Lee M H¹, Chang K M¹, Chen W C¹, Wu H¹

1. Feng Yuan Hospital, Taichung, Taiwan

MORBIDITY AND MEDICAL UTILIZATION OF INTERSTITIAL CYSTITIS/PAINFUL BLADDER SYNDROME IN TAIWAN-A NATIONWIDE POPULATION-BASED STUDY

Hypothesis / aims of study

Interstitial cystitis/painful bladder syndrome(IC/PBS) is a chronic and debilitating disease of unknown etiology. The morbidity (incidence and prevalence) of IC/PBS varies greatly depends on the definition of studies among distinctive areas. Contradictory findings exist among these available reports. The morbidity of IC/PBS and its surgical intervention during twelve years were calculated with a nationwide database of Taiwan.

Study design, materials and methods

This is a cohort study of Longitudinal Health Insurance Database 2010 with newly diagnosed of IC/PBS from 2002 through 2013. The morbidity rate adjusting to age, sex, and calendar date using density methods were estimated. Moreover, surgical intervention and medical utilization during the study period for investigating the behavior of seeking healthcare were measured.

Results

After limiting our sample to patients with IC/PBS diagnosis (ICD-9 code 595.1 at least once during the study period), 2,122 patients as IC/PBS cohort was identified. The database search yielded the incidence of IC/PBS was 21.8 / 100,000 in 2002 and 21.1 / 100,000 in 2013. The prevalence of IC/PBS was 21.8 / 100,000 in 2002 and 40.2 / 100,000 in 2013. In 2003, the incidence and prevalence of female was 28.6/100,000 and 63.5/100,000, respectively. The incidence and prevalence of male was 12.3/100,000 and 19.4/100,000, respectively. It showed the similar pattern till 2013. In 2002, the incidence was 45.5/100,000, 32.4/100,000, 9/100,000 in the age above 65, age between 40-65 and age under 40 years, respectively. The pattern was similar till 2013. The prevalence in 2003 was 86.3/100,000, 63.1/100,000, 16.4/100,000 in the age above 65, age between 40-65 and age under 40 years, respectively. Mean inpatient and outpatient visit time was 1.8±1.8 (1-13) and 4.8±11.5 (1-189) times per year, mean surgery fee (US\$ 246.6±304.5) make up 23.4% of total fee.

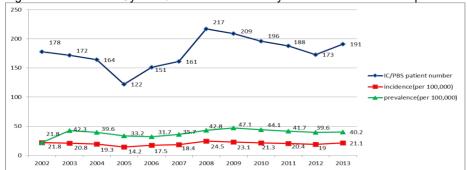
Interpretation of results

The higher incidence and prevalence were noted in female than in male. The morbidity of IC/PBS was increasing during our study period (2002-2013) which was compatible with other studies. Age distribution showed association among increased age, higher incidence and prevalence. The older the patient the higher morbidity rate and higher ratio of female in our study were also compatible with others. The increasing of medical utilization could be explained by the awareness of physician and patient search for medical help that could be found in our study and other's. The 23.4% of surgical fee can be explained the deficiency of the surgical treatment for this disease.

Concluding message

The clinicians in Taiwan were more aware of IC/PBS and payed more attention for its treatment, in the same time, patient search for more medical help, which was compatible with the trend of developed countries.

Figure 1. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002~2013 in LHID 2010



IC/PBS Interstitial Cystitis / Bladder Pain Syndrome; LHID 2010: Longitudinal Health Insurance Database 2010 Figure 2. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002~2013 (by sex) in LHID 2010

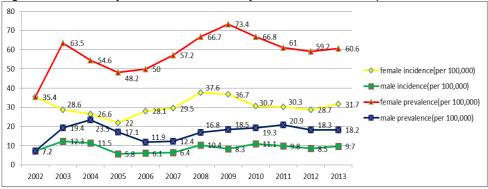


Figure 3. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002~2013 (by age) in LHID 2010

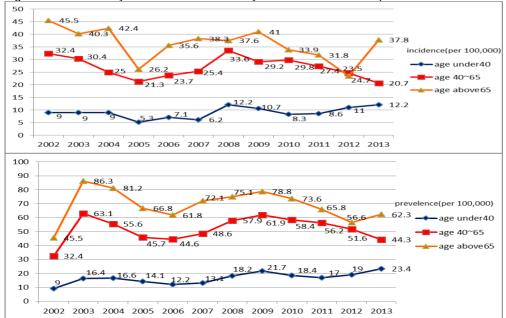


Table 5 Distribution of hospitalizations and outpatient visits for IC/PBS patients between 2002~2013 in LHID 2010

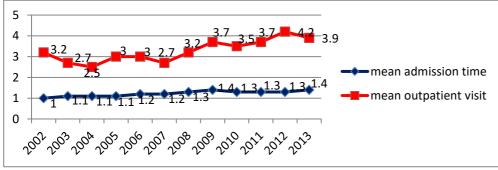


Table Surgery fees (US\$) and its percentage, 2002~2013 between 2002~2013 in LHID 2010

| variables | inpatients | Mean | sd | Min. | Max. |
|-------------------|------------|---------|---------|---------|---------|
| Surgery fee | | | | | |
| Hydrodistension | 256 | 246.562 | 304.487 | 0 | 1454.47 |
| Total fee | | | | | |
| Hydrodistension | 256 | 1248.15 | 2118.23 | 4.28901 | 24347.2 |
| Percentage | | | | | |
| Hydrodistension | 256 | 23.4 | 18.8 | 0.0 | 67.1 |

Disclosures

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