SUMMARY AND CONCLUSION

The first documented use of laparoscopy in urology was to diagnose cryptorchid testis in 1976, followed by retroperitoneal laparoscopic ureterolithotomy in 1979 and laparoscopic varix-ligation in 1988. Urologic laparoscopy was ushered into a new era with the performance of the first laparoscopic nephrectomy in 1990. Since that time, most of the urologic surgical procedures are considered to be ideal for laparoscopy, it has been performed laparoscopically.

All patients underwent transperitoneal laparoscopic approach in Urology Department, Benha Faculty of Medicine between September 2002 and February 2005.

This series included 40 patients; they were divided into three groups according to diagnosis.

Group I: Included 10 patients with symptomatic simple and peripelvic renal cysts. Patients included 6 males and 4 females with mean age $\pm$SD (51 $\pm$ 8.69) and ranged between 37-70 years.

Group II: Included 15 patients with large chronic impacted upper ureteric stones. Patients included 14 males and one female. The mean age $\pm$SD (47.27 $\pm$ 9.32) ranged between 32-62 years.

Group III: Included 15 patients with non-functioning kidney due to severely hydronephrotic, chronic pyelonephritic and hypoplastic kidneys. Patients included 11 males and 4 females with a mean age $\pm$SD (46.87 $\pm$ 11.61) ranged between 23-67 years.

Laparoscopic ablation of renal cysts was performed for management of eight patients with simple peripheral renal cysts and two patients with peripelvic renal cysts. The mean operative time was 116 minutes. Cyst size ranged between (3.8 x 3.5-7x8 cc) in diameter. The mean estimated blood loss was 54cc. Two patients required post-operative parentral analgesia and the mean for oral feeding 1.2 ranged (1-3 days). The average hospital stay was 3 days and the mean for resuming work one week. So, laparoscopic renal cyst decortication is an excellent treatment for simple and peripelvic renal cysts. It offers many advantages over the open surgical; less post-operative pain, early ambulation, shorter hospitalization, convalescence and improved cosmoses.

On the other hand, the mean cost, particularly when performed with disposable instruments was 2660 LE. However, the mean cost, when preformed with reusable instruments was 580 LE.

Laparoscopic ureterolithotomy was performed in 15 patients which was successful in 13 patients (86.6%). There were 2 operative failures (13.4%). In one patient, an iliac stone was accidentally migrated distally to pelvic part of the ureter. The other case was converted to open surgery to control bleeding from the left common iliac artery, both patients were successfully managed.

The mean operative time was 119 minutes and the mean estimated blood loss was 62cc. The mean stone size was 18 ranged (from 15-22 mm). The mean for oral feeding was 1.5 days and the mean post-operative parentral analgesia was 150mg of diclofenac sodium. The average hospital stay was 4.3 days and the mean resuming normal activity was 11.6 days.

Laparoscopic ureterolithotomy is associated with lower analgesia requirement, shorter hospital stay and quicker return to work than equivalent open procedures. The mean cost particularly when performed with reusable instruments was 996 LE. In comparison, the mean cost of the procedure using disposable instruments was 3660 LE. So, LU was the same cost of the traditional open approach by using reusable instruments.

Laparoscopic nephrectomy was performed in 15 patients, which was completed in 13 patients and converted to open surgical nephrectomy in two patients due to extensive perinephric adhesion in both, provide over all benefit, including, decreased post-operative pain, shorter hospital stay, and rapid convalescence. The mean operative time was 194 minutes. The kidney size ranged from (3x3-15x25 cm). The mean estimated blood loss was 134cc and the mean post-operative analgesia was 150 gm of diclofenac sodium. The mean hospital stay was 4.7 days and the mean time to return to normal activity was 11.9 days.

Laparoscopic nephrectomy is associated with lower analgesia requirements, shorter hospital stay and quicker return to work than equivalent open procedures. The mean cost, particularly when performed with reusable instruments was 1566. In comparison a laparoscopic nephrectomy typically cost around 5780 LE when performed with disposable instruments.

Finally, the financial cost of laparoscopy remains a problem; the cost of laparoscopic nephrectomy was a three times expensive more than open nephrectomy with disposable instruments, but with reusable instruments is not prohibitive being comparable with that of open nephrectomy.