



**A RANDOMISED CONTROLLED TRIAL COMPARING DURATION OF HOSPITAL STAY AMONG WOMEN WITH POST-OPERATIVE INDWELLING BLADDER CATHETER DRAINAGE VERSUS NO CATHETER FOLLOWING NON DESCENT VAGINAL HYSTERECTOMY**

**Dr. Shalini Sharma**

MS (OBG) Medical Officer, CH Dalhousie, Chamba, Himachal Pradesh, India

**Dr. Sonali Singh\***

MS (OBG) Medical Officer, CHC Mashobra, Shimla, Himachal Pradesh, India. \*Corresponding Author

**ABSTRACT**

The objective of this study is to assess the duration of hospital stay among women undergoing NDVH with or without indwelling bladder catheter.

Setting: Gynecology department of Dr. Rajendra Prasad Medical College & Hospital. Population: Women scheduled for non descent vaginal hysterectomy. We randomly assigned 60 women who underwent NDVH to two groups. The in-dwelling catheter was removed after 24 hours of operation. Data regarding duration of hospital stay was recorded.

Main outcome measures: We estimated duration of hospital stay among women undergoing NDVH.

**RESULTS:** In catheter and no catheter group, duration of hospital stay was <3 days in 90% (27/30) and 96.7% (29/30) women respectively. There was no statistically significant difference in both the groups with respect to duration of hospital stay, (p value = 0.612).

**CONCLUSION:** Post-operative foley's catheter does not add to additional benefit. This suggest that use of foley's catheter for 24 hours post-operatively appears unnecessary for anticipated patient comfort, monitoring urine output or surgeon convenience in uncomplicated NDVH.

**KEYWORDS :** foley's catheter, NDVH

**INTRODUCTION**

Hysterectomy is one of the most commonly performed surgeries in gynecology worldwide.<sup>1</sup> Nowadays a spectrum of approaches available for performing hysterectomy e.g. abdominal, vaginal, and laparoscopic or combination of these.<sup>2</sup> In recent times, there has been clear evidence in the favor of vaginal route over abdominal and laparoscopic route of hysterectomy. To prevent iatrogenic injury to the bladder, foley's catheter was placed in all women undergoing hysterectomy.<sup>3</sup> *However, there is limited support for the use of foley's catheters for the first 24 hours after routine hysterectomy.*<sup>4</sup> *Duration of post-operative foley's catheter generally based on custom rather than strong published evidence.* Although several trials addressed the issue of the duration of catheterization after surgery, there was not enough evidence to show that any policy was better than another.<sup>5</sup>

**MATERIAL AND METHODS**

This randomized controlled study was conducted in the Department of Obstetrics and Gynecology at Dr. Rajendra Prasad Government Medical College and Hospital, Kangra at Tanda, H.P.

After taking informed consent sixty women undergoing NDVH, were recruited in the study provided they fulfill following criteria:

**Inclusion Criteria**

- NDVH for benign gynecological indications

**Exclusion Criteria**

- POP ≥ stage I (Annexure III)
- Suspected/confirmed malignancy
- Diagnosis suspicious for endometriosis
- Large tubo-ovarian abscess
- Ovarian cysts
- Previous pelvic surgery by abdominal approach
- Pelvic inflammatory disease

**METHODOLOGY**

After careful assessment by senior consultant, all women planned for NDVH (as per standard indications) were enrolled for recruitment in the study after taking informed consent. A total of sixty women were randomized on the basis of

computer generated random numbers table to either of the two groups:

**Group 1-** A total of thirty women were randomized to this group and indwelling foley's catheter was inserted for 24 hours post-operatively.

**Group 2-** A total of thirty women were randomized to this group and no indwelling catheter was inserted post-operatively.

Type of anesthesia was left to the discretion of the anesthesiologist in consultation with the patient. After preparation of the lower abdomen, vagina and perineum with povidine-iodine solution, the perineum was draped with sterile towels. Labial sutures were applied. Urinary bladder (UB) was emptied by metallic catheter. Hydrodissection was done with normal saline mixed with adrenaline 1:2,00,000 dilution.

Circular incision was given on the cervix. Anterior and posterior vaginal walls were dissected. Uterovesical fold and pouch of douglas were opened, respectively. Bilateral uterosacral and transverse cervical ligaments were clamped, cut, ligated and transfixed. Bilateral uterine arteries were clamped, cut and ligated, uterus was bisected. Bilateral cornual structures were clamped, cut, ligated and transfixed. Uterus delivered. Internal and external McCall sutures were applied. Vagina was closed. No vaginal packing was used. Intra-operative findings were noted, including operating time and estimated blood loss.

**RESULTS**

In group 1 and group 2, duration of hospital stay was <3 days in 90% (27/30) and 96.7% (29/30) women respectively. There was no statistically significant difference in both the groups with respect to duration of hospital stay, (p value = 0.612).

**Table 1: Duration Of Hospital Stay**

	Group 1 (n=30)	Group 2 (n=30)	p value
• <3 days <sup>#</sup> (n)	27	29	0.612

<sup>#</sup>Data expressed as frequency

**DISCUSSION**

Hysterectomy is one of the most commonly performed

surgeries in gynecology worldwide.<sup>6</sup> Post-operative foley's catheter use after major uncomplicated gynecologic surgery has been the standard method of practice.<sup>7</sup> However, there is limited evidence available for support of foley's catheter use after surgery.<sup>8</sup> In this context, we planned this pilot study to evaluate the need for using post-operative foley's catheter after NDVH.

#### Duration Of Hospital Stay

Duration of hospital stay was not found to be statistically significantly different in both the study groups ( $p = 0.612$ ).

These observations are in contrast to those observed by Alessandri et al.<sup>9</sup> in which duration of hospital stay was significantly higher in foley's catheter group ( $p < 0.05$ ).

#### CONCLUSION

*Post-operative foley's catheter use in women undergoing NDVH offers no distinct advantage when compared with respect to duration of hospital stay.*

**Abbreviations:** NDVH: non descent vaginal hysterectomy

#### REFERENCES

1. Sharma C, Sharma M, Raina R, Soni A, Chander B, Verma S. Gynecological diseases in rural India: A critical appraisal of indications and route of surgery along with histopathology correlation of 922 women undergoing major gynecological surgery. *J Midlife Health*. 2014 Apr;5(2):55-61.
2. Jain SB, Chandrakar KD. Non-decent NDVH in Rural Setup of MP: A Poor Acceptance. *J Obstet Gynaecol India*. 2016 Oct; 66(Suppl 1):499-504.1.
3. Ghoreishi J. Indwelling urinary catheters in Cesarean delivery. *Int J Gynecol Obstet* 2003;83:267-70.
4. Dobbs SP, Jackson SR, Wilson AM, Maplethorpe RP, Hammond RH (1997) A prospective, randomized trial comparing continuous bladder drainage with catheterization at abdominal hysterectomy. *Br J Urol* 80(4):554-556.
5. Phipps S, Lim YN, Mc Clinton S, Barry C, Rane A, Dow JN. Short term urinary catheter policies following urogenital surgery in adults. *Cochrane Database Syst Rev* 2008; (3): CD004374.
6. Hooton TM, Bradley SF, Cardenas DD, Colgan R, Geerlings SE, Rice JC, et al. Diagnosis, prevention, and treatment of catheter-associated urinary tract infection in adults: 2009 International Clinical Practice Guidelines from the Infectious Diseases Society of America. *Clin Infect Dis* 2010;50(5):625-663.
7. Cormio L, Mancini V, Liuzzi G, Lucarelli G, Carrieri G. Cystocele repair by autologous rectus fascia graft: the pubovaginal cystocele sling. *J Urol* 2015;194:721-7.
8. Cormio L, Mancini V, Liuzzi G, Altilla N, Carrieri G. Surgical management of female pelvic organ prolapse with and without urinary incontinence: a single center experience. *Medicine* 2017;96:39.
9. Alessandri F, Mistrangelo E, Lijoi D, Ferrero S, Ragni N (2006) A prospective, randomized trial comparing immediate versus delayed catheter removal following hysterectomy. *Acta Obstet Gynecol Scand* 85(6):716-720.