

cohort was compared with the non-IC/BPS cohort among the three subgroups by Cox regression after adjusting for confounding factors.

Results: In addition to the representative middle age, subgroup 2 had similar rates of comorbidities as the general population. The study was both externally and internally valid. The risk of hysterectomy in the IC/BPS cohort ($n = 536$) was significantly higher than in the non-IC/BPS cohort ($n = 103846$) in subgroup 2 (HR = 1.701, 95 % CI 1.056–2.740). The mean time to hysterectomy after diagnosis of IC/BPS was 2.97 years. In this nationwide study, we found that IC/BPS has a causal impact on hysterectomy in the middle-age subgroup in LHID 2010. The possibility of a woman having IC/BPS should be evaluated prior to hysterectomy to avoid inappropriate surgery.

Conclusion: IC/BPS has a causal impact on hysterectomy in middle age female; the possibility of IC/BPS should be evaluated prior to hysterectomy to avoid inappropriate surgery.

NDP092:

ACUTE URINARY RETENTION DURING PREGNANCY – A NATIONWIDE POPULATION-BASED COHORT STUDY IN TAIWAN

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Purpose: To study the epidemiology and risk factors of acute urinary retention (AUR) during pregnancy.

Materials and Methods: We included all cases of pregnancies with AUR reported in Taiwan's Longitudinal Health Insurance Database from January 1, 1998, to December 31, 2011. Cases of AUR onset one day before delivery were excluded. The Cochrane-Armitage trend test and logistic regression analysis were used to evaluate the age distribution and types of deliveries of pregnant women. Chi-squared tests and Fisher's exact test were performed to examine the association among all covariates. The odds ratios (OR) and 95% confidence intervals (CI) were estimated.

Results: We identified 308 cases of AUR in 65,490 pregnancies. The risk of AUR during pregnancy was 0.47%. The peak incidence occurred between the 9th and 16th gestational weeks. Patients who experienced preterm delivery exhibited the highest risk for AUR (2.18%). Those with post-term delivery had the second highest risk (0.46%), and patients with a normal delivery exhibited the lowest risk (0.33%). Compared with normal delivery, preterm delivery carried a higher risk of AUR (OR: 6.33, 95% CI: 4.94–8.11). The AUR risk was higher for patients with advanced maternal age (>35 years-old) than it was for those in the younger group (< 20 years-old) (OR: 2.62, 95% CI: 1.18–5.81). Within the normal delivery group, higher incidences of urinary tract infection; inflammation of the pelvis, cervix, vagina, and vulva; genital herpes, previous abortion; and abnormal pelvis were noted in women with AUR than in those without AUR (all p values < 0.05).

Conclusion: Women with advanced maternal age and those who experienced preterm delivery had an increased risk for AUR. The peak incidence of AUR in normal pregnancies occurred between the 9th and 16th gestational weeks. Urogenital infection, previous abortion, and abnormal pelvis were associated with AUR in women who underwent a normal delivery.

NDP093:

EVALUATION OF URINARY BLADDER FIBROGENESIS IN MOUSE MODEL OF LONG-TERM KETAMINE INJECTION

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Purpose: Long-term ketamine abuse has been shown to affect the lower urinary tract and result in interstitial cystitis-like syndrome. However, the causative mechanism of ketamine-induced dysfunction is still not clear. This present study was to investigate the physiological and histological changes on ketamine-associated cystitis (KC) in a mouse model.

Materials and Methods: Both male and female Balb/c mice were separately distributed into the control (normal saline) and ketamine groups which received ketamine hydrochloride (100 mg/kg/day) daily by intraperitoneal injection for a total period of 20 weeks. In each group, the urine was analyzed by GC-MS to measure the concentration of ketamine and its metabolites. Urinary frequency and urine volume were examined to investigate the urinary voiding functions. Mice bladders were excised for cDNA microarray and HE stain.

Results: The voiding interval was decreased at the male mice group after 20-week ketamine administration. Moreover, the result of cDNA array analysis revealed a number of gene expressions involved in chronic wound healing response and collagen accumulation, which were closely related to fibrosis progression in the connective tissue. In HE stain of bladder tissue, the ketamine-injected mice showed prominently denser blood vessel distribution in the submucosal layer.

Conclusion: Based on the evidence in our experiment, we may build up a mechanism that delineates fibrosis formation of urinary bladder induced by the pathogenesis of ketamine abuse.

NDP094:

PRELIMINARY EXPERIENCE OF TRANSOBTURATOR TAPE FOR FEMALE URINARY INCONTINENCE IN TAINAN MUNICIPAL HOSPITAL

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Purpose: Mid-urethral sling is the gold standard as surgical treatment for female urinary incontinence. Transobturator tape (TOT) is the fashion method in recent decade, with a comparable dry rate for incontinence and lower complication rate to other sub-urethral sling procedures, such as TVT. Of the complications, the most unpredictable one is the post-operative urine retention. To prevent this complication, careful patient selection is required to exclude complicated SUI, those have bladder dysfunction and neurological deficit. Therefore, most physicians in medical center will arrange video urodynamic studies for screening patient's underlying bladder function. In local hospitals, because of lacking urodynamic instruments, complete VUDS is not available for pre-operation screening. In this study, we used clinical assessment and post voiding residual urine (PVR) as screening tools, and report the surgical outcome and complication of TOT.

Materials and Methods: Female patients with stress urinary incontinence as a chief complaint was targeted. Detailed medical history and incontinence questionnaire was taken. Those has significant neurological deficits clinically was excluded, and PVR was checked for every patient. PVR more than 200ml was considered as bladder dysfunction and an exclusion criteria for TOT surgery. TOT with AMS MONARC system was performed by single surgeon with general anesthesia and based on inpatient. Foley was removed at post-OP day 1, and PVR was checked. Patient will be discharged if no urine retention was observed. At outpatient follow up, PVR will be measured at day 7, and day 28. Remission rate of stress and urgent incontinence was analyzed at day 28. Adverse events and complications were recorded.

Results: From Sep. 2014 to Jan. 2016, total 21 patients received TOT. Age: 60.8 (29–80). Children with vaginal delivery: 3.42 (0–6). All 21 patients complaint of stress urinary incontinence, 10 of 21 (47.6%) also has problem of urgent incontinence. 4 of 21 have diabetes, and 1 has history of old stroke. PVR measured at pre-operative: mean: 30.4 (0–116)ml, at post-OP day 1: mean: 91.1 (0–700)ml, day 7: mean: 39.6 (0–100)ml, day 28: mean: 32.76 (0–194)ml. Total dry rate: 81%, with SUI complete resolved in 20 of 21 (95.2%), and UUI cured in 6 of 10 (60%). Only 2 patients (9.5%) experienced AUR, but resolved in one week. No serious complication as bladder or vessel injury was noted. No statistical significant was noted between pre-operative PVR and post-operative PVR and AUR.