

Bleeding is the most common of them. Vascular complications were detected in 1.34% of our cases and this ratio was similar with the literature. Previous renal surgery and SWL had no effect on bleeding rates. In the literature it is emphasized that bleeding and vascular complications are seen most common in upper pole puncture and solitary kidneys. But in our study we detected the risk of vascular complications increased in patients who had previous open renal surgery.

S100 RADIOGRAPHIC ANATOMIC FEATURES TO PREDICT STONE CLEARANCE AFTER EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY (ESWL); FACT OR FICTION

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Introduction & Objectives: We determined whether there is a significant relationship between the radiographic renal anatomic features on preoperative excretory urography (IVP) and stone fragments clearance after ESWL.

Material & Methods: Total of 282 patients with mean age 45.8± 13.2 years (189male, 93female), who underwent ESWL due to renal calculi between October 2005 and August 2009 were enrolled. The mean calculi load was 155.72 + 127.66mm². The patients were stratified into three groups; patients with pelvis calculi(group 1), patients with upper or middle pole calculi(group2) and patients with lower pole calculi(group 3). Three angles on the pretreatment IVP were measured; the inner angle between the axis of the lower pole infundibular and ureteropelvic axis (angle I), inner angle between lower pole infundibular axis and main axis of pelvis-UP junction point (angle II) and inner angle between lower pole infundibular axis and perpendicular line (angle III). Multivariate analysis were used to define the significant predictors of stone clearance.

Results: The over all success rate was 85.81%. All angles, sessions number, shock waves number and stone burden were significant predictors of success in patients in group 1. However in group 2 only angle II and in group 3, angle I and angle II, had significant effect on stone clearance.

Conclusions: Radiographic anatomic features have significant role in determining the stone-free rate following satisfactory fragmentation of renal stone with ESWL. Angle II defines the relation of renal pelvis with lower pole and UP junction point and it had significant influence on stone clearance in all groups. Angle III is of low significant influence for patients with renal pelvis stone, however in patients with lower, upper or middle pole it had not impact on the stone clearance. This mean that the perpendicularity or the gravity effect of the lower pole is not the only mechanism which standing behind the retention of the fragments after lithotripsy. Therefore the measurement of infundibulopelvic angle in different manner help to predict the stone-free status in patients with renal calculi located not only in lower pole but also in renal pelvis and upper or middle pole. The gravity effect seems to be not enough to justify the significant influence of the radiographic anatomic features on the stone clearance and on the retention of the fragments in the lower pole.

Poster Session 6

ANDROLOGY I

Friday, 1 October, 15.10-16.50, Poster Room 2

S101 THE EFFECT OF CARDIOPULMONARY BYPASS IN CORONARY ARTERY BYPASS SURGERIES (ON PUMP VERSUS OFF-PUMP) ON ERECTILE FUNCTION AND ENDOTHELIUM-DERIVED NITRIC OXIDE LEVELS

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Introduction & Objectives: The clinical results of cardiopulmonary bypass, on- or off-pump, in coronary artery bypass grafting (CABG) is still matter of debate in the last decade. The aim of this study is to investigate the effects of on-pump and off-pump CABG on the erectile function and endothelium-derived nitric oxide (eNO) levels.

Material & Methods: Twenty-eight consecutive patients were randomized into two groups depending on use of cardiopulmonary bypass in CABG surgery. The erectile function was evaluated by using the International Index of Erectile Function (IIEF)-5 questionnaire. The plasma eNO levels were determined at baseline and after reactive hyperemia before and after surgery. Reactive hyperemia was induced by inflating a blood pressure cuff placed on the upper forearm, for 5 minutes at 250 mmHg followed by a rapid deflation. Blood was collected in one minute time after cuff deflation from the radial artery on the same side.

Results: After CABG surgery the mean IIEF-5 score increased insignificantly over baseline from 14.8 to 15.8 (p=0.29) and 12.4 to 14.3 (p=0.11) after on-pump and off-pump CABG surgeries, respectively. The baseline plasma NO levels before

surgery were 18.16±7.63 nmol/L in on-pump and 21.76 ±11.08 nmol/L in off-pump CABG. After reactive hyperemia the plasma NO levels were 22.14±10.52 nmol/L in on-pump and 21.49±9.13 nmol/L in off-pump CABG before the surgery. The difference in the plasma NO levels before surgery was not significant (p=0.51). Two hours after surgery, the difference of the plasma NO levels at baseline (on-pump; 24.44±12.31 and off-pump CABG; 20.58±6.74 nmol/L) and after reactive hyperemia (on-pump; 35.55±23.54 and off-pump CABG; 23.00±15.40 nmol/L) were not significantly different from each other (p=0.11).

	On-pump patients (n=12)	Off-pump patients (n=16)
IIEF-5 results		
Normal	2 (16.6%)	2 (12.5%)
Mild ED (17-21)	1 (8.3%)	3 (18.8%)
Mild-moderate ED (12-16)	2 (16.6%)	3 (18.8%)
Moderate ED (8-11)	6 (50.0%)	7 (43.8%)
Severe ED (5-7)	1 (8.3%)	3 (18.8%)
IIEF-5 mean ±SD	14.9±6.9	12.4±7.1
IIEF-5 results change		
No IIEF-5 change	7 (58.3%)	8 (50.0%)
Increased IIEF-5	5 (41.6%)	7 (43.8%)
Decreased IIEF-5	-	1 (6.3%)

Conclusions: Patients who had on-pump or off-pump CABG surgeries had higher IIEF-5 scores. Nevertheless, the improvement was insignificant in both groups. Meanwhile, on-pump or off-pump CABG surgeries did not have significant effect on plasma eNO levels.

S102 THE COMPARISON OF DIAGNOSTIC TESE AND TESA IN NON-OBSTRUCTIVE AZOOSPERMIC PATIENTS IN A RANDOMIZED CONTROLLED TRIAL STUDY

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Introduction & Objectives: Various techniques are preferred for sperm retrieval in non-obstructive azoospermic (NOA) men including TESE and TESA. Till now, it is not clear that which of these techniques are more efficient in sperm retrieval. The aim of this study is to compare the performance of diagnostic TESE and TESA in NOA men by randomized controlled trial (RCT).

Material & Methods: This study was performed on 180 men (20-50) years old with NOA, who were undergoing TESE or TESA for the first time referring to royan infertility center, cases with atrophic testis or FSH more than 4 fold of normal rang, were excluded. Testis selection (right or left) and techniques (TESE or TESA) were performed randomly in patients. For TESA the testis was aspirated at three separated sites (upper, middle and lower pole), using 20 ml syringe and 18-gauge needle. A testicular biopsy for TESE was taken from the same sites. The efficacies of sperm retrieval procedures were compared using the Pearson chi-square test.

Results: After randomization 2 groups of TESE and TESA were similar according to age and duration of infertility. Spermatozoa were found in 63 (70.0%) of the 90 men who underwent TESA and 49 (54.4%) of the 90 men in TESE evaluation. With respect to anatomical position, in both procedures, sperm retrieval from upper, middle and lower pole of testis were 46.6%, 42.0% and 11.6%, respectively. Motile testicular sperm cells were detected in 44 subjects, 26 cases of TESA and 18 cases of TESE.

Conclusions: The comparison of two techniques in our RCT study indicated that multifocal TESA is more effective than TESE for sperm retrieval in men with NOA. The sample size of this randomized trial was higher than other studies in this field. With respect to the advantages of TESA (shorter procedure time, no skin scars, lower side-effects) and based on our results, TESA procedure can be preferred for sperm retrieval in men with NOA. However a long-term follow-up study for detection of side-effects of two techniques is recommended.

S103 SEMINAL PLASMA ELASTASE IN INFERTILE PATIENTS WITH AND WITHOUT LEUCOCYTOSPERMIA

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Introduction & Objectives: Inflammation of the genital tract is alleged to be responsible for between 5 % and 10% of male infertility (Thonneau et al., 1992), but is not easily proven. Several tests have been proposed as markers of inflammation in men, including either markers of specific infection known for a deleterious effect on male reproductive function (antibodies specific for Chlamydia trachomatis in seminal plasma) or non-specific markers such as leukocytospermia. One of the main changes during the inflammatory process is discharge by polymorph nuclear