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### Short report

## Patial Colpocleisis (LeFort) in elderly patients with severe pelvic organ prolapse

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#### ABSTRACT

**Objective:** To study the objective and subjective therapeutic effect of partial (LeFort) colpocleisis in treatment of severe pelvic organ prolapse (POP) in selected elderly patients. **Methods:** From Nov 2008 to April. 2011, 30 severe POP ( grade III Pelvic Organ Prolapse ) underwent partial colpocleisis. The mean age was (62+6) years (50-85 years). 1 out of 30 patients presented with medical disease. All 30 patients had prolapse of uterus. All the 30 patients underwent partial colpocleisis. Patients were followed up to evaluate therapeutic effect 2 months after the surgery. Objective evaluation included the length of vagina and perineal body. A Satisfaction Questionnaire was completed for subjective evaluation. **Results:** The mean operating time of 30 patients was 50+9 minutes (40–75 mins). The mean blood loss was 98 + 38 (50-250 ml). No intraoperative injury or death occurred. The rate of postoperative complications was 3% (1/30). Mean follow-up time of 30 patients was 2 months. 1 (3%, 1/30) patient had mild urinary incontinence after the operation. No recurrence was observed 2 months after operation. The mean preoperative total vaginal length (TVL) of (6.5+/-1.1) cm was decreased to (3.1+/-1.1) (P<0.01); and perineal body (PB) measurements was increased from (2.2+/-0.8) to (3.2+/-0.8) cm (P<0.01). 2 months after the operation, 27 (90%) patients completed the Satisfaction Questionnaire. 26 (95%) patients said either 'very satisfied' or 'satisfied' with the outcome of their surgery, while 1 (5 %) reported unsatisfied or not at all satisfied. **Conclusions:** The objective and subjective curative rates of colpocleisis in treatment of severe POP are high with lower morbidity and recurrence. Colpocleisis is a safe and effective management in selected elderly patients with severe POP, who no longer desire to maintain vaginal coital function.

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### 1. Introduction

Pelvic organ prolapse, including anterior and posterior vaginal prolapse, uterine prolapse, and enterocele, is a common group of clinical conditions affecting millions of women. Because the prevalence of pelvic organ prolapse increases with age, the changing demographics of the world's population will result in even more affected women. Prolapse encompasses a range of disorders, from asymptomatic altered vaginal anatomy to complete vaginal eversion associated with severe urinary, defecatory, and sexual dysfunction. The Pathophysiology of

prolapse is multifactorial and may operate under a "multiple-hit" process in which genetically susceptible women are exposed to life events that ultimately result in the development of clinically important prolapse. Although prolapse is associated with many symptoms, few are specific for prolapse; it is often challenging for the clinician to determine which symptoms are attributable to the prolapse itself and will therefore improve or resolve once the prolapse is treated. When treatment is warranted based on specific symptoms, prolapse management choices fall into 2 broad categories: nonsurgical, which includes pelvic floor muscle training and pessary use; and surgical, which can be reconstructive (eg, sacral colpopexy) or obliterative (eg, colpocleisis). Concomitant symptoms require additional management. Virtually all women with prolapse can be treated and their symptoms improved, even if not completely resolved [1]. Although the overall

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rate of prolapse surgery has dropped, this represents a substantial drop in the rate of surgery for women less than 50 years old and a moderate increase for women aged 50 years and greater [2]. The aim of this study was to study the objective and subjective effectiveness of partial colpocleisis.

## 2. Materials and Methods

This study was conducted in Sri Siddhartha Medical College and Hospital, tumkur. The study group consisted of newly diagnosed severe pelvic organ prolapse (Grade III). The diagnosis was made based on history and clinical examination. Patients with pelvic organ prolapse who had received any surgical treatment related to prolapse were excluded from the study. The study period of our study was Nov 2008 to april 2011. 30 severe Pelvic Organ Prolapse cases underwent partial colpocleisis. The age group of our study was 50 yrs to 85 yrs. Objective evaluation included measurement of vaginal length and perineal body before the surgery and 2 months after the surgery. The vaginal length and perineal body length of the subjects before the surgery were compared with the vaginal length and perineal body length 2 months after the surgery. The subjects were given a subjective questionnaire to do a subjective evaluation of the surgery.

### 2.1. Statistical analysis

Statistical comparison's were done student's t test. P value of < 0.005 was considered statistically significant. All statistical operations were done through SPSS for windows (Version 15 evaluation version, 2006), SPSS Inc. New York.

## 3. Results

The mean operating time of 30 patients was 49+9 minutes (30–75 mins). The mean blood loss was 99+38 ml (50-250 ml). No intraoperative injury or death occurred. The rate of postoperative complications was 3% (1/30). 1 (3%, 1/30) patient had mild urinary incontinence after the operation. No recurrence was observed 2 months after operation. The mean preoperative total vaginal length (TVL) of (6.5+/-1.1) cm was decreased to (3.1+/-1.1) (P<0.01) Table 1; and perineal body (PB) measurements was increased from (2.2+/-0.8) to (3.2+/-0.8) cm (P<0.01) Table 2. 2 months after the operation, 27 (90%) patients completed the Satisfaction Questionnaire. 26 (95%) patients said either 'very satisfied' or 'satisfied' with the outcome of their surgery, while 1 (5 %) reported unsatisfied or not at all satisfied.

**Table No-1**

Subjects	Mean $\pm$ SD (in cms)	P value
preoperative total vaginal length	6.5 $\pm$ 1.1	< 0.005
postoperative total vaginal length	3.3 $\pm$ 1.1	< 0.005

**Table No-2**

Subjects	Mean $\pm$ SD (in cms)	P value
Preoperative perineal body (PB) length	2.2 $\pm$ 0.8	< 0.005
Postoperative perineal body (PB) length	3.2 $\pm$ 0.8	

## 4. Discussion

There are various modalities of treatment for pelvic organ prolapse. These include non surgical management, adjunct therapy, pelvic floor muscle training, pessaries and surgical management [3-5]. Surgical management includes anterior vaginal repair, posterior vaginal repair, vaginal apical repair, abdominal apical repair and colpocleisis [6-8]. For older patients who do not desire vaginal function, colpocleisis may be an appropriate choice [9]. Many variations exist, from partial colpocleisis (where some portion of the vaginal epithelium is left, providing drainage tracts for cervical or other upper genital discharge) to total colpocleisis (where all the vaginal epithelium is removed from the hymen posteriorly to within 0.5–2.0 cm of the external urethral meatus anteriorly) [10]. In the present study, all the patients underwent partial colpocleisis. Partial colpocleisis has several advantages when compared to total colpocleisis. The operating time for partial colpocleisis is much lower when compared to total colpocleisis. The blood loss is much lower in partial colpocleisis when compared to total colpocleisis. The rate of postoperative complications are much lower in partial colpocleisis when compared to total colpocleisis. Objective evaluation of the subjects revealed statistically significant difference between preoperative total vaginal length and postoperative total vaginal length. Objective evaluation also revealed statistically significant difference between preoperative perineal body measurements. Subjective evaluation revealed majority of the subjects were satisfied following the surgery. So according to the findings of our study, partial colpocleisis is a good line of management for the treatment of pelvic organ prolapse.

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