



Sacrospinous colpopexy for vault suspension during vaginal hysterectomy with repair for genital prolapse

Dalal Malti, Verma Ragini N, Shah Tejal S, Garg Heena C

Department of Obstetrics and Gynecology, Government Medical College and New Civil Hospital, Surat.

OBJECTIVE(S) : To study the effectiveness of sacrospinous fixation for vault suspension.

METHOD(S) : Thirty-five women with genital prolapse were subjected to sacrospinous colpopexy during vaginal hysterectomy and repair.

RESULTS : The intraoperative complication encountered was rectal injury in one case (2.8%). The postoperative complications were fever in five cases (14.2%), urinary tract infection in four (11.4%), and urinary retention in one (2.8%). Complications were dysparunia in three cases (8.5%) noted at 3 months follow-up and recurrence of prolapse in one (2.8%) case noted at the time of discharge. This patient had developed ischioanal abscess which was drained on 10th postoperative day.

CONCLUSION(S) : Sacrospinous colpopexy is a safe, efficacious, and simple procedure which is indicated in severe degrees of prolapse with significant loss of vaginal supports.

Key words : sacrospinous colpopexy, vault prolapse

Introduction

Genital prolapse is a common problem encountered in gynecological practice. It is much complex in India probably due to catastrophes of childbirth, manual labor in early puerperium, nutritional deficiencies, and successive pregnancies without adequate spacing.

Vault prolapse after hysterectomy has a reported incidence of 0.2 to 43% depending on the patient's condition and surgical skill of the operator. This condition is highly distressing and for those affected it nullifies the purpose of performing hysterectomy.

Many operations have been described to prevent vault prolapse. Two methods which have stood the test of time are transvaginal sacrospinous colpopexy and transabdominal

sacrocolpopexy¹. The vaginal route is preferred over the abdominal route.

The study was undertaken to evaluate the effectiveness of sacrospinous fixation in vault suspension and postoperative complications associated with the procedure.

Methods

The study was carried out from August 1999 to March 2004 and involved 35 women with genital prolapse.

After vaginal hysterectomy, high ligation of enterocele sac was done. During colpoperineorrhaphy, rectovaginal space was reached after separating the vagina from rectum. Right rectal pillar was perforated with a finger, and right coccygeus muscle and right sacrospinous ligament were identified using ischial spine as landmark. Two sacrospinous colpopexy stitches 1-1.5 cm apart were taken approximately 2.5-3 cm medial to ischial spine with polypropylene No.1 on round body needle from below upwards (Figure 1). These were taken in the form of a

Paper received on 18/07/2005 ; accepted on 13/03/2006

Correspondence :

Ragini Varma

E-9, Asso. Prof. Quarters, New Civil Hospital,
Majura Gate, Surat - 395 001.

Tel. 0261 242734 Email : ragini@flashmail.com

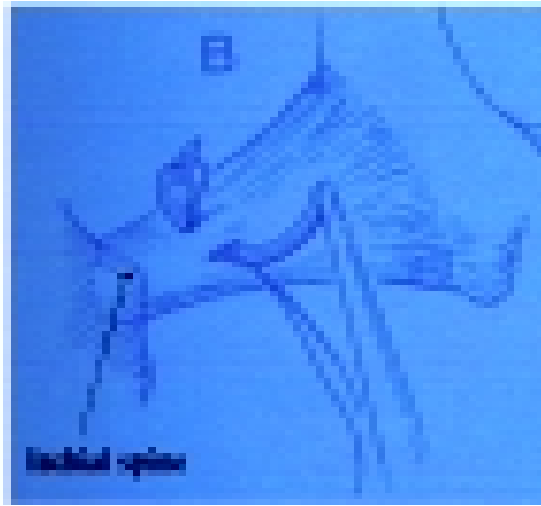


Figure 1. The site of bite in sacrospinous ligament 3-4 cm medial to the ischial spine.

pulley and fixed to vaginal apex ^{2,3}. At the end of surgery, adequate vault suspension was ensured and vagina was packed for 24 hours. On the 6th postoperative day patients were evaluated and discharged. They were followed up after 2 weeks, 1 month, 3 months and 6 months.

Results and Discussion

The mean age of the patients was 52.5 years. Thirty-two women were postmenopausal. Third degree descent was seen in 33 and posthysterectomy vault prolapse was present in two. Associated cystoectocele was seen in 26 patients and cystoectoenterocele in nine.

Table 1 shows the associated procedures performed with sacrospinous colpexy in our study and in two other studies ^{4,5}. Intraoperative complications are shown in Table 2. One of our patient had rectal injury which was repaired and she had no other complication in the immediate or late postoperative period. One of Nichols’s ⁴ patient had rectal injury. There was no other significant intraoperative problem. This shows that sacrospinous colpoexy is a safe procedure if carried out with proper surgical skill.

Table 1. Associated procedures performed with sacrospinous colpexy.

Procedure	Present study (n=35)	Nichols ⁴ (n =59)	Cruikshank ⁵ (n=48)
Anterior colporrhaphy	00	00	07 (14.6%)
Posterior colporrhaphy	00	04 (7%)	07 (14.6%)
Anterior + posterior colporrhaphy	35 (100%)	54 (92.5%)	18 (37.5%)
Repair of vault prolapse	00	01 (0.5%)	16 (33.3%)

Table 2 compares our postoperative complications with those of Cruikshank. In our study fever was the most common complication which could have been a result of operative stress, intravenous fluids, wound infection, and urinary tract infection (UTI). UTI seen in four women responded well to proper antibiotics given after culture and sensitivity tests. Retention of urine in one case was treated by drainage of bladder for 7 days with antibiotic cover after which the patient did not have repeat retention. Infection seen in one case was due to ischiorectal abscess from an unrecognized ischiorectal hematoma. It was drained on 10th postoperative day. This was our first case taken up for sacrospinous fixation.

Table 2. Comparison of postoperative complications.

Complication	Present study (n=35)	Cruikshank ⁸ (n=48)
Fever	05 (14.2%)	04 (8%)
Urinary tract infection	04 (11.4%)	03 (6%)
Retention of urine	01 (2.8%)	-
Wound infection	01 (2.8%)	-
Stress urinary incontinence	-	02 (45%)

Hospital stay was 5-10 days in 30 cases, 10-15 days in four cases and more than 15 days in one case. The mean stay was 8.7 days which is longer than that reported by others ⁶⁻⁸. Longer mean stay was due to retention of urine and prolonged stay required by the patient who developed ischiorectal abscess and also because of the poor socioeconomic status of these patients which did not permit repeated visits to the hospital necessitated by early discharge.

Table 3 shows the comparison of follow-up complications ⁵⁻⁸. Three of our cases had dyspareunia at 3 months follow-up which got resolved by the 6th month. Repeat prolapse was seen in one case. This patient who had ischiorectal abscess had prolapse on discharge probably due to disintegration of the colpoexy stitches.

Table 3. Comparison of follow up complications.

Complication	Study	Number
Dyspareunia	Present study (n=35)	03 (8.5%)
Vault prolapse	Cruikshank ⁵ (n=48)	1 (2%)
	De Lancey and Morley ⁶ (n=75)	3 (4%)
	Present study (n=35)	1 (2.8%)

Conclusion

Sacrospinous colpopexy is a safe, efficacious yet simple procedure which is indicated in severe degree of prolapse with significant loss of vaginal supports. The vaginal route confers an advantage by posing less anesthetic risk and allowing simultaneous repair of other defects. If performed meticulously complications are minimal. Operative time, blood loss and hospital stay are minimally increased.

References

1. Barrington JW, Calvert JP. Vaginal vault suspension for prolapse after hysterectomy using an autologous fascial sling of rectus sheath. *Br J Obstet Gynecol* 1998;105:83-6.
2. Raz S. *Atlas of transvaginal surgery*. Philadelphia. WB Saunders Company. 1992;130-5.
3. Rock JA, Thompson JD (eds). *Te Linde's Operative Gynecology*. 8th edn. Philadelphia. Lippincott-Raven.1997:1017-26.
4. Nichols DH. Sacrospinous fixation for massive eversion of the vagina. *Am J Obstet Gynecol* 1982;142:901-4.
5. Cruikshank SH, Cox DW. Sacrospinous ligament fixation at the time of transvaginal hysterectomy. *Am J Obstet Gynecol* 1990;162:1611-9.
6. De Lancey JOL, Morley GW. Sacrospinous ligament fixation for eversion of vagina. *Am J Obstet Gynecol* 1991;164:1072-6.
7. Cruikshank SH. Sacrospinous fixation – should this be performed at the time of vaginal hysterectomy? *Am J Obstet Gynecol* 1988;158:872-81.
8. De Lancey JOL. Anatomic aspects of vaginal eversion after hysterectomy. *Am J Obstet Gynecol* 1992;166:1717-28.