

## PREVALENCE OF PELVIC ORGAN PROLAPSE IN DIFFERENT COMPARTMENTS IN SYMPTOMATIC CHINESE WOMEN

### Hypothesis / aims of study

Pelvic organ prolapse (POP) is a very common problem in elderly women across different populations. Limited studies were reported in the prevalence and incidence of pelvic organ prolapse, but mainly in western countries (1-2). On examination, anterior compartment prolapse is the most frequently reported site of prolapse followed by posterior compartment defects and then apical prolapse (3). This study aims at exploring any difference in the prevalence of prolapse in different compartments in Chinese women symptomatic of POP.

### Study design, materials and methods

This is a cohort study included all Chinese women who presented to our urogynaecology clinic with symptoms of POP from 2001-2013. Basic demographic data, symptoms on urinary and faecal incontinence and POP were obtained using a standard datasheet at the first consultation; and physical examination was performed to assess for POP using POP-Q staging for every woman. Prevalence of prolapse in different compartments was then analyzed. Ethics approval was obtained from local institute.

### Results

During that period, 6935 women were referred for urogynaecology problems, with 2884 women complained of POP. Their mean age was 64.5 (SD: 12.7) year old. The mean number of vaginal delivery was 3.6 (SD 2.0). The mean Body mass index (BMI) was 24.6 kg/m<sup>2</sup> (SD: 3.7). In all, 77.3% (2229/2884) of them were menopausal and 29.1% (839/2884) of them were sexually active. Among all women, there was 47.95% (1383/2884) reporting urinary stress incontinence, 32.91% (949/2884) had urinary urge incontinence, 6.14% (177/2884) had faecal incontinence and 12.83% (370/2884) had flatal incontinence.

The prevalence of prolapse in different compartment according to POP-Q system was listed in table 1. Overall, 99 (3.4%) of them was found to have no prolapse in any compartment. 279 (9.7%) of them had prolapse only involved in one single compartment.

The characteristics of women with various stages of prolapse were shown in Table 2. Women with prolapse Stage III or IV were significantly older and had more vaginal deliveries than those without prolapse. Women with Stage III or IV prolapse were significantly older than those with Stage I and II.

### Interpretation of results

90.3% of the symptomatic women had pelvic organ prolapse in more than one compartments. 92% of them had anterior compartment prolapse while 83.3% of them had apical compartment prolapse and only 44.0% of them had posterior compartment prolapse. Besides, women with severe prolapse (Stage III or IV) were significantly older than those with mild prolapse (Stage I or II).

### Concluding message

The prevalence of prolapse in different compartments observed in our Chinese population was different to previous reported in western countries. Apical compartment prolapse was more common in Chinese women. Further study is required to investigate possible factors to account for this difference.

Table 1. Prevalence of pelvic organ prolapse in different compartment in symptomatic Chinese women

	Overall staging (n=2785)	Anterior compartment (n=2785)	Apical compartment (n=2785)	Posterior compartment (n=2785)
Stage 0	3.4%	8%	16.7%	56.0%
Stage I	33.0%	52.4%	40.1%	32.0%
Stage II	49.4%	34.8%	30.3%	8.4%
Stage III	11.3%	2%	10.1%	0.8%
Stage IV	2.8%	2.8%	2.8%	2.8%

Table 2. Characteristics of women with symptomatic POP

	Overall	Stage 0	Stage I	Stage II	Stage III	Stage IV
Age (years)	64.5 (12.7)	58.6 (15.6)	62.6 (13.5) *	64.7(11.9)*,**	69.3 (10.9)*, **,***	69.6 (11.0)*, **, ***
Parity	3.7 (2.0)	2.9 (2.3)	3.5 (1.9)	3.8 (2.0)*,**	3.9 (2.1)*,**	3.8 (2.1)*
No. Vaginal delivery	3.6 (2.0)	2.9 (2.2)	3.4 (2.06)	3.8 (2.0)*,**	3.8 (2.1)*	3.8 (2.1)*
BMI (kg/m <sup>2</sup> )	24.6 (3.7)	23.3(5.6)	24.0(3.5)	25.0 (3.6)*,**	24.9 (3.4)*,**	25.0 (3.7)

Data is presented in mean (standard deviation)

\*p<0.05 vs Stage 0, \*\*p<0.05 vs Stage I, \*\*\* p<0.05 vs Stage II

### References

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### Disclosures

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