MEDICAL CHANNEL

Original Article

COMPARISON BETWEEN CONVENTIONAL ABDOMINAL HYSTRECTOMY AND HYSTRECTOMY WITH AUTOLOGUS RECTUS SHEATH SLING TO PREVENT VAULT PROLAPSE

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ABSTRACT

Vaginal vault prolapse is a common complication following hysterectomy with negative impact on women's quality of life due to associated urinary, anorectal and sexual dysfunction. A clear understanding of the supporting mechanism for the uterus and vagina is important in making the right choice of corrective procedure. Management should be individualized, taking into consideration the surgeon's experience, patient's age, comorbidities, previous surgery and sexual life.

Objective: To compare the outcome between simple hysterectomy and hysterectomy with autologous rectus sheath sling in valurnalble patients for vault prolapse and any specific post-operative or long term complications after prophylactic sling.

Material & method: This prospective case control study was carried out atBahawal Victoria Hospital, Bahawalpur from June 2008 to Dec. 2010. Total 56 patients were included in this study. Age range of the patients were from 30-45 years.

Results: About 55% of women were from village and hard working. Due to poor nutritional status and multiple child birth assisted TBAS or even without any assistance some time, with minimum birth spacing all the uterine support were very weak and vagina was found lax with first or second degree perinial tear. pouch of douglas was found very deep preoperatively in all cases. So vault sling was done in those vulnerable cases with rectus sheath sleeve. Average post-operative hospital stay was 6 days. All patients compaliants of usual post operative pain for 3 to 4 days but 75% of the patient complained pain in both iliac region along with the usual post-operative pain upto 9th to 10th day and 10% complained slight dragging pain at the same point upto 6 weeks post operatively. Vaginal vault prolapse was found in one (3.6%) patient only during consecutive two and halfyear'sfollow-up period in Group A. The technique of vault sling was very simple & needs only few minutes to complete the procedure without extra financial cost.

Conclusion: The conclusion of my study is whenever abdominal hysterectomy a prophylactic sling of vaginal vault with rectus sheath should be done in vulnerable patientsas its outcome is more favorable as compare to conventional abdominal hysterectomy.

INTRODUCTION:

Vaginal vault prolapse has been defined by the International Continence Society as descent of the vaginal cuff below a point that is 2 cm less than the total vaginal length above the plane of the hymen. It occurs when the upper vagina bulges into or outside the vagina.[1]

Vaginal vault prolapse occurs in 11.6% of hysterectomies done for prolapse and 1.8% for other benigndiseases.[2]The incidence increases day by day since increasing number of hysterectomies and due to increased life expectancy, the number of cases presenting with post-hysterectomy vaginal vault prolapse is set to rise. Hysterectomy is the commonest

major gynaecological operation performed in various conditions.[3,4]After this surgery, the condition is distressing to the patient who may experience vaginal bulge, urinary and / or bowel symptoms, backache, and limitation of movement and sexual dysfunction. These problems reduce the quality of life for elderly patients and are restricting for younger and more active ones.[2] Pelvic organ prolapse and stress incontinence are common disorder and affecting at least 30% of adult women.[5] Women have a risk of 11% for at least one surgical correction of pelvic floor dysfunction and 30% procedure for recurrent prolapse.[6] One of the arguments for performing an abdominal procedure is that, it maintains normal length and caliber of the vagina.[7]Sometimes for various indications like fibroid uterus, pelvic inflammatory disease, , associated ovarian tumour, endometriosis demands abdominal hysterectomy but factors aggravating the vault prolapse may be present.[8] A less time consuming, cost effective autologous sling of the vault of the vagina during abdominal hysterectomy can prevent this complication in hysterectomized women vulnerable for vault prolapse.

OBJECTIVE:

- To compare the outcome (vaginal vault prolapse) between simple and vaginal vault sling hysterectomy.
- Any specific post-operative or long term complications after prophylactic sling.

MATERIAL AND METHOD

This prospective case control study was carried out in Bahawal Victoria Hospital, Bahawalpur from June 2008 to Dec. 2010.Total 56 patients were included in this study who were required total abdominal hysterectomy but with very weak uterine support or very deep pouch of douglas or have some degree of genital organ prolapse or have to perform heavy work. By random selection patients were divided into two equal groups Group A and Group B and each group consisted of 28 patients. In Group A Hysterectomies were done with vaginal vault sling and in Group B hysterectomies were done without vaginal vault sling, results was compared between these two groups and p-value ?0.05 was considered as significant. Outcome were recorded in the form of post-operative pain, hospital stay, post-operative dysparuenia, incisional hernia, micturation difficulties and subsequent vault prolapse.

ABDOMINAL HYSTERECTOMY WITH VAGINAL VAULT SLING

For abdominal hysterectomy, abdomen was opened by pffennenstiel incision 2 cm above the symphysis pubis. After doing total abdominal hysterectomy with or without bilateral salpingo-oophorectomy and vault closure a 2cm sleeve was prepared by rectus sheath. The sheath was divided at the middle. Passing each sleeve through the deep inguinal ring the medial end of each sleeve was taken into the abdominal cavity and enchored at the angles of the vaginal vault.

The divided sleeves were sutured by interrupted stitchs with proline no 1. During suturing of the rectus sheath, the area from where rectus sleeves were taken, was sutured meticulously to avoid any weak point leaving behind. Skin closure done at the end.

RESULTS

Total 56 hysterectomies were done, 28 with vaginal vault sling and 28 without vaginal vault sling. Mean hospital says was 7 days.About 55% of women were from village and hard working. About 75% of the patient complained pain in both iliac region along with the usual post-operative pain upto 10th day and 10% complained slight dragging pain at the same point upto 6 weeks post operatively. As shown in table No. 1, vaginal vault prolapse was found in 1 (3.6%) patient and none of the patients developed incisional hernia, stress incontinence or any difficulties during micturition in Group A and in Group B, vaginal vault prolapse was found in 10 (35.7%) patientsduring the two and half yearsof follow-up period, about 8 (28.6%) patient developed stress incontinence, Statistical analysis was done by Chi- square test and result was significant e.g P value was <.005.

Table No.2 shows the variety of indications for which hysterectomies were performed.

The risk factors were present in almost all cases as all females were from middle to elder age. They had poor nutritional status, history of multiple child birth without birth spacing (family planning). Clinically the pouch of Douglas was deep in these patients with lax vagina and some degree of perineal tear. Post-operative pain in iliac region at the bases of rectal sheath was observed in 68%. This pain with variably intensity exist in 10% upto 6 weeks post operatively. After six weeks follow-up complains of dyspareunia was not observed in Group A, but 6 (20%) in patients of Group B. Incisional hernia not developed in any patient.

TABLE NO. 1
COMPARISON OF VAGINAL VAULT PROLAPSE IN BOTH GROUPS

Group	Prolapse		Total	P.Value
	Yes (%)	No (%)		
Group A	1 (3.6)	27 (96.4%)	28	0.005*
Group B	10 (35.7)	18 (64.3)	28	

*Significant

TABLE NO.2
INDICATIONS OF TOTAL ABDOMINAL HYSTERECTOMY

Indications for abdominal hysterectomy	Number (%)
Fibroid uterus	23 (41.07)
DUB with first degree uterine descend with bilateral tubal ligation	10 (17.86)
Chronic cervicitis with mild cystocele & mild recto &enterocele	10 (17.86)
Adenomyosis with mild enterocele with deficient perineum	3 (5.35)
Adenomyosis with elongated vervix	4 (7.14)
Fibroid with mild cystocele with mild rectocele with lax vagina	6 (10.71)
Total	56

DISCUSSION:

Abdominal hysterectomy is well known procedure. It is done in

cure of many gynecologicalproblems.[9] Like other procedures, its usefulness can only be judged by its morbidity and mortality in long run. Conventionally abdominal hysterectomy with sacral colpopexy for vaginal apex fixation is done. But it is seen to have great morbidities over the long time.[10] Vaginal vault prolapse is one of the major morbidity in these patients like in our study where almost 20% got it. The same result were observed in other two studies.[11-12] Vaginal vault prolapse is negligible in patients who had done abdominal hysterectomy with vaginal vault sling. The other complications like stress incontinence and other problems of micturition were not reported in vaginal vault sling procedure abdominal hysterectomy.The anatomical and functional disharmony regarding the external genitalia (vagina) is also not observed in these patients, as no one reported for dyspareunia as compared to other group where 20% reported dyspareunia.

As abdominal hysterectomy with vaginal vault sling is not a common procedure adopted. But its usefulness is evident in this study. It is necessary to conduct various studies at multiple centers, so that a unanimous decision regarding it should be adopted. There are studies on uterine sling but no study for preventing the vault prolapse after hysterectomy by using prophylactic sling of vaginal vault with rectus sheath.Vault prolapse repair is based on use of native tissues orsyntheticmaterials. There is no consensus on the mechanismand management of vault prolapse, but what is acceptedby all is the need to properly assess these patients, involvethem in the management and to agree on the type of surgerythat will be suitable for their own peculiar circumstance.

CONCLUSION:

The conclusion of my study is whenever abdominal hysterectomy a prophylactic sling of vaginal vault with rectus sheath should be done as its outcome is more favorable as compare to conventional abdominal hysterectomy.

REFERENCES:

1. Uzoma Z, Farag KA. Vaginal Vault Prolapse. ObstetGynecol Int2009;2009:275621.
2. Yasmin S, Saeed S, Fatima N. Abdominal techniques for surgical Management of vaginal vault Prolapse. JSP.2010;15(1):15-19.
3. Marinkovic SP, Stanton SL. Triple compartment prolapse; Sacrocolpopexy with anterior and posterior mesh extensions. Br J ObstetGynaecol 2003;110:323-26.
4. Dunton JD, Mikuta J. Post hysterectomy vaginal vault prolapse. Postgrad ObstetGynecol 1988;8:1-6.
5. Nygaard BM, Barber MD, Burgio KL, et al. Prevalence of symptomatic pelvic floor disorders in US women. JAMA.2008 Sep;300(11):1311–6.
6. Brubaker L, Bump R, Fynes M, et al. Surgery for pelvic organ prolapse. In: Abrams P, Cardozo L, Koury S, Wein A, eds. Incontinence. Paris: Health Publication Ltd; 2005:1371–1402.
7. Roovers JP, van der Vaart CH, van der Bom JG ,van Leeuwen JH Scolten PC, Heinz AP. A randomized controlled trial comparing abdominal and vaginal prolapse surgery :Effects on urogenital function . Br J ObstetGynaecol 2004;111(1):50-56.
8. Dutta DC. Text Book of Gynaecology ; Fourth Edition ;Edited by HiralalKonar; New central book agency; Calcutta, 2005.
9. Gonzalez-Quintero VH, Cruz-Pachano FE. Preventing adhesions in obstetric and gynecologic surgical procedures. Rev ObstetGynecol 2009;2:38-45.
10. Gilleran JP, Johnson M, Hundley A. Robotic-assisted laparoscopic mesh sacrocolpopexy. Therapeutic Advances in Urology.2010;2(5):195-208.
11. Gilleran JP, Zinumevan P: Abdominal mesh sacrocolpopexy for recurrent triple compartment pelvic organ prolapse. Br J UrolInt 2009;20
12. Yasmin S, Saeed S, Fatima N. Abdominal techniques for surgical Management of vaginal vault Prolapse. JSP.2010;15(1):15-19.