Poster session 1 TESTIS CANCER, TRANSPLANTATION, ANDROLOGY, ED, FERTILITY I

Friday, 26 October, 10.50-12.30, Poster Room 1

S1

THE IMPACT OF UNILATERAL EXPERIMENTAL RAT VARICOCELE MODEL ON TESTICULAR HISTOPATHOLOGY, LEYDIG CELL COUNTS, AND INTRATESTICULAR TESTOSTERONE LEVELS OF BOTH TESTES

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Introduction & Objectives: Varicocele, most treatable pathologic condition in male infertility, exerts unfavourable effects on testicular ultrastructure via various mechanism. In our study we aimed to demonstrate adverse effects of varicocele on both testes.

Material & Methods: Twenty one adult male Albino rats were divided into 3 groups. Sham operation was performed for Group 1 (control group), and this group of rats were sacrificed 4 weeks later. Experimental varicocele model was performed for group 2 (varicocele group) and these animals were sacrificed 4 weeks after the operation. In group 3 the rats were varicocelectomized 4 weeks later. This group of rats were sacrificed at 4 weeks postoperatively. The level of testicular damage was examined, and serum testosterone and intratesticular testosterone levels were measured.

Results: Mean (\pm SD) testicular damage scores (DSs) of right testes of 3 groups were detected to be 0, 1.64 \pm 1.3, and 1.21 \pm 0.3 in Groups 1,2, and 3, respectively. There was no statistically significant differences between damage scores of Groups 2, and 3 (p=0.320), relevant scores of both groups were determined to be significantly higher than Group 1 (p=0.009, and p=0.001). Mean (\pm SD) testicular damage scores of three groups were 0.43 \pm 1.13, 2.29 \pm 1.15, and 1.78 \pm 0.39 in Groups 1,2, and 3, respectively without any statistically significant difference between Groups 2, and 3 (p=0,112).

Conclusions: Unilateral varicocele has deleterious effects on both testes. There was no statistically significant difference as for histopathologic recovery following varicocelectomy.

S2

RENAL TRANSPLANTATION IN PATIENTS WITH LOWER URINARY TRACT DYSFUNCTION

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Introduction & Objectives: In pediatric population, 40% of ESRD is secondary to uropathologies and LUTD is most common urologic abnormality. Renal transplantation in patients with LUTD is considered high risk due to potential early and late complication and graft loss risk. The aim of this retrospective study is to investigate the outcome of renal transplantation in patients who developed ESRD secondary to LUTD.

Material & Methods: We retrospectively reviewed the outcomes of 31 patients with ESRD secondary to LUTDand renal transplantation between April 1998 and April 2011. There were 23 males and 8 females with a mean age of 15 ± 4 . Etiology of ESRD was neurogenic bladder in 17, posterior urethral valve in 12 and voiding dysfunction in 2 of the patients. Eighteen patients received kidney from a living donor while thirteen received from a deceased-donor. Among those, 10 patients had augmentation cystoplasty surgery prior to the transplantation. All patients were evaluated by cystometry prior to transplantation. Initially all of them were managed by triple immunosuppressive medications consisting of a calcineurin inhibitor, an anti-proliferative agent and corticosteroid.

Results: Mean creatinin level at the last visit was 1.5 \pm 0.4 mg/dl within a follow up of mean 43 \pm 13 months (4-133 months). Graft failure developed in 3 patients due to pneumonia, FSGS nephropathy and chronic allograft injury. Surgical complications were observed in 2 patients. One urine leak and ureteral stricture treated with percutaneous antegrade double-J stent placement, DJS encrustation treted with percutaneous nephrolithotomy. Clean intermittent catheterization was continued in 17 patients. Among them at least one urinary tract infection, that required hospitalization, developed in 13 of 17 patients, albeit all of the patients with augmented bladder. Graft and patients survival at 5th year was 91% and 100%respectively.

Conclusions: All patients with severe LUTD and ESRD should be investigated as renal transplantation candidates and bladder must be rehabilitated. With careful patient selection, preoperative evaluation, and close post operative monitoring,

renal transplantation can be performed safely. Higher risk of urinary tract infection, stone diseases, metabolic bone complications and malignancy should be always kept in mind in patients with bladder augmentation and kidney transplantation.

S3

LONG-TERM OUTCOME AFTER POSTCHEMOTHERAPY RETROPERITONEAL LYMPHADNECTOMY IN PTS WITH RESIDUAL TERATOMA

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Introduction & Objectives: The histologic finding of teratoma (T) occures in approximately 40% of all postchemoherapy retropefritoneal (PC-RPLA). We evaluated patients (pts) undergoing PC-RPLA for T to determine their clinical outcome.

Material & Methods: Among a survey of 191 pts submitted to PC-RPLA due to metastatic nonseminomatous testicular tumors from 1980-2005, we indentified 82 pts (42%) who were found to have only T in the RP. Pts undergoing ERP surgery were not included in this study because our previous study demonstrated that these pts may be at risk of progression indenpendetly of tumor histology.

Results: 67 pts (82%) received only induction cisplatin-based C, and 15 (18%) required additional C regimens. PC-RPLA pathology revealed mature teratoma (MT) in 86%, immature T (IMT) in 12% and T with malignant transformation (TMT) in 2%. 16 pts (19%) relapsed within median free interval of 22 months (m). Among 13 pts submitted to redo-RPLA due to relapse, discordant histology ocurred in 46%, all with worse histology in comparison to primary RPLA, 1 relapsing pt with only elevated STM achieved CR with C alone. 2 pts relapsed at 21 and 74 m with widespread metastases and died despite salvage C. 7/13 pts (54%) who were rendered free of disease with redo-RPLA, relapsed again. All but 1 died despite salvage treatment (2 of C related toxicity) within median survival time of 86.7±26.1 m (95% CI, 66.1-107.1)(2 TMT, 4 viable GCT). At median follow-up of 135±62.6 m (95%CI, 98.79-149.21) disease speciphic survival (DSS) is achieved in 90% (95% CI, 124.4-154.4) with difference between DSS and RFS (p<0.0009)(Log Rank = 15.18). Overall, the 5- and 10-year probabilities of DSS were 97.56% (95% CI, 95.86-99.26) and 88.54% (95% CI, 57.67-66.23), respectively. Worse vs favorable histology on redo-RPLA predicted unfavourable survival (17% vs 86%) (p<0.0001). The probabilities of freedom of recurrence were between MT/IMT vs TMT at PC-RPLA in 86% (95% CI, 78%-90%) vs 50% (95% CI,20%-77%)(p=0.001), PC RM >/= 5 cm vs < 5 cm in 59% (95% CI, 42%-72%) vs 97% (95%CI, 76%-99%) (p<0.0005) and intermediate/poor vs good IGCCCG risk classification in 67% (95% CI, 38%-97%) vs 87% (95% CI, 76%-88%) (p=0.01). On univariate analysis, higher pre- and post-C RP nodal size (p<0.0005), intermediate/poor IGCCCG risk classification (p=0.02) and the presence of TMT (p=0.002) were significant predictors of ds recurrence. On mulivariable analysis RM size (p<0.005) and worse IGCCCG risk group (p=0.01) predicted ds recurrence.

Conclusions: Pts with residual T after PC-RPLA continue to exibit a 19% risk of recurrence even 10 years after RPLA, with 46% recurrence being with worse histology. These data suggest that these pts should undergo long-term surveillance of their RP especially in the setting of a large RM or elevated IGCCCG classification risk.



POPULATION-BASED STUDY OF PERIOPERATIVE MORTALITY AFTER RETROPERITONEAL LYMPHADENECTOMY FOR NONSEMINOMATOUS TESTICULAR TUMORS

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Introduction & Objectives: The present study is performed to determine wheter retroperitoneal lymphadenectomy (RPLA) perioperative mortality (PM) rates reported from a center of excellence [Indiana University: 0% for primary and 0.8% for postchemotherapy (PC) RPLA] are applicable to institution of large.

Material & Methods: We used the data from 327 assessable pts with nonseminomatous testicular tumors (NSTT) treated with RPLA from 1975 to 2005 asseses from clinical data- base: primary in 134 pts (41%) and PC-RPLA in 193 pts (59%). The observed PM rates were stratified according to age, clinical stage (CS) and type of RPLA.

Results: The median age at RPLA was 28 years (y)(range, 16-54):≤ 29 y in 184 (56.3%), 30-39 y in 99 (30.3%) and ≥ 40 y in 44 (13.4%) pts. Of 327 RPLA pts, 81 (27.8%) were performed for localized (CS-I), 179 (54.7%) for egional (CS-II) and 57 (17.5%) for metastatic (CS-III) disease (ds). 10 pts (3.1%) died during initial 90 days (d) after RPLA: 1 pt died of pulmonary embolism, 2 of C related toxicity and 7 of progressive ds due to perioperative worse prognostic factors. Of the entire cohort 30,60 and 90-d PM rate was 0.3%, 1.0% and 1.3%, respectively. PM rate increase with increasing age : ≥ 29y 0%, 30-39 y 5.0% and ≥ 40 y 11.4% (x2 trend test, p=0.002). PM also increased with increasing stage : 0% for localizd, 2.8% for regional and 8.8% for metastatic ds (x2 trend test, p<0.001). PM rate at primary vs PC-RPLA was 0.7% vs 3.1% (p<0.001).

Conclusions: RPLA was associated with virtually no or low PM in pts with