

Vault prolapse after vaginal hysterectomy with pelvic floor repair for uterovaginal prolapse

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Abstract

Introduction: Utero-vaginal prolapse is the most common gynaecological pathology among the Nepalese women. Many women in Nepal are unable to get the treatment of this pathology due to their poor economical conditions (1,2). However since last few years many governmental and nongovernmental organizations are organizing hysterectomy camps in rural areas of Nepal to help these poor people.

Objective: To compare the incidence of vault prolapse among the women underwent vaginal hysterectomy with pelvic floor repair for different degree of utero-vaginal prolapse in hysterectomy camps.

Methods: It was Prospective comparative study, done on 1646 women in different nine districts of Nepal from June 1999 to May 2009. All the Patients subjected to the vaginal hysterectomy for different degree of utero-vaginal prolapse were grouped in to two groups selecting the patients alternatively.

In first group of the patients during anterior colporrhaphy bladder was supported by interrupted bladder buttressing stitches and in second group this repair was done by applying single purse string stitch including the apex of the vagina and incidence of vault prolapse was compared in two groups after two years of the surgery in follow up camps.

Results: Out of 1646 operated patients 891 came for follow up. Among these women 567 were from group A (interrupted suture group) and 325 patients were from the Group B (single purse string) group. From group A there were 22 cases and from group B 4 cases of vault prolapse. In both the groups majority of the women were chronic smoker. And majority of them started heavy work after one month of prolapse surgery in both the groups.

Conclusion: Single purse string suture seems better technique for the support of the bladder or as a whole vault during the anterior colporrhaphy while doing the pelvic floor repair in cases of utero-vaginal prolapse, especially in the camp set up.

Key words: vault prolapse, bladder buttressing, utero-vaginal prolapse, pelvic floor repair.

Introduction

Utero-vaginal prolapse is the most common gynaecological pathology among the Nepalese women. Many women in Nepal are unable to get the treatment of this pathology due to their poor economical conditions (1,2). However since

last few years many governmental and nongovernmental organizations are organizing hysterectomy camps in rural areas of Nepal to help these poor people. The author has been involved in these camps since last 10 years and had performed over 2700 vaginal hysterectomies with pelvic

floor repair in such camps in different 23 districts of Nepal. Vault prolapse is the most common delayed complication after surgery among these women. Post hysterectomy vaginal vault prolapse may develop after vaginal or abdominal hysterectomy, if the vaginal support mechanism is disrupted (3)

Once the woman under go hysterectomy for prolapse continues after surgery and maybe repeated.(4) The incidence of vault prolapse depends on many factors ,like degree of the prolapse operated ,associated other genital prolapse like urethrocele, cystocele, rectocele and enterocele, smoking habit, type of the work the women performs, time to return to work after surgery. According to Patrick Dallenbach it is about 0.5percentage. (5)

Though author had already done over 2700 hysterectomies in these prolapse surgery camps only 1648 women could be included as other women are not yet 2 years after operation and in some places the follow up was not possible due to different problems.

Methods

It was a prospective comparative study done in different nine districts of Nepal on women who attended the vaginal hysterectomy camp for utero vaginal prolapse.

Before surgery brief history of the patient taken, examined for systemic and local abnormalities. Patients with different degree utero-vaginal prolapse who were fit for surgery were included in the study after taking written consent. Alternate patients were kept in two groups: group A and Group B. Performa were filled.

All other procedure of surgery and was same in both the groups, only the difference was in one step of the surgery of the pelvic floor repair, that is while doing the bladder support stitches. In group A patients bladder was supported by traditional interrupted bladder buttressing stitches while in group B bladder support was done by the single purse string stitch, which included in pubo-cervical fascia and the apex of the vaginal vault. Patients were discharged on third post operative day and were advised to come for follow up any time in case of problem or after 7 days for routine follow up. On 7th day follow up they were instructed not to have heavy work for six months, who were smoker advised to quite smoking and come to the health post of district hospital for follow up in case of any problem. They were also told that they will be followed after two years.

After two years follow up was done in the center where the surgery was done by spreading the information to the patients through the radio, and community health workers working in the district.

Degree of utero-vaginal prolapse ,personal history like smoking, resumption of work after surgery, type of work they perform in two groups were correlated with the incidence of vault prolapse in these two groups.

Result

From the 1648 operated patients only 891 came for follow up after two years, and 757 did not came. This might either they did not get the information about the follow up camp or they did not have any problems after surgery or might be physically unable to come from the hilly area. The following table shows the total number of patients undergone vaginal hysterectomy with pelvic floor repair; number of patients came for follow-up after two years and how many of them had vault prolapse in two groups. Most of the patients missing in the follow-up were from group B. As during the hysterectomy camp patients were selected alternatively, there was equal number of patients in both the groups.

Table:1

Degree of uterine prolapse	I degree UVP	II degree UVP	III degree UVP	IV degree UVP	Total
Total No of operated patients	41	263	909	435	1648
Total No of patients came for follow-up	18	92	420	361	891
Patients of group A came for follow-up	7	28	233	299	567
No of patients with vault prolapse in group A	0	1	4	17	22
Patients of group B came for follow-up	11	64	187	62	324
No of patients with vault prolapse in group B	0	0	1	3	4

As shown in the table only 51.9 percent of the total operated patients came for follow-up and majority of them were from the group A. 22 (3.9 %) women out of 567 had vault prolapse in this grouping contrast in group B only 4 (1.2 %) out of 324 had vault prolapse, which is significantly higher in group A. Among the case of the vault prolapse cases in group 16 out of the 22 were chronic smoker and in group 3 out of the 4 patient were smoker. Majority of the women with vault prolapse were from those, who were operated for complete procidentia. According to the patients in group A patients 11 started to work as before within one month while other took adequate work and group B only one patient had adequate rest other three started to work as before within one month.

In second group none of the patients who were operated for first and second degree prolapse reported with vaginal vault prolapse i.e. 11patients were operated for first degree and 64 operated for second degree utero-vaginal prolapse while

from group A out of seven operated for first degree had no vault prolapse but out of 28 who operated for second degree one had vaginal vault prolapse.

Discussion

Many factors play role in the occurrence of the vault prolapse in post vaginal hysterectomy patients. The common among them are degree of utero-vaginal prolapse for which they were operated, definitely the chance of vault prolapse is more in cases of complete procidentia. In this study most of the patients who had vault prolapse were from those who were operated for complete procidentia. Secondly personal habit of the patients especially it is concerned with the smoking habit of the patients, again here the majority of the patient were chronic smoker among the patients with vault prolapse. Thirdly it is directly related with the type of the work they perform and when they resume it. All of the patients belonged to the low socio-economic group, with many children and majority of them started to work with load on their back before the fibrosis of the vault tissue completed. These all the things found as predisposing factors for vault prolapse among the Neplease women

. Many patients lost in follow up. However there is significant difference in the number of vault prolapse cases in two groups, though there was no significance difference in the number of patients operated for complete procidentia, number of the chronic smoker and all of the women were from low socio-economic group most of them started to work, with load on their back before one month of the operation. This significance difference must be due to the effectiveness of the difference in operation technique of bladder support as all other procedure was same in both the groups. Though Patrick Dallenbach considered preoperative prolapse, confidence interval and sexual activity as risk factor in our set up two more factors smoking habit and early return to work after surgery played significant role in occurrence of the vaginal vault prolapse after vaginal hysterectomy. Single purse string stitch for the bladder support, which whole vault during anterior colporrhaphy has some role in the prevention of the post hysterectomy vaginal vault prolapse. But as the vault prolapse may occur after many years further studies may require to strengthen this finding. (6)

However Fred T and Given Jr. recommended prophylactic culdoplasty as an essential part during vaginal hysterectomy (7, 8).

Conclusion

Single purse string stitch is better than the multiple interrupted stitches for the bladder support during anterior

colporrhaphy for prevention of vault prolapse in patients with utero-vaginal prolapse but other factors like smoking habit of the patient and lifestyle play an important role.

Acknowledgement: I am grateful to Sagarmatha health foundation, B P Koirala Health foundation, Vinayak Hospital, Dr Bhim Singh Tinkari, Dr Anand Shrestha, Dr Suman Karmacharya, Dr K P Singh, Dr Deepak Mahara, Dr Neupane Mr. Binaya Lama, and all other supportive staffs involved in this study. Similarly I am thankful to the patients who were enrolled in this study.

References

1. Geeta Gurung, Ashma Rana, Archana Amatya, Keshng D Bista, Anand B Joshi, Jamuna Sayami. Pelvic organ prolapse in rural Neplease women of reproductive age groups: What makes it so common? .N.J. Obstet. Gynaecol 2007 Nov-Dec;2(2):35-41.
2. P. R.Pant. Utero-vaginal prolapse in far western region of Nepal. Journal of Institute of Medicine. August, 2009; 31:2, 19-21.
3. Reda Afifi, Ayamant Sayed. Post vaginal hysterectomy vault prolapse. The Obstetrician and Gynaecologist, 2005; 7:89-97.
4. Repairing post hysterectomy vaginal vault prolapse: Little data available. Obstetrics and Gynaecology news. Nov 1, 2003.
5. Patrick Dallenbach, Sabella Kaelin- Gambirasio, Sandrin Jacob, Jean-Bernard Dubussion and Michel Boulvain. Incidence rate and risk factors for vaginal vault prolapse repair after hysterectomy. International Urogynaecology Journal Vol 19, Number 12, 2008, 1623-1629.
6. Bebb MJ, Aronson MP, Forguson LK Lee RA. Post hysterectomy vaginal vault prolapse: primary repair in 693 patients. Journal of Obstetrics and Gynaecology 1998, Vol 92:281-285.
7. Fred T, Given Jr. Is post hysterectomy vaginal vault prolapse preventable?. Journal of Gynecologic surgery, 1992; 8(4):201-209.
8. Lefranc JP, Atllah D; Camette S; Blondon J Journal of American College of surgeons. Vol 195. Number 3, September 2002:352-358.