which resulted in smaller wounds and rapid recovery. This operation can be performed using either transperitoneal or retroperitoneal techniques. The advantages of retroperitoneal approach were avoidance of bowel manipulation and it could be direct access to the kidney. Thus the aim of our study was to evaluate the experience of laparoscopic retroperitoneoscopic partial nephrectomy for benign renal tumor (pathology: angiomylipoma) in Chi-Mei Medical Center from June 2012 to July 2015. All of the surgeries were performed by a single surgeon. The demographic data, characteristic of tumors, peri-operative status and post-operative outcome were analyzed.

Results: Twenty-two partial nephrectomies were performed in twenty-one kidneys. The mean age was 48-year-old (27–70). Most of the patients were diagnosed incidentally, only 4 patients (20%) presented with the symptom of flank or abdominal pain. The mean size of tumors which disclosed by CT was 4.9 cm (1–18). Meanwhile the R.E.N.A.L nephrometry score was 6.1 in average. Only one patient who underwent pre-operative TAE due to huge tumor size (18cm). There was a wide range of operative time with mean 176 mins (90-345) related to the complexity of tumors. The average warm ischemic time was 9.4 mins (0-20.7) with 7 partial nephrectomies done in zero-ischemia status. Intra-operative estimated blood loss 173 ml (10-600). No major surgical complications noted. Only 3 patients required blood transfusion perioperatively. Another one patient experienced asymptomatic perirenal hematoma during CT follow-up. The average post-operative length of hospital stay was 3.3 days (2-8). Regarding the renal function, the average decreased of GFR of lesion side after operation was 11% (from 46.5 ml/min to 41.4 ml/min). Two patients revealed residual tumors and one patient experienced tumor recurrence by CT during out-patient department follow-up.

Conclusion: Laparoscopic retroperitoneoscopic renal surgery can be performed safely and effectively. However, the limited space of retroperitoneum given this procedure more challenging.

MP5-6.
THULIUM LASER FOR TRANSCUTANEOUS RESECTION OF BLADDER TUMORS
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Purpose: We describe the preliminary experience of a new method by Thulium laser for transcutaneous resection of CIS or diffuse sessile bladder tumors.

Materials and Methods: From September 2014 to December 2015, 7 patients (6 males and 1 female) newly diagnosed with having diffuse sessile bladder tumors with or without ureteral orifice involved were selected by TUR-BT of Thulium Laser. A 10-20 watts Thulium laser power was used to incise bladder tumors by 300-microm fiber through resectoscope. Mean tumor diameter was 5.5cm (range 3.5–9.0).

Results: All patients were treated successfully in one session. No patients experienced detrusor nerve reflex reaction intra-operatively and no bladder perforation in dome-located neoplasm. Mean operative time was 55 min (range 30–100). Tumors involved ureteral meatus were noted in 3 patients. The orifice was sharply excised without subsequent evidence of stenosis. The mean follow-up time was 8.4 months. Tumor recurrences were found in two patients in 6 and 12 months postoperatively.

Conclusion: In our limited experience, Thulium laser TURBT is a reliable therapy with minimal morbidity for selected patients of diffuse bladder tumors with ureteral orifice involved or CIS.

LUTS
MP5-7.
UP-REGULATION OF PROSTATIC CANNABINOID RECEPTOR TYPE 2 FOLLOWING CAPSAICIN-INDUCED PROSTATITIS IN CASTRATED AND NON-CASTRATED RATS
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Purpose: The etiology of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is unknown, and there are still no established treatments that consistently relieve patients’ symptoms. Endocannabinoids serves as important modulators of tissue inflammation and pain perception. Manipulation of cannabinoid system had been shown to reduce inflammation and lessen pain perception in some inflammatory disorders. This study investigated the changes of cannabinoid system following capsaicin-induced prostatitis in castrated and non-castrated rats.

Materials and Methods: In adult male Sprague-Dawley rats androgen deprivation was induced with bilateral orchietomy (OX). At 4 weeks after bilateral OX or sham operation, prostat inflammation was induced by intraprostatic capsaicin injection. Control group received intraprostatic vehicle injection. The expression of cannabinoid receptor type 1(CB1) and 2(CB2), fatty amide hydrolase (FAAH) and cytochrome P450 (COX-2)(CXO-2) in each group were examined with RT-PCR for mRNA and immunohistochemistry.

Results: Capsaicin injection induced an inflammatory reaction with infiltration of leukocytes. Expression of COX-2 was enhanced following capsaicin injection. Capsaicin injection increased CB2 expression, while the expression of CB1 was not changed. Expression of FAAH, an endo-cannabinoid degradation enzyme, was reduced following capsaicin injection. Castration induced an atrophic change of the prostate gland. Expression of CB1, CB2 and FAAH was enhanced following castration. Capsaicin injection also induced an inflammatory reaction in the castrated-prostate, but with a lesser degree of leukocyte accumulation as compared with non-castrated group. In the castrated-prostate capsaicin injection induced a further increase of CB2 expression, while expression of CB1 and FAAH was not changed.

Conclusion: The present study demonstrated a consistent up-regulation of CB2 following capsaicin-induced prostatitis in castrated and non-castrated rats. CB2 can be a promising therapeutic target in treating non-bacterial prostatitis.

MP5-8.
SAFETY AND THERAPEUTIC EFFICACY OF MIRABEGRON 25 MG IN VERY OLD AND FRAIL PATIENTS WITH OAB AND MULTIPLE COMORBIDITIES – COMPARISON WITH YOUNGER PATIENTS
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Purpose: To assess the therapeutic efficacy and safety of mirabegron 25 mg once daily in very old and frail patients with overactive bladder (OAB) and multiple comorbidities compared with younger patients.

Materials and Methods: Patients with OAB at the age range of between twenty to sixty years old and over eighty years old were included in this study. All of the participants were treatment-naïve or no treatment more than 3 months at the baseline, treated with mirabegron 25 mg once daily. The patients were divided into two groups, younger (20-60 years old) and older(≥ 80 years old). Patients who discontinued mirabegron 25 mg once daily; or changed the dosage of mirabegron; or changed to antimuscarinics during treatment course were excluded. Their underlying comorbidities was recorded. Assessment tools included International Prostate Symptom Score (IPSS), Overactive Bladder Symptom Score (OABSS), Urgency Severity Score (USS), Patient Perception of Bladder Condition (PPBC), Quality of Life (QoL), uroflowmetry and prostate volume. We compared the difference of the change from baseline to 1st month and 3rd month between two groups. Safety assessments included reporting adverse events (AEs) and post-void residual.

Results: Total 92 patients (younger, N=56; very old, N=40) with OAB treated with mirabegron 25 mg once daily were included. The mean age of younger group was 50.55 ± 10.12 and older group was 85.58 ± 5.76. In overall, the patients in the older group have more underlying comorbidities than younger group (59 vs 30). There was no significant difference of baseline in IPSS, OABSS, USS, QoL and total prostate volume (TPV) between two groups. However, the baseline Qmax, voided volume, post-voided residual (PVR) and PPBC were lower in older group. A statistically