ABSTRACT

Objective: The purpose of this study was to evaluate the prevalence of voiding and defecatory dysfunction in postmenopausal women with pelvic organ prolapse.

Study Design: This is a cross-sectional study of Sixty post-menopausal women with symptomatic pelvic organ prolapse of stage II or greater. Patients were admitted for surgery in Gynaecology department at Christian Medical College Hospital, Vellore between October 2015 to August 2016 were recruited. This study was approved by the institutional review board and ethical committee of the hospital. All women had informed written consent and were examined with POP-Q system to categorize the stages of prolapse and interviewed with international prostate symptom score (IPSS) questionnaire to evaluate LUTS and QOL. Short form of pelvic floor distress inventory (sPFDI-20) questionnaire was used for assessment of defecatory symptoms. Pre- and post-operative uroflow and PVR were measured. In this study, voiding dysfunction was defined as the maximal flow rate below 15ml/sec and/ or PVR ≥100ml. Defecatory dysfunction was defined as “the women who had given positive response for 2 or more questions out of 8 questions “in CRADI-8 bowel subscale score with in PFDI-20 (short form of the pelvic floor distress inventory). The statistical analysis was done by using SPSS version 21 and P value < 0.05 was considered as statistically significant.

Results: The overall prevalence of voiding dysfunction in this study was 68% and the defecatory dysfunction was 60%. The stage IV POP had significant
voiding dysfunction, $P = 0.050$. Women with anterior compartment prolapse had more voiding dysfunction with the odds ratio of 2.22 (95% CI=0.13-37.55) and the $P$ value 0.537 which was not significant. The stage of prolapse did not correlate with defecatory dysfunction (P value 0.790 was not significant). Women with posterior compartment defect had more defecatory dysfunction with the odds ratio of 2.49 (95% CI=0.773-7.993) however the $P$ value 0.145 was not significant. Stages of POP did not correlate with severity of LUTS and QOL. Pre-operative voiding dysfunction resolved post operatively in 93%, the $P$ value $<0.000$ which was highly significant. The POP-Q points Ap and Bp were significantly higher in women with defecatory dysfunction ($P = 0.02$ and $P = 0.04$).

**Conclusion:** The prevalence of voiding and defecatory dysfunction in postmenopausal women with POP was 68% and 60% respectively. Points Ap and Bp of POP-Q stage had positive correlation with defecatory dysfunction. Pre-operative voiding dysfunction significantly resolved after vaginal hysterectomy and pelvic floor repair ($P \leq 0.000$).

Keywords: pelvic organ prolapse, voiding dysfunction, defecatory dysfunction, postmenopausal, POP-Q stage, hysterectomy