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Purpose: The diagnosis and treatment of retroperitoneal fibrosis is still difficult in clinical practice. Some articles were tried to analyze the characteristics of these patients and compare the treatment efficacy. However, there is still much to be mentioned. This study was aimed to describe the clinical manifestations, laboratory results, diagnostic tool, and treatments in patients with retroperitoneal fibrosis at Taipei Veterans General Hospital.

Materials and Methods: From January 2005 to August 2015, we retrospectively reviewed the patients who were diagnosed with retroperitoneal fibrosis via ICD-9 code (594.3). The data we collected including age, sex, height, weight, BMI, BSA, initial renal function, serum IgG4 level, nephrosis condition, diagnostic tool, further treatment and post-treatment renal function.

Results: Total 30 patients were included, 23 were male (77%) and 7 were female (23%). Mean age was 65.9 ± 16.7 years. Biopsy specimens were available in 13 cases (43%). The mean serum creatinine at diagnosis was 2.28 ± 1.85 mg/dL. Half of the patients had serum IgG4 test, and the mean was 249.3 ± 205.1 mg/dL. Twenty-one patients (70%) were treated with uroteral procedures only (17 double J stenting, 2 reconstruction and 2 ureterolysis), 2 patients (7%) with medications only, and 3 patients (10%) with a combination of medical and double J stenting. Corticosteroids were initiated in 5 patients (17%), and immunomodulator was used in 2 patients (7%). Follow-up data were available in 27 patients (90%). Creatinine levels were normal (<1.5 mg/dL) at last visit in 16 patients (59%) of the 27 patients. More than half patient (53%) with improved renal function (creatinine) was under ureteral procedure (double J stenting, reconstruction and ureterolysis).

Conclusion: Retroperitoneal fibrosis in Taipei Veterans General Hospital was diagnosed mostly via laboratory results (IgG4 in 15 patients and IgG in 14 patients and increased level in 10 patient) or biopsy (43% of 30 patients with fibrosis in pathology report). Ureteral procedure (double J stenting, reconstruction and ureterolysis) was preferred as compared with medication only.

MP2-10.
ANALYSIS OF THE USAGE AND REPAIR OF FLEXIBLE URETEROSCOPE—5-YEAR EXPERIENCE OF CHI-MEI HOSPITAL

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Purpose: The frequency usage of flexible ureteroscope has increased in the diagnosis and treatment of upper tract disease in recent years. Flexible ureteroscope allows endoscopic access to the ureter and kidney. However, maintenance and repair of scopes may increase the total procedure expense.

Materials and Methods: In Chi-Mei Hospital, we started using flexible ureteroscopes since 2009. Starting from January 2011, we have two Olympus flexible ureteroscopes URF-P5. Cases were performed by senior residents under the supervision of attending urologists. In this study, we prospectively recorded the use and damage from January 2011 to December 2015. The damages of ureteroscopes were inspected by the maintenance department from our hospital, then the repair performed by the original manufacturer.

Results: From January 2011 to December 2015, two flexible ureteroscopes were used in 379 surgeries. The usages each year were 44 times in 2011, 77 in 2012, 82 in 2013, 54 in 2014, and 112 times in 2015. A total of 10 reports of damage were recorded (2.64% of total uses). Seven major damages (1.85% of total uses) because of breakage of bending rubber from distal part required comprehensive repairs from the original manufacturer and replacement of distal segment. The major damage rates each year were 2.27% in 2011, 0% in 2012, 2.44% in 2013, 1.85% in 2014, and 0.89% in 2015.

Conclusion: Flexible ureteroscopes are fragile instruments. As the usage of flexible ureteroscopes increase, there is a notably increasing expenses associated with instrument repair. In our 5-year experience, we find that with the improvements of familiarity with the device, we can decrease the risk of major damage, thus decrease the maintenance expenses and improve the ureteroscope durability.