



COMPARISON OF PERIOD OF AMBULATION AMONG WOMEN UNDERGOING NDVH WITH OR WITHOUT FOLEY'S CATHETER : A RANDOMISED CONTROLLED TRIAL

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 period of ambulation among women undergoing NDVH with or without foley's 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 period of ambulation was recorded.

Main outcome measures: We estimated period of ambulation among women undergoing NDVH.

Results: Thirteen women in catheter group had early ambulation (<6 hours of surgery), whereas all women in no catheter group had early ambulation. This difference was statistically significant, (p value = 0.001).

Conclusion: Post-operative foley's catheter might pose hindrance to early ambulation in women post NDVH. 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 : Period of ambulation, foley's catheter, NDVH

INTRODUCTION

Nowadays a spectrum of approaches are available for performing hysterectomy e.g. abdominal, vaginal, and laparoscopic or combination of these.¹ The traditional vaginal and abdominal hysterectomies represent the least and most invasive techniques, respectively.¹

Despite convincing evidence that NDVH is preferable when either vaginal or abdominal route is clinically appropriate, the only formal guideline available is the uterine size guideline by ACOG which suggest that the vaginal route is the most appropriate in women with mobile uteri no larger than 12 weeks gestational age (approximately 280 gm).²

Insertion of an indwelling urinary catheter is a routine preparatory step in hysterectomy as keeping the urinary bladder empty during the operation improves surgical field exposure and eases the different operative steps along with prevention of iatrogenic injury of the urinary bladder.³ Foley's catheter allows the operative team to assess the urinary output and to be assured that the urine appears clear. **However, there is limited support for the use of foley's catheters for the first 24 hours after routine hysterectomy.**⁴ *Duration of post-operative foley's catheter generally based on custom rather than strong published evidence.*^{5,6}

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 \geq 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
- Extensive vaginal discharge
- Local vaginal or cervical infection
- Positive pre-operative urine culture
- Known history of neurological disorder
- Patient with recurrent UTI

Sample Size

This being a pilot study, we took sample size of thirty women in each group.

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.

"**Early ambulation**" was defined as the time when the patient could stand up and walk supported by a nurse or attendant, after completion of surgery.

RESULTS

Thirteen women in Group 1 had early ambulation (<6 hours of surgery), whereas all women in group 2 had early ambulation. This difference was statistically significant, (p value = 0.001).

Table 1: Early ambulation

	Group 1 (n=30)	Group 2 (n=30)	p value
• <6 hours [#] (n)	13	30	0.001

[#]Data expressed as frequency

DISCUSSION

Hysterectomy is one of the most commonly performed surgeries in gynecology worldwide.⁷ Post-operative foley's

catheter use after major uncomplicated gynecologic surgery has been the standard method of practice.⁸ However, there is limited evidence available for support of foley's catheter use after surgery.⁹ In this context, we planned this pilot study to evaluate the need for using post-operative foley's catheter after NDVH.

Women without use of post-operative foley's catheter were ambulatory statistically significantly early as compared to those with post-operative foley's catheter ($p = 0.001$).

Alessandri et al.¹⁰ also had similar observations. Foley's catheter might interfere with early ambulation as a result of urethral site discomfort and pain in addition to patient anxiety and apprehension from the inserted catheter. Hence, post-operative foley's catheter might pose hindrance to early ambulation in women post NDVH.

CONCLUSION

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. Post-operative foley's catheter might interfere with early ambulation. ***We discourage the practice of routine post-operative foley's catheter after uncomplicated NDVH.***

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