tumor necrosis is serious negative prognostic factor. Tumor necrosis can be found even in small asymptomatic tumors. It is always indicator of the fast and aggressive tumor grow. Simultaneous presence of the tumor necrosis and sarcomatoid transformation are always signs of the high malignant potency of the renal cancer.

C58
Spontaneous rupture of the renal pelvis

M. Chocholatý*, M. Schmidt, P. Hanek, L. Jarolím, I. Kawaciuk. *Charles University and University Hospital Motol, Dept. of Urology, Prague, Czech Republic*

Introduction and Objectives: The aim of our study was to evaluate the etiology, diagnosis and treatment of the spontaneous rupture of the renal pelvis.
Material and Methods: From 1999–2008, we evaluated and treated 11 patients (6 women and 5 men) with spontaneous rupture of the renal pelvis. The diagnosis was confirmed by abdominopelvic CT with contrast agent or by intravenous urography and by retrograde ureteropyelography. The cause of spontaneous rupture of the renal pelvis was a ureteral stone in 8 cases and ureteral stricture in 3 cases.
Results: Four patients with ureterolithiasis in lower ureter underwent primary ureteroscopic lithotripsy and stenting and no auxiliary treatment was required. Four patients with ureterolithiasis in upper ureter we treated with sole stenting and the secondary intervation was performed 28 – 60 days (average 37 days) after initial procedure. The patients with ureteral stricture were primary treated with stent placement. One patient underwent endoluminal incision 45 days after initial procedure and two seriously ill patients were managed with chronic ureteral stent changes. All rupture of renal pelvis recovered without complication.
Conclusions: Spontaneous rupture of the renal pelvis is a rare complication of the obstructive uropathy. Sole stenting of the ureter is reseverd for ureteral stricture and for stones of the upper ureter or pelvic ureteric junction. Ureteroscopic lithotripsy followed by double-J stenting of the ureter is a treatment of choice for stones of the lower ureter with rupture of renal pelvis.

C59
Image fractal analysis in retroperitoneal fibrosis – 5 years of experience with 19 patients

I. Sinescu[1], C. Surcel[1]*, C. Mirvald[1], C. Chibelean[1], C. Gingu[1], D. Avram[1], M. Hîrza[1], M.A. Manu[1], R. Lazar[1], C. Savu[2], A. Udrea[3]. *[1]Fundeni Clinical Institute, Center of Urological Surgery, Dialysis and Renal Transplantation, Bucharest, Romania; [2]Fundeni Clinical Institute, Departemt of Ic and Anesthesiology, Bucharest, Romania; [3]Politehnica University, Department of Automatics, Bucharest, Romania*

Introduction and Objectives: To evaluate effective prognostic factors in the evolution of patients with retroperitoneal fibrosis and to establish the validity of fractal analysis in determining the disease severity in these patients.
Material and Methods: The study included 19 pts (M/F: 5/14) with a median age of 56, 4 yrs treated for idiopathic retroperitoneal fibrosis and bilateral obstructive renal failure between Jan 2004-Dec 2008. The data were evaluated about medical history, physical examination findings, laboratory tests, imaging methods (abdominal CT-scan, MRI), surgical treatment performed. All the patients had ureterolysis and omental wrapping. Parameters assessed on helical CT were: fibrosis width, interureteric distance, maximal cranio-caudal length in sagital section and fibrosis surface area – using fractal analysis. The patients were followed up postoperatively at 3 and 6 mts. Assessment of renal function was based on the clearance of creatinine and helical CT scan at 6 mts. Positive outcome was considered an increase of clearance of creatinine and a decrease of hydronephrosis level.
Results: All patients had at admission high BUN levels, with a median creatinine level 10.2 (range 6.5–18.7 mg/dl), median clearance of creatinine = 27 mL/min/1.73 m^2. They were initially stented (17-bilateral/2-unilateral), but after 2 days, 16(84.2%) underwent bilateral nephrostomy for further decreasing of BUN levels or for oligoanuria. Preoperative median serum creatinine was 2.3 (range 3.7–1) median clearance of creatinine=70 mL/min/1.73 m^2. Median imaging parameters preop. were: 3.8 cm (range 6–2.2 cm) fibrosis width, interureteric distance at intervertebral discus L4-L5= 6.8 cm (range 5.6–9.2 cm), fractal dimension of the fibrosis surface area=1,67788, maximal cranio-caudal length in sagital section 10.8 cm (range: 7.9–13.4 cm). Postoperative, at 3 mts, the median clearance of creatinine had an increase of 10% (range:60–80 mL/min/1.73 m^2) and at 6 mts the median clearance of creatinine had an increase of 21% (range:75–98 mL/min/1.73 m^2). 6 of 19 pts had a stable GFR