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Symptomatology in cases of vaginal cuff prolapse

Vajinal kaf prolapsusu vakalarında semptomatoloji

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ÖZ

Amaç: Vajinal kaf prolapsusu olan vakaların başvuru zamanındaki semptom ve şikayetlerini tanımlamak

Gereçler ve Yöntem: Vajinal kaf prolapsusu tanısı ile başvuran 34 hastayı içeren retrospektif bir çalışmadır. Evre <3 vajinal kaf prolapsusu olan hastalar erken kaf prolapsusu olarak kabul edilirken, evre ≥3 vajinal kaf prolapsusu olan hastalar ileri kaf prolapsusu olarak kabul edildi. Hastaların başvuru anındaki ilk klinik semptomları ve şikayetleri kaydedildi.

Bulgular: Vajinal kaf prolapsusu olan hastalarda en sık görülen semptom vajinada basınç hissi idi. Fekal inkontinans en az bildirilen semptomdu. Prolapsus semptomu ileri kaf prolapsusu grubunda erken kaf prolapsusu grubuna göre daha yüksekti (p<0,001). Koitusta ve idrar yapmada zorluk, ileri kaf prolapsusu grubunda erken kaf prolapsusu grubuna göre daha yaygın olarak bulundu.

Sonuç: İleri kaf prolapsusu grubunda koitusta zorluk ve idrara çıkma zorluğu semptomunun erken kaf prolapsusu grubuna göre daha sık olduğu bulundu. Kaf prolapsusuna bazen üriner ve gastrointestinal şikayetlerin yanı sıra cinsel işlev bozukluğu ve ağrı şikayetleri de eşlik eder. Bu nedenle tüm hastalar bir bütün olarak değerlendirilmelidir.

Anahtar kelimeler: kaf prolapsusu, semptomatoloji, histerektomi

ABSTRACT

Aim: To define the admission symptoms and complaints of cases with vaginal cuff prolapse

Materials and Methods: A retrospective study including 34 patients with the diagnosis of vaginal cuff prolapse. While patients who had grade < 3 vaginal cuff prolapse were accepted as early cuff prolapse, patients with grade ≥ 3 vaginal cuff prolapse were accepted as advanced cuff prolapse. Patients' initial clinical symptoms and complaints at the time of admission were recorded.

Results: The most common symptom in patients with vaginal cuff prolapse was pressure sensation in the vagina. Fecal incontinence was the least reported symptom. The prolapse symptom were higher in the advanced cuff prolapse group than in the early cuff prolapse group (p<0,001). Difficulty in coitus and difficulty in urinating were more common in the advanced cuff prolapse group than in the early group.

Conclusion: Difficulty in coitus and difficulty in urinating symptom were found to be more common in the advanced cuff prolapse group than in the early cuff prolapse group. Cuff prolapse is sometimes accompanied by urinary and gastrointestinal symptoms as well as sexual dysfunction and complaints of pain. Therefore, all the patients should be evaluated as a whole.

Keywords: cuff prolapse, symptomatology, hysterectomy

INTRODUCTION

Vaginal cuff prolapse is a common disorder generally seen after hysterectomy as the protrusion of the vagina through the genital hiatus (1). The upper part of the vagina is the organ that prolapses.

Hysterectomy is the most common gynecological surgery with an incidence of postoperative cuff prolapse varying from 2 to 43% (2, 3). The predisposing factors for vaginal cuff prolapse are the same as for pelvic organ prolapse (POP) including age, parity, obesity and previous hysterectomy,chronic constipation, genetic predisposition leading to reduced connective tissue and muscle strength (4-6). To prevent prolapse, suspension of the vaginal apex to the uterosacral ligaments or to the sacrospinous ligaments at the time of hysterectomy can be performed (7).

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Although the majority of cases especially in the initial stages are asymptomatic, it is sometimes accompanied by urinary and gastrointestinal symptoms as well as sexual dysfunction and complaints of pain (8) . Vaginal cuff prolapse and the symptomatology is not well studied. In a study conducted by Baykuş et al., the symptoms and complaints of the cases who have undergone vaginal hysterectomy due to pelvic organ prolapse at the time of admission were determined. It has been shown that these cases may present with primarily anatomical problems, urinary, sexual, defecation-related problems and pain complaints (8).

In this current study, we aimed to define the admission symptoms and complaints of cases with vaginal cuff prolapse.

MATERIALS AND METHODS

After receiving approval (24.06.2021, number:23) from the institutional review board, the medical records of consecutive patients diagnosed with vaginal cuff prolapse at University of Health Science Turkey Dr Zekai Tahir Burak Women's Health Training Research Hospital over 3 years were retrospectively reviewed. The study was performed in accordance with the 1964 Helsinki declaration.

Patients' initial clinical symptoms and complaints at the time of admission were recorded. The most important application complaints were examined. Also, patients' demographic characteristics, obstetric and gynecological history, and laboratory findings were recorded as study parameters.

Standardized classification systems was used for the assessment and documentation of pelvic organ prolapse, including vaginal cuff prolapse (9).

While patients who had grade < 3 vaginal cuff prolapse were accepted as early cuff prolapse, patients with grade ≥ 3 vaginal cuff prolapse were accepted as advanced cuff prolapse. Patients who did not have sufficient records were excluded.

Data were analyzed via SPSS version 17.0 (SPSS Inc., Chicago, IL, USA). Kolmogorov- Smirnov analysis was used to evaluate the normal distribution of continuous variables. Continuous variables were compared via the independent simple t test. The comparison of categorical variables was tested via $\chi 2$ test and Fisher exact test. Nominal data with normal distribution is shown as mean ± standard deviation in the tables. Categorical data are shown in numbers (n) and percentages (%). A p value of less than 0.05 was taken to be significant.

RESULTS

For this study, 34 patients admitted to the hospital with the diagnosis of vaginal cuff prolapse were determined and formed the study group.

Demographic and laboratory data of patients with vaginal cuff prolapse are shown in Table 1.

Table 1. Demographic and laboratory data of patients with vaginal cuff prolapse

	Vaginal cuff prolapse cases (n=34)
Age, years	51.53±9.91
Age at the time of hysterectomy, years	47.32±7.51
Gravida	4 (1-8)
Parity	3 (1-6)
BMI	28.94 ± 4.92
WBC count, $\times 10^3/\mu l$	10.02±3.30
CRP, mg/dl	15.07±13.12
Menopausal Status	22 (61.7)
Grade 1	5 (14.7)
Grade 2	10 (29.4)
Grade 3	6 (17.6)
Grade 4	13 (38.2)

Values were presented as mean±standard deviation, median (min-max)and number (%).

BMI: Body Mass Index, WBC: White Blood Count, CRP: C-reactive protein

Symptoms of patients with vaginal cuff prolapse are shown in Table 2. The most common symptom in patients with vaginal cuff prolapse was pressure sensation in the vagina. The second most common symptom was prolapse. In addition, fecal incontinence was the least reported symptom (Table 2).

Table 2. Symptoms of patients with vaginal cuff prolapse

*Symptom	Vaginal cuff prolapse cases (n=34)
Prolapse	21 (61.8)
Pressure sensation in the vagina	24 (70.6)
A mass near the opening of the vagina	7 (20.6)
Fecal incontinence	3 (8.8)
Urinary incontinence	5 (14.7)
Pelvic pain	10 (29.4)
Difficulty with coitus	18 (52.9)
Dyspareunia	9 (26.5)
Difficulty in defecating	8 (23.5)
Difficulty in urinating	13 (38.2)
Frequent urinating	7 (20.6)

Values were presented as number (%)

*Some patients reported more than one complaint

The prolapse symptom were higher in the advanced cuff prolapse group than in the early cuff prolapse group (p<0,001). There were no significant differences between the groups in terms of pressure sensation in the vagina, a mass near the opening of the vagina, fecal and urinary incontinence, pelvic pain, dyspareunia, difficulty in defecating and frequent urinating (All p> 0,05).

Difficulty in coitus were more common in the advanced cuff prolapse group than in the early cuff prolapse group. Furthermore, difficulty in urinating symptom were significantly more in the advanced cuff prolapse group (p=0,008) (Table 3).

Table 3. Symptoms of patients with early and advanced vaginal cuff prolapse

*Symptom	Early vaginal cuff prolapse cases (n=15)	Advanced vaginal cuff prolapse cases (n=19)	p
Prolapse	4 (26.7)	17 (89.5)	<0.001
Pressure sensation in the vagina	9 (60.0)	15 (78.9)	0.229
A mass near the opening of the vagina	2 (13.3)	5 (26.3)	0.353
Fecal incontinence	2 (13.3)	1 (5.3)	0.571
Urinary incontinence	3 (20.0)	2 (10.5)	0.634
Pelvic pain	4 (26.7)	6 (31.6)	0.755
Difficulty in coitus	3 (20.0)	15 (78.9)	0.001
Dyspareunia	5 (33.3)	4 (26.7)	0.420
Difficulty in defecating	2 (13.3)	6 (31.6)	0.257
Difficulty in urinating	2 (13.3)	11 (57.9)	0.008
Frequent urinating	5 (33.3)	2 (13.3)	0.102

Values were presented as number (%)

*Some patients reported more than one complaint

p<0.05 was considered statistically significant

DISCUSSION

Vaginal cuff prolapse is a rare complication after hysterectomy (10). Nowadays, due to the increased average life expectancy vaginal cuff prolapse is of increasing importance. Besides being a medical problem, it has social and hygienic effects. The patient's quality of life is affected to an important extent. Patients with prolapse may present with primarily anatomical problems, urinary, sexual, defecation related problems and pain complaints but the actual incidence is unknown (8).

In our study, we found pressure sensation in the vagina (n: 24, %70.6) and prolapse (n:21, %61.8) as the two most common symptoms similar to the literature (11). Both complaints were present in approximately 2/3 of our patients. While prolapse was present in almost all of the advanced cuff prolapse group, it was present in approximately one of every 4 cases in early cuff prolapse group. On the other hand, we did not find statistically important difference in pressure sensation in the vagina symptom between the early and advanced cuff prolapse groups. However, pressure sensation in the vagina was an important symptom for admission which could be considered as a frequent symptom in the early and advanced cuff prolapse groups.

In this study, there were statistically significant difference between advanced and early cuff prolapse group in terms of difficulty in coitus and difficulty in urinating symptom. Sexual satisfaction may be reduced due to dyspareunia, urinary incontinence and the pelvic pressure sensation in the vagina (12). Nevertheless, when the literature is analyzed, a previous study has shown that compared to healthy women, there was no change in the frequency of sexual activity in women with prolapse (13). In our study, more than half of the patients had difficulty in coitus symptom. This suggests that the presence of vaginal cuff prolapse is an important reason of symptomatology in sexually active women to visit the doctor and seek a solution. On the other hand, in our advanced cuff prolapse group, this symptom was found to be increased about 4 times more frequently and significantly when compared to the early cuff prolapse group. This suggests that sexual dissatisfaction increases with the increase in the severity of cuff prolapse. And although difficulty in coitus was seen in %52.9 of our patients, it can be thought that this rate may have been found even lower due to the feeling of embarrassment in the patients and it may be indicative of a situation belonging to our population.

In addition, in this current study difficulty in urinating was found to be more common in cases with advanced cuff prolapse which

is in agreement with previous studies (14). Difficulty in urinating symptom, which is seen only in 2 patients (%13.3) in the early cuff prolapse group, becomes a symptom that needs attention in terms of frequency in the advanced cuff prolapse group. With the increase in the prolapse, it may be become difficult for patients to urinate due to the pressure towards the urethra and bladder outlet. If not treated, it can lead to renal damage and more serious systemic problems in the future. Therefore, cases with such a symptomatology should be taken into account. In other words, cuff prolapse detected at any grade should be carefully followed up and managed in terms of accompanying or possible urination difficulties.

The strength of our study is that the examination were performed by the same expert woman gynecologist (M.D). And as far as we know, there is no previous study for the symptomatology of cuff prolapse in the literature. Our study is the first to guide the literature.

However, there are several limitations to this study. Once, a relatively small number of subjects and secondly being a retrospective study may limit the reliability of data. In addition, hysterectomy operations performed with different indications (benign / malignant) and surgical routes (abdominal /vaginal/ laparoscopic), are not included in our study as subgroups. Therefore, this does not allow the evaluation of the symptomatology of cuff prolapse for such different types of patients.

In conclusion, in the current study, pressure sensation in the vagina and prolapse were found as the two most common symptoms. Also, difficulty in coitus and difficulty in urinating symptom, prolapse were found to be more common in the advanced cuff prolapse group than in the early cuff prolapse group. The worsening of the prolapse grade can negatively affect a person's quality of life and medical health status. The symptoms of women who apply to hospital due to cuff prolapse should be questioned. The follow up and treatment of cuff prolapse is important for human well-being. Although there are several research have examined POP symptomatology, vaginal cuff prolapse symptomatology is not well studied. However, in order to apply the validity of these findings in the clinics, further studies are needed.

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