

Ureter was incised by cold knife in 5, scissor in 16, j-hook in 3, monopolar-bipolar cut in 17 patients. In 6 patients, double-j stent was inserted while in 1 operation was converted to open. Mean operation time was 124 minutes. Mean amount of drainage was 220 cc. Mean hospitalization time was 4.8 days. In 5 (12.5%) of 7, persistent drainage was detected as a major complication treated via insertion d-j stent. All patients were discharged as a stone free status.

Conclusions: Laparoscopic ureterolithotomy is a feasible and effective procedure especially for stones that could not treat easily with ureteroscopic approach. Increased hospitalization and operation time could be related with difficulties of stone removal while success was achieved in each patient.

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Frequency of urolithiasis in primary gout

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Introduction and Objectives: The prevalence of urolithiasis in primary gout patients has been increased for the past few decades. In earlier studies frequency of primary gout urolithiasis was 20% and now we have data that 37 to 50% patients with gout develop uric acid-related stones. The objective of this study was to assess the frequency and risk factors for urolithiasis in primary gout

Material and Methods: Fifty-five patients with diagnosed primary gout were studied. Urolithiasis was defined as previous history of urolithiasis in clinical records of observed patients or as ultrasonographic findings of nephrolithiasis. Next step was to compare chosen risk factors: patient age, duration of gout, high blood pressure, diabetes and hyperlipidemia between patients with and without urolithiasis.

Results: In observed group we have 50 (90.90%) males, average age of 56.55 (min 22.00, max 83.00, SD 13.06). Duration of gout was 6.23 years in average (min 1.00, max 35.00). We found 23 patients (41.8%) with urolithiasis. Ten of them (18.18%) was diagnosed by clinical history and additional 13 (23.63%) by ultrasonography. In our group 35 (63.6%) patient had hyperlipidemia, 26 (47.3%) were with regularly cured high blood pressure, and 14 (25.5%) were diabetics. After statistic evaluation we did not find statistically significant correlation of presents of urolithiasis in gout patients, and their age, hyperlipidemia, high blood pressure and diabetes but we find statically significant correlation between urolithiasis and duration of gout ($p < 0.001$).

Conclusions: Frequency of urolithiasis in primary gout in our sample was 41.8%, and 23.63% were patients with silent kidney stone diagnosed by ultrasound. Ultrasonography increased the probability of diagnosing urolithiasis and the most important risk factor is duration of gout.

Poster Session 8: Trauma and reconstruction

Saturday, 10 October 2009, 09:40–11:40

Room 2

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Use of urinary beta-2 microglobulin (B2MG) as renal injury index

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Introduction and Objectives: Human Beta-2 Microglobulin (B2MG) is a protein filtered by the glomeruli and reabsorbed

by the proximal tubular cells where it is metabolized. B2MG is expressed on nucleated cells, and is found at low levels in the serum and urine of normal individuals and is considered as sensitive means for diagnosing tubular dysfunction. The aim of this study was to elucidate the relationship between urinary levels of B2MG and renal injuries and to correlate them with clinicopathological parameters. Our objective was to point out the value of urinary levels of B2MG as a cost effective, non-invasive diagnostic approach of diagnosis and evaluation of renal injuries.

Material and Methods: Urine samples of 85 patients with renal injuries were collected after 24 h, 2 days and 7 days for measuring B2MG. The control group consisted of 10 health subjects (< 300 ng/ml). Exclusion criteria's were diseases that decrease renal function, such as inflammatory, viral and autoimmune diseases. The patients underwent clinical and laboratory tests and were also subject to image study by U/S and CT. Patients' age ranged from 18 to 70 years (mean age = 42 years). Their diagnoses were reported as follows: 13 (15.3%) had Grade I, 21 (24.7%) had Grade II, 16 (18.8%) Grade III, 8 (9.4%) Grade IV and 12 (14.1%) Grade V. 15 patients (17.7%) with renal injury, microscopic hematuria and negative U/S and CT findings has been concluded in our study. All patients with Grade IV and V underwent nephrectomy due to hemodynamic instability. Relationship between B2MG and Grade of renal injury was evaluated with Kruskal-Wallis and confirmed by the Cochran-Armitage test for trend. Furthermore, we applied multivariate linear mixed effects models with B2MG as outcome, and age as an independent variable.

Results: In the urine sample of 15 patients with negative image study for renal injury, we detected B2MG with median value 524 ng/ml. A statistically significant negative relationship was found between levels of B2MG across the early period after renal injury ($r_s = -0.31$, p -value = 0.004), meaning that when patients go to 7th day, this is followed by a decrease in B2MG. We observed that B2MG was associated with Grade (p -value < 0.001). Patients with Grade IV have 2579.7 ng/ml with 95% CI greater B2MG compared to patients in Grade 0 and subjects with Grade V have a 4956.5 ng/ml with 95% CI greater B2MG compared to patients in Grade 0, meaning that the level of B2MG is increased. We further observed that levels of B2MG of patients with Grade IV–V, who underwent nephrectomy were normalized in 2nd and 7th day postoperatively. No statistically significant association was obtained when correlating B2MG and age.

Conclusions: B2MG constitutes reliable index for renal injury and it can be used when the image study is not available or not diagnostic for renal injury and the suspicion is placed by the existence microscopic or macroscopic hematuria.

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Urethral injury. Can mechanism of injury prejudge partial or total urethral rupture?

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Introduction and Objectives: Urethral injury may be due to a variety of causes. Key point in the management is to diagnose a total or partial rupture. Our aim is to study if the mechanism of injury can prejudge partial or total urethral rupture. Urethral injury may cause complications, short-term (acute urinary retention) or longterm (strictures, incontinence, erectile dysfunction)

Material and Methods: A retrospective study of 83 patients presented with traumatic urethral rupture from January 2005 until June 2008. All patients underwent retrograde urethrography after clinical, laboratory and radiographic