RETROPERITONEAL FIBROSIS: CHALLENGE IN DIAGNOSIS AND TREATMENT – A SINGLE INSTITUTE EXPERIENCE

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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, hydro-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 ± 16.37. 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 ureteral procedures only (17 double J stenting, 2 reconstruction and 2 ureterolithotomy), 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 ureterolithotomy).

Conclusion: Retroperitoneal fibrosis in Taipei Veterans General Hospital was diagnosed mostly via laboratory results (IgG4 in 15 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 ureterolithotomy) was preferred as compared with medication only.

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 manufacturers.

Results: 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.

RECURRENT FEMALE STRESS URINARY INCONTINENCE

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Purpose: To investigate the effectiveness of repeat suburethral sling for recurrent stress urinary incontinence (SUI) in women.

Materials and Methods: From May 1994 to November 2015, 35 women with SUI who received repeat suburethral sling procedure were retrospectively reviewed. The treatment outcome was assessed by direct or telephone interview. Patients also received transrectal sonographic examination of the bladder and urethra. The sling position and urethral incompetence during straining was examined after sling procedure.

Results: The overall continence rate after repeat sling procedure was 71.4% (25/35) within 10 years of follow up. Of the 35 women, 19 received a simple retropubic puvoginal sling procedure (PVS), 16 received combined PVS and other pelvic floor surgery. The overall success rate in the simple PVS group is 16 out of 19, 84.2% whereas in the concomitant surgery is 5 out of 16, 31.3%, p=0.001. The overall success rate in the earlier 17 women was 88.9% vs. 11.1% (p=0.015) in simple PVS and combined procedure, respectively. The success rate in the latter 18 women was 80.0% vs. 20.0% in simple PVS and combined procedure, respectively (p=0.145). Sling position was identified in 25 women after repeat simple PVS. The success rate was 50% (2/4) at bladder neck, 87.5% (7/8) at proximal urethra, 36.4% (4/11) at middle urethra, and 0% (0/2) at distal urethra (p=0.122). Only 1 patient had bladder injury during simple PVS procedure. Urinary tract infection developed in 3 patients (8.5%), 2 had postoperative bladder outlet obstruction necessary for urethrolysis (5.7%) and sling erosion was noted in 2 (5.7%). Age, body mass index (BMI), parity, and the status of previous hysterectomy showed no significant difference in influencing the continence rate of repeated sling.

Conclusion: Repeat suburethral sling procedure for recurrent SUI was safe and effective. The sling position of PVS procedure at the proximal urethra had a relatively higher continence rate than locating at the other site.

ENDOMETRIOSIS IS A RISK FACTOR OF INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME WITHIN SHORT INTERVAL – A POPULATION-BASED STUDY

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Purpose: Intercutstitial cystitis/bladder pain syndrome (IC/BPS) and endometriosis frequently coexist and elusive. Both diseases share similar symptoms which are common contribute to chronic pelvic pain. This study aimed to evaluate if endometriosis is a risk of IC/BPS.

Materials and Methods: From a national insurance database, we identified women newly diagnosed with endometriosis between 2002 and 2013. Those with a history of IC/BPS before endometriosis diagnosis were excluded. All women were stratified into two subgroups based on the propensity scores of 10 confounding factors, including age and nine comorbidities (irritable bowel syndrome, depressive disorder, anxiety, fibromyalgia, stress incontinence, acute cystitis and chronic urinary tract infection). All were followed until the end of 2013 to detect the event of IC/BPS diagnosis. The hazard ratio (HR) of IC/BPS in the endometriosis cohort...
was compared with the non-endometriosis cohort among the two sub-
groups by Cox regression after adjusting for confounding factors.

**Results:** In addition to the representative average age, subgroup 2 had similar rates of comorbidities as the general population. The study was both externally and internally valid. The risk of IC/BPS in the endometriosis cohort (n=18006) was significantly higher than in the non-IC/BPS cohort (n=389099) in subgroup 2 (HR=2.091, 95% CI 1.641–2.663). The mean time to IC/BPS after diagnosis of endometriosis was 3.76 years.

**Conclusion:** Endometriosis has association with IC/BPS in our database. Caregivers should cautiously evaluate the possibility of IC/BPS in women with diagnosis of endometriosis.

**MP3-3. DYSpareunia Radiated To The Bladder May Be a Potential Progressive Phenotype of These Patients With Intersitial Cystitis/Bladder Pain Syndrome (IC/BPS)**

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**Purpose:** Intersitial cystitis/bladder pain syndrome (IC/BPS) is a chronic disease characterized by a constellation of symptoms, including pelvic pain, pressure, and discomfort perceived to be related to the bladder with frequency, persistent urge, or nocturia in the absence of bacterial infection or other identified pathologic disease. A previous study established that intersitial cystitis/bladder pain syndrome (IC/BPS) patients had significantly more dyspareunia and fear of pain than healthy controls. Moreover, recent studies revealed sexual pain may be the one of "UPOINT" phenotypes (Urinary, psychosocial, organ specific, infection, neurogenic, tenderness) in IC/BPS patients. We proposed that patients diagnosed of IC/BPS with the presence of dyspareunia could be a specific phenotype and compared as a separate group with a pure IC/BPS without presence of dyspareunia. The purpose of this study is to examine the relationships between lower urinary tract symptoms including the symptom profile, used validated questionnaire, duration of symptoms, anesthetic maximal bladder capacity (MBC), severity of glomerulation, and dyspareunia in IC/BPS patients.

**Materials and Methods:** A total of 156 IC/BPS female patients were included in this study. The diagnosis was made on the consensus of IC/PBS proposed by the Society for Urodynamics and Female Urology criteria in 2008. All patients were diagnosed on the basis of chronic (>6 weeks) pelvic pain, pressure, or discomfort perceived to be related to the bladder with frequency, persistent urge, or nocturia in the absence of infection or other identified causes. There were two questions for dyspareunia history: (1) “Do you feel pain during or after sexual intercourse” and (2) “At which site was the pain located (bladder, vagina, or both)” Urogenital prolapse, vaginal candidiasis, and cervical, uterine, and ovarian cancers were excluded. All women completed measures of pain severity (visual analog scale) and bladder symptom severity [IC Symptom Index, IC Problem Index, and the Pelvic Pain and Urinary/Frequency (PUF) scale]. Respondents were asked to recall if they experienced any sexual pain during or after sexual intercourse in the past 1 year. Cystoscopic hydrodistention during general anesthesia was performed for 5 minutes and maximal bladder capacity was also measured. We used Chi-square tests to evaluate the associations between dyspareunia condition (presence or absence) and severity of glomerulation. Significance was set at p < 0.05.

**Results:** Of the women with a current sexual partner, 61% (96/156) reported dyspareunia during or after sexual intercourse. Of the 96 dyspareunia respondents, 46% (44/96) reported pain in the bladder only, 43% (41/96) in the vagina only, and 11% (11/96) in both the bladder and the vagina. Patients with dyspareunia complained of more severe urological pain (p = 0.02), a higher PUF scale score (p < 0.01), and larger anesthetic maximal bladder capacity (p = 0.04) than patients without dyspareunia. However, patients with dyspareunia at the bladder only more severe urgency (p = 0.03) and larger MBC (p = 0.04) compared to those without dyspareunia. When examining patients with dyspareunia at the vagina only versus those without dyspareunia, no difference was found in bladder symptom and MBC. There were no differences in symptomatic severity and MBC between patients with dyspareunia at the bladder and those at the vagina. There were no differences in the severity of glomerulation between patients positive and negative for dyspareunia (p = 0.18). Moreover, dyspareunia at the vagina only and that at the bladder only showed no differences in severity of glomerulation (p = 0.23, vagina only; p = 0.24, bladder only).

**Conclusion:** IC/BPS women with dyspareunia have significantly more severe urological pain and a higher PUF scale score than women without dyspareunia. Patients with dyspareunia radiated to the urinary system (bladder) show more severe lower urinary tract symptoms (urgency) and larger anesthetic MBC. Physicians should consider sexual pain disorder in the management of patients with IC/BPS and use the PUF scale to evaluate not only IC-specific lower urinary tract symptoms but also sexual pain disorder.

**Other**

**MP3-4. Postoperative Chylous Ascites After Urological Surgery: A 10-Year Review at Chung Shan Medical University Hospital**

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Postoperative chylous ascites is a rare complication of urological surgery. We reviewed the chart of urological operation in the past 10 years in Chung Shan Medical University Hospital, and we are going to report and discuss four cases of postoperative chylous ascites in the article. The first two cases were patients underwent nephrectomy with bladder cuff excision for urothelial carcinoma, the third case was the one underwent radical nephrectomy with lymph node dissection, and the last case was a patient had renal transplantation. Adequate survey and immediately diagnosis were important since milky-white fluid was found in the drain bag. We checked the triglycerides level of the drainage. Then, we did conservative treatment for the postoperative chylous ascites patient with nothing per os (NPO) and total parenteral nutrition (TPN) given via central line for at least seven days. Since the daily drain amount decreased and became steady, the color of drainage turned from milky-white to light yellow or serosanguinous, a diet containing low fat and/or medium chain triglycerides was asked to follow, and last for weeks. Elongating the time of drain placement was suggested, and even more let the patient discharged home with the drain. The outcome of all four patients were good, there is no more uncomfortable abdominal symptoms or milky-white fluid accumulated. In our opinions, the conservative treatment for chylous ascites after urological surgery was feasible.

**MP3-5. Duplex Collecting Systems: Presentation, Morbidity, and Treatment**

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**Purpose:** Duplex collecting systems is the most common congenital anomaly, with an incidence of 0.8-1% during urinary tract development. They are usually asymptomatic and diagnosed incidentally by radiological survey for other reasons. Duplex collecting systems can be divided into complete and incomplete type and may associate with other anomalies. However, there is minimal literature on the review of this entity, its associated anomalies and complications. The purpose of this study is to review the presentations, characteristics, morbidities and treatment modalities in patients with duplex collecting system.

**Materials and Methods:** We retrospectively evaluate the database of patients with duplex collecting systems both from chart records and radiological image studies with the term “duplication” or “duplex” between January, 2010 and September, 2015.