

## RISK FACTORS FOR RECURRENCE OF PELVIC ORGAN PROLAPSE

### Aims of Study

Recurrent pelvic organ prolapse following surgical correction is perhaps the most vexing problem in pelvic reconstructive surgery. Nearly 30% of all pelvic organ prolapse surgery done in the United States is for recurrent problems.(1) Despite the introduction of new and "better" surgical tools and techniques recurrence inevitably occurs and remarkably little is known about those factors which protect or promote its occurrence. We sought to determine what factors are associated with recurrent pelvic organ prolapse among a large cohort of women followed prospectively for 1 year.

### Methods

Data on 389 women undergoing surgery for prolapse or urinary incontinence were collected prospectively between June 1996 and May 1999. Among these patients, 189 had one-year postoperative follow-up and were the basis of this study. Ninety-six percent (182/189) of the prolapse repairs were done vaginally. Data included demographic information; symptoms related to prolapse and urinary, bowel, and sexual function by questionnaire and visual analog scales; and pelvic organ prolapse quantification (POP-Q) examination by a research nurse. Recurrent prolapse was defined as Stage II prolapse (or worse) at any site (anterior, apical, posterior) one year after surgery. In addition to descriptive statistics, logistic regression was used to determine which risk factors were independently associated with recurrent prolapse.

### Results

Before surgery, 84 women had Stage II prolapse and 99 women had Stage III/IV. One year after surgery, 101 women (53%) had Stage II prolapse (67/101 or 66% anterior), 4 (2%) had Stage III, and 2 (1%) had Stage IV. History of hysterectomy or surgery for incontinence or prolapse was not associated with postoperative recurrence. Women with more prolapsed sites preoperatively were more likely to recur (40% for one preoperative site, 44% for two sites, and 79% for three;  $p = 0.04$ ). Recurrence was more likely with more advanced preoperative prolapse: 33% for Stage I, 50% for Stage II, and 64% for Stage III/IV ( $p = 0.03$ ). Recurrence was less likely as age increased: 70% for age < 50, 64% for ages 50-59, 44% for ages 60-69, and 52% for age > 70 years ( $p = 0.02$ ).

Characteristic	Adjusted OR	95% CI	p
Age < 60 years	3.4	1.7 – 6.6	<0.001
Preoperative Stage III-IV Prolapse	2.9	1.5 – 5.6	0.002

### Conclusions

Women of younger age and with more advanced prolapse are more likely to develop recurrent prolapse following reconstructive surgery.

### References

1. OLSEN AL, SMITH VJ, BERGSTROM JO, COLLING JC, CLARK AL. Epidemiology of surgically managed pelvic organ prolapse and urinary incontinence. *Obstet Gynecol* 1997;89:501-6.