



Long-term Outcome and Satisfaction to Surgery after Vaginal Hysterectomy

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Authors' contributions

Authors RN and KV designed this study. Authors SL, RN and TMA examined the patients. All authors wrote the manuscript and have read and approved the final manuscript.

Original Research Article

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ABSTRACT

Purpose: Pelvic organ prolapse (POP) is a common condition that can severely impact the quality of a woman's life. POP will generally get worse in time and is likely to become more common, as the population ages in the coming years. Epidemiologic studies point to vaginal childbirth delivery as the strongest risk factor, although the etiology is multifactorial. The annual incidence of posthysterectomy vaginal prolapse that requires surgery has been estimated to be 36 per 10 000 persons globally.

Methodology: This study was a retrospective analysis in which we evaluated long-term anatomical results and quality of life after vaginal hysterectomy. 43 patients out of 98 who underwent vaginal hysterectomy between the years 1990 and 1996 in the Länsi-Pohja Central Hospital in Finland were examined and interviewed for the study.

Results: 33% of examined patients presented cystocele or rectocele at the time of study (on average 17.6 years post operation). Seven of them had already been operated. No vaginal vault prolapse was observed. As for quality of life 72 % of patients reported lower urinary tract symptoms, namely urgency, but only 9% felt sensation of prolapse, while 53 % of sexually active patients complained dyspareunia.

Conclusion: In this article we present unique long-term follow-up after vaginal hysterectomy. This is a first article presenting over 15 year follow-up after vaginal hysterectomy.

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1. INTRODUCTION

Pelvic organ prolapse (POP) is an increasingly common condition. The exact prevalence of prolapse is unknown, but it has been estimated that the lifetime risk for a woman undergoing surgery for prolapse or incontinence in the United States is 11%. One third of these procedures are operations for recurrent prolapse [1]. Pelvic organ prolapse is more common in elderly and multiparous women and parity is considered one of the main risk factors [2,3]. However, some women develop uterine prolapse without presenting risk factors, whereas others, in spite of having had difficult deliveries, do not. Postulated risk factors for pelvic organ prolapse include vaginal childbirth, aging, asthma, menopause, genetic factors, race, overweight and smoking. Most patients have multiple contributing factors. Various investigators have already demonstrated decreased collagen content and altered morphologic features in the pelvic support tissue in women with pelvic organ prolapse and stress urinary incontinence [4-8].

The primary intention of pelvic organ prolapse surgery is to alleviate symptoms and follow-up studies have generally been limited to less than 5 years. In recent years there has been increasing concern with the problem of recurrent pelvic support defects following vaginal pelvic surgery. In this study we examined the recurrence of genital prolapse 16-22 years after surgery. This is the first article presenting over 15 year follow-up after vaginal hysterectomy.

2. MATERIAL AND METHODS

The study population consisted of voluntary postmenopausal women. 98 patients have undergone vaginal hysterectomy in Länsi-Pohja Central Hospital, Finland during the years 1990-1996. All 98 patients were contacted while 43 of them agreed to this study. Six women had undergone only vaginal hysterectomy, whereas 37 women had also had both their anterior and posterior vaginal walls corrected. Anterior colporrhaphy was made without graft. 5 patients suffered from stress urinary incontinence, which had been simultaneously corrected by Kelly sutures under the urethra. All patients were Caucasian origin.

The protocol was approved by the local institutional Ethical Committee and all subjects gave informed consent before participation. Each woman completed a detailed questionnaire regarding her medical and gynaecological history, including parity, BMI, smoking, oestrogen replacement therapy and past surgical procedures. Each woman was evaluated for genital prolapse by one of two gynaecologists and prolapse was scored according to the International Continence Society Pelvic Organ Prolapse (POP-Q) classification [9-11]. All operated patients had at least stage II prolapse. Stress incontinence was also evaluated on examination.

3. RESULTS AND DISCUSSION

The present study was designed to study long-term outcome in a homogenous patient population from one department. 16% of the patients had used hormone therapy systemically (oestrogen or oestrogen together with progesterone), all the patients had used local estrogen treatment after surgery. The mean age at the time of first operation was 56.2, parity 5.9 and BMI at the time of study 26.8, as shown in Table 1. At the study point the

mean age of the women was 70 years varying between 57-83 years while at the time of operation it was 56 years varying between 42-67 years. All patients were non-smokers.

Table 1. Characteristics of the patients, age and parity are give in mean

Demographic	
Age (at the study point)	69.9 (range 57-83)
Age (at the time of operation)	56.2 (range 42-67)
Parity	5.9 (range 0-12)
BMI (at the moment)	26.8 (range 19.5-38)
Tobacco use	None
Systemic HRT	None, past 28 (65%)
Recurrent prolapse	(7 operated), total 14 (33%)
Stress urinary incontinence	(9 operated), total 16 (37%)
Widowed	18
Dry	10
Mixed incontinence	25
No lower urinary tract symptoms	12
Sensation of prolapse	4
Defecation disorders	6
Sexual dysfunction	8

The most common complaint was urgency. 58% complained about it, but only 32% of them were using anticholinergic agents. 14% of patients complained about defecation disorders, but fecal incontinence was not complained. 53% of the sexually active patients (8 out of 15) complained about dyspareunia and 67% about dryness. None of the patients had asthma or suffered from osteoporosis. Before first operation 5 out of 43 patients had stress urinary incontinence. At the study point 31 out of 43 patients had lower urinary tract symptoms, but only 6 patients were bothered by their condition. At the study point, most of the patients were elderly and apparently adjusted to their symptoms. After the first surgery, 4 patients were already operated because of stress urinary incontinence.

17 patients have already been reoperated earlier. All reoperated patients had a positive family history for urogenital prolapse for a first degree relative. The mean time for reoperation was 4.2 years after the first surgery. There were no apical defects.

In our study, we found 7 recurrent prolapse (2 st. III rectocele, 2 st. III cystocele, 1 st II rectocele and st II cystocele, 2 st. III rectocele and st. II cystocele), but only 4 of them were bothered by their prolapse. No apical defects were found. A positive family history of genital prolapse from at least one first-degree relative, was recorded for 57% women with genital prolapse.

Pelvic organ prolapse (POP) contributes significantly to a decrease in the quality of life for women. Affected women complain of urinary incontinence, voiding difficulty, defecation dysfunction and sexual discomfort. The underlying risk factors are poorly understood but include in parturition, menopause, aging, repetitive straining and connective tissue disorders. In general, any factor that leads to chronic increases in abdominal pressure should be avoided.

In Women's Health Initiative's (WHI) Hormone replacement therapy Clinical Trial approximately 40 % had some form prolapse [12]. This reflects that prolapses are often

asymptomatic, the incidence increasing with age. Most hysterectomies are done in the age group of 65-69 [13-18]. In this study the lower urinary tract symptoms were most common on follow-up. Only 12 out of 43 patients had no lower urinary tract symptoms. The most bothersome symptoms were symptoms of descent.

8 out of 15 sexually active patients had dyspareunia, but it is well known that the frequency and experience of sexual intercourse varies over a lifetime and generally decreases with advancing age, making any direct connection between the effect of surgery and sexual dysfunction difficult.

4. CONCLUSION

Our study comprises a homogenous group of procedures but it is limited by the relatively small number of patients available. We present a unique finding with a long-term follow up for up to 20 years allowing drawing conclusions on the rate of recurrence over time. In our patient population, we found very high patient satisfaction and good functional outcome. In the future we will focus how to prevent genital prolapse in a high risk patients.

CONSENT

All authors declare that written informed consent was obtained from the patient for publication this article. All experiments have been examined and approved by the appropriate ethics committee.

ETHICAL APPROVAL

All authors hereby declare that all experiments have been examined and approved by the appropriate ethics committee and have therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki.

COMPETING INTERESTS

Authors have declared that no competing interests exist

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