

PERSONAL MATTERS AFFECT THE TIMING OF THE SURGERY FOR STRESS URINARY INCONTINENCE: A NATION-WIDE STUDY

Hypothesis / aims of study

One of every three women will experience stress urinary incontinence (SUI) at some point during their lives. SUI can interfere with quality of life. Surgery is an important treatment option for SUI because it can reduce urinary leakage symptoms most definitively and improve quality of life. Nevertheless, a woman can wait to have SUI surgery without causing any harm to herself. Owing to the convenience of seeking medical advice in Taiwan, the patients could acquire timely therapy. However, women with SUI may delay surgery due to various factors, such as taking care of her family or busy with work. In this study, we want to investigate the personal matters which may affect the timing of the surgery for SUI.

Study design, materials and methods

We recruited female patients who underwent surgeries for SUI and aged 20 years or older from a urology dataset including 3,431,366 individuals selected from the National Health Insurance Research Database for the year 2006 to 2010. We traced the time of original diagnosis of SUI and measured the delay to surgery. We used Kaplan-Meier analysis and log-rank test to investigate whether combined surgery for pelvic organ prolapse (POP), age, monthly income and geographic location affected the timing of the surgery for SUI.

Results

We identified 4670 female patients who underwent surgeries for SUI between January 2007 and December 2010. Table 1 presented the demographic characteristics of the research subjects. The mean \pm SD age of the participants was 58.18 \pm 11.76 (range 23.63-89.82) years. Among them, 1700 (36.4%) received combined surgery for POP. The median delay to surgery was 1.00 (quartile range 0.27-7.33) months. The delay to surgery was significantly shorter in the patients who underwent combined surgery for POP compared with those who merely received the surgery for SUI ($p < 0.001$). If the research subjects divided into three groups according to the monthly income, undertaking the combined surgery didn't influence the timing of surgery for SUI in the group with low monthly income. Younger patients underwent surgery for SUI earlier than older patients ($p < 0.001$). Nevertheless, age was not a significant predictor for the delay to surgery in the patients who underwent combined surgery. Patients who lived in central area of Taiwan underwent surgery for SUI earlier than those who lived in other areas of Taiwan

Interpretation of results

POP associate with SUI poses a more severe condition, and may prompt patient accept surgery earlier than patients with only SUI. Younger patients may be more active than elderly and underwent surgery earlier for symptoms relief.

Concluding message

SUI patients combined with POP who might suffer from voiding dysfunction would elect to undertake the surgery early. Nevertheless, the surgical mesh for POP surgery is beyond the scope of the health insurance and the patients with low income might not afford the expense of the mesh which causing delay to surgery. Younger patients with SUI might pay more attention to the life quality and social activities, and expect the prompt relief of symptoms.

Demographic characteristics of Female SUI patients underwent surgery

Variable	Total no.	Percent
Age (years)		
< 50	1254	26.85
50-70	2501	53.55
> 70	915	19.59
Monthly income		
<NT\$15,840	895	19.33
NT\$15,840~25,000	1921	41.5
>NT\$25,001	1813	39.17
Geographic region		
Northern	2412	52.1
Central	954	20.6
Eastern	172	3.71
Southern	1092	23.59

References

1. Curr Urol Rep. 2011 Oct;12(5):370-6. doi: 10.1007/s11934-011-0206-0.

Disclosures

Funding: external funding of the study (NONE). **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Taipei Veterans General Hospital **Helsinki:** Yes **Informed Consent:** No