INCIDENTAL PROSTATE CANCER IN PATIENTS UNDERGOING RADICAL CYSTECTOMY FOR MUSCLE INVASIVE BLADDER CANCER

Lindenmeier T., Lierh U.B., Rau O., Reifer F., Althoff E.P.
Otto-von-Guericke-University, Dept. of Urology, Magdeburg, Germany

Introduction & Objectives: Ileal neobladder becomes more and more the “Goldstandard” in the treatment of muscle invasive bladder cancer. In order to preserve urinary continence and sexual potency different techniques of “prostate sparing” procedures have been published. However, these techniques are related with compromising radicality. Incidental prostate cancer (PCA) is often found in these specimens.

Material & Methods: In a retrospective study cystectomy specimens from patients underwent radical cystectomy for bladder cancer were analyzed for the detection of incidental PCA. In addition preoperative clinical findings - rectal digital examination, transrectal ultrasound, serum prostate specific antigen (PSA) level - and histological findings were compared.

Results: 103 patients (pts.) were treated with radical cystectomy between 2000 and 2005. The preoperative mean PSA level was 5.09 ng/ml (range 0.01 - 167.5 ng/ml). PSA levels were < 4 ng/ml in 75 pts. (72.8 %), > 4 ng/ml in 21 pts. (24.4 %) and > 10 ng/ml in 7 pts. (8.0 %), respectively. PCA was found in 46 of the 103 specimens (44.7 %), in 12/46 pts. PCA was already diagnosed preoperatively. In 34/91 pts. PCA was confirmed postoperatively (37.4 %). In this group the PCA was clinically significant (T2 stage or higher, Gleason sum 5 or higher) in 22 pts. (46.7 %). The PCA levels from the pts. with PCA was < 4 ng/ml in 27 pts. (58.7 %), 4-10 ng/ml in 15 pts. (32.6 %) and > 10 ng/ml in 4 pts. (8.7 %). The mean age of all pts. was 67.75 years (range 30 – 89 years), and in pts. with PCA 69.9 years (range 47 – 89 years).

Conclusions: In unselected pts. underwent radical cystectomy for bladder cancer unexpected PCA was found in about 40 %. About 60 % of the pts. with PCA had a preoperative PSA-level < 4 ng/ml. About 65 % of the PCA were clinically significant. Prostate sparing techniques in radical cystectomy for bladder cancer should be used only in strictly selected patients. Even when PSA levels are < 4 ng/ml core needle biopsies must be done preoperatively and patients have to be informed about the high risk of PCA.

CHEMOTHERAPY WITH GEMCITABINE, PACLITAXEL, AND CISPLATIN IN THE TREATMENT OF PATIENTS WITH INFILTRATIVE TRANSITIONAL CELL CARCINOMA OF THE URETHOBLIN

Ecke T.H.1, Bartel P.1, Theissig F.1, Koch S.1, Ruttloff J.1
1HELIOS Hospital, Department of Urology, Bad Saarow, Germany, 1HELIOS Hospital, Institute of Pathology, Bad Saarow, Germany

Introduction & Objectives: Chemotherapeutic agents are active in advanced bladder cancer, and combination have shown promising results. The objective of the current study was to evaluate the efficacy of combination chemotherapy with gemcitabine, paclitaxel, and cisplatin in patients with metastatic and / or infiltrative urothelial carcinoma.

Material & Methods: 61 patients with metastatic and / or infiltrative advanced transitional cell carcinoma of the urethrum were eligible. All patients received chemotherapy with intravenous gemcitabine at a dose of 1000 mg/m2 on Days 1 and 8, intravenous paclitaxel at a dose of 80 mg/m2 on Days 1 and 8, and intravenous cisplatin at a dose of 50 mg/m2 on Day 2. Treatment courses were repeated every 21 days. After completion of four to six courses in this regimen an application of intravenous gemcitabine at a dose of 1000 mg/m2 followed. The regimen was repeated every 28 days. For five patients with rapid progress we used the second line chemotherapy with intravenous methotrexate at a dose of 30 mg/m2 on Days 1 and 15, intravenous epirubicine at a dose of 30 mg/m2 on Day 2, and intravenous cisplatin at a dose of 70 mg/m2 on Day 2.

Results: Sixty one patients were treated between August 2000 and July 2006. Nine patients (15%) had ≥ 1 visceral sites of metastases, no patient had received any previous systemic chemotherapy. Fifty-two patients (85%) had achieved objective responses to treatment (55% complete responses). The median actuarial survival was 24.3 months, and the actuarial 1-year and 2-year survival rates were 69% and 41%, respectively. After a median follow-up of 17.5 months, 29 patients remained alive and 25 were free of disease progression. The median progression-free survival for the entire group was 10.0 months. Median survival time for patients with ECOG status 0, 1, and 2 was 32.5, 18.9, and 10.5 months respectively. Grade 3-4 neutropenia occurred in 41 % of patients. Fifteen patients were hospitalized for the treatment of neutropenia and fever.

Conclusions: The combination of gemcitabine, paclitaxel, and cisplatin is a highly effective and tolerable regimen for patients with advanced urothelial carcinoma. This treatment should be considered as a suitable option that deserves further prospective evaluation. ECOG performance status is an important predictive factor for survival.

SELECTIVE ORGAN PRESERVATION IN MUSCLE-INVASIVE BLADDER CANCER: THE CASE FOR A COMBINED MODALITY TREATMENT

Perdonà S.1, Authorino R.2, De Sio M.2, Gallo L.1, Gallo A.1, Di Lorenzo G.3, Damiano R.4
1INT G. Pascale Foundation, Urology, Naples, Italy, 2Second University of Naples, Urology, Naples, Italy, 3Federico II University, Oncology, Naples, Italy, 4Magna Graecia University, Urology, Catanzaro, Italy

Introduction & Objectives: To evaluate our long-term experience with combined modality treatment and selective bladder preservation and to identify factors that may predict treatment response, risk of relapse, and survival in patients with muscle-invasive bladder cancer.

Material & Methods: Between 1994 and 2002, 131 patients with T2-T4 bladder cancer (mean age 56, M/F=2:7,1) were treated with induction by maximal transurethral resection (TUR) of the tumor and two cycles of chemotherapy followed by radiotherapy (RT; n=43) or radiochemotherapy (RCT; n=88) after. Six weeks after RT/RCT, response was evaluated by restaging-TUR. In case of complete response (CR), patients were observed at regular intervals. In case of persistent or recurrent tumor, salvage-cystectomy was recommended. Median follow-up was 66 months (range 6 to 182 months).

Results: CR was achieved in 69.4% (n=91) of patients. Local control after CR without muscle-invasive relapse was maintained in 59.5% (n=78) of patients at 5 years. Distant metastases were diagnosed in 31 patients with an actuarial rate of 38% at 5 years. Five-year disease-specific survival was 40%, and more than 80% of survivors preserved their bladder. Early tumor stage and a complete TUR were the most important factors predicting CR and survival. RCT was more effective than RT alone in terms of CR and survival. Salvage cystectomy for local failure was associated with a 50% disease-specific survival rate at 5 years.

Conclusions: Although radical cystectomy must be considered the gold standard for muscle invasive bladder cancer, conservative combined treatment (TUR with RCT) can represent a reasonable approach in carefully selected patients. It appears to offer improved local response rates, expediting synergism between CT and RT. Meticulous follow-up is essential to identify patients who may still benefit from salvage cystectomy. Randomized trials are necessary to confirm these findings.

COMPARATIVE OUTCOMES FOLLOWING ENDOSCOPIC URETERIC DETACHMENT AND FORMAL BLADDER CUFF EXCISION IN OPEN NEPHROURETERECTOMY FOR UPPER URINARY TRACT TRANSITIONAL CELL CARCINOMA

Walton T.J.1, Parkinson R.J.2, Taylor M.C.2, Lemberger R.J.3
1Nottingham City Hospital, Department of Urology, Nottingham, United Kingdom, 2Kingsmill Hospital, Department of Urology, Mansfield, United Kingdom

Introduction & Objectives: Few studies have compared differences in outcome after endoscopic ureteric detachment and open distal ureterectomy in nephroureterectomy. Bladder tumour implantation and overall survival data are especially required given the advent of techniques such as laparoscopic nephroureterectomy.

Material & Methods: Ninety patients underwent nephroureterectomy between 1983 and 2004 with at least 12 months cystoscopic follow-up at either Nottingham City Hospital or Kingsmill Hospital. 63 patients underwent nephroureterectomy with endoscopic ureteric detachment (ED), and 27 underwent conventional nephroureterectomy with a bladder cuff (BC). Demographic, peri-operative and oncological outcome data were collected in all cases. Statistical analysis of data was performed using Student’s t-test, chi-squared, and log-rank tests.

Results: There were no significant differences in age, sex, smoking status or history of bladder cancer between the groups. Mean operative duration was significantly lower in the ED group than in the BC group (p=0.001); similar trends were seen for intra-operative blood loss and catheter duration but did not reach statistical significance. Complication rates were equivalent. Median follow-up was 47 months and 40 months in ED and BC groups respectively. There were 37 (58.7%) bladder tumours in the ED group; 8 (21.6%) were muscle invasive. Of 14 (51.9%) tumours in the BC group, 3 (21.4%) were muscle-invasive. One in each group was likely due to tumour implantation. There were no significant differences in either recurrence-free survival or disease-specific survival between the groups.

Conclusions: Endoscopic ureteral detachment reduces operative duration and appears to be associated with equivalent rates of tumour implantation and disease-specific survival when compared with conventional bladder cuff excision in nephroureterectomy.