ORIGINAL ARTICLE

Frequency & pelvic symptoms in women with pelvic organ prolapse

Shamim Haque, Ayesha Khan

Abstract

Objective:

To determine the frequency of and association of age & parity with symptomatic pelvic organ prolapse. To assess frequency of various symptoms in women with pelvic organ prolapse.

Study Design: Prospective Observational study.

Setting: Gynaecology & Obstetrics Unit V, Sindh Government Lyari General Hospital, Karachi.

Duration of Study: 2 years & 11 months, from 1st August 2005 to 30th June 2008.

Patients & method: All patients admitted in Gynae Unit V with a diagnosis of Uterovaginal prolapse were included in this study. Details were recorded on a proforma and data was analyzed.

Result: Frequency of symptomatic pelvic organ prolapse was 11% in the Gynae Unit V of Sindh Government Lyari General Hospital.

44.19% of patients were ≤40 years of age and 55.81% patients were >40 years of age.

63.95% patients had parity of 5 & above and 32.56% were para 4 & below.

Nulliparity was found in 2.33% of patients & 1.16% were unmarried.

All of these patients presented with the complain of something coming out of vagina as their main complaints.

2.33% of patients were found to have urinary stress incontinence.

3.49% of patients had increase frequency of micturation. 3.49% patients had complaints of backache.

2.33% of patients had constipation as associated complaints.

37.21% patients had 3rd degree cervical descent and procidentia was found in 27.90% of patients.

Conclusion: Pelvic organ prolapse is common and some degree of prolapse is normal, especially in older women. Grandmultiparity clearly confers a risk for severe prolapse. Small family size and delivery under supervision should be adopted to reduce the risk of pelvic organ prolapse.

Key words: Frequency, Pelvic symptoms, Pelvic organ prolapse.

Department of Gynaecology & Obstetrics, Unit V, DUHS & Sindh Government Lyari General Hospital, Karachi.
S Haque
A Khan

Correspondence:
Dr. Shamim Haque
Res: 110/ II, Saba Avenue, Phase VI, D.H.A, Karachi.
Phones: 021-5844200, 0321- 2489613.
shamimhaque1@hotmail.com

Introduction

Pelvic organ prolapse is a common group of clinical conditions affecting millions of women.[1] The incidence of genital prolapse is difficult to determine, as many women donot seek medical advice. In the United Kingdom, the disorder accounts for 20% of women waiting for major gynaecological surgery.[2,3] Pelvic organ prolapse results in more than 200,000 surgical procedures annually in the United States[4,5] and is the most common indication for hysterectomy in middle aged women.[4]

Forty percent of participants in the Women

Health Initiative (WHI) trial in the United States had some degree of prolapse. Uterine prolapse was found in 14% of the 27 342 women enrolled in the study.[6] The lifetime risk of a woman having surgery for prolapse is about 11%[7,8] and 29% of these women had undergone multiple procedures.[8] Loss of normal vaginal supports can be seen, to some degree, in as many as 43% to 76% of women.[9,10,11]

Prolapse is often asymptomatic and clinical examination may not necessarily correlate with symptoms.[10,12] Many women with pelvic organ prolapse do not require treatment. This is particularly true for women with prolapse that is mild and does not extend beyond the introitus.[9]

The stage of prolapse is not directly associated with prolapse related symptoms, and only 4-10% of women report symptomatic prolapse.[13,14] Risk factors for prolapse include increasing age, weight, parity, weight of babies delivered vaginally, ethnic origin, family history, constipation, increased abdominal pressure, menopause, lower education,[15] vaginal trauma or episiotomy during labour, long second stage of labour & epidural analgesia.[15,16] White race is also considered a risk factor for prolapse, while African and Asian ethnicity is thought to be protective.[17]

Women with stage II or higher stage prolapse almost universally reports the vaginal bulge symptom. Nine Patients with grade III or IV cystocele were significantly more likely to have symptoms of voiding dysfunction than those with lesser degrees of prolapse (44% vs. 9%).[9] Approximately 40% of all patients with prolapse report stress incontinence and there is a 50% risk of occult stress incontinence in the remainder.[7] Rectal prolapse is a recognized cause of fecal/ flatus incontinence and 7% to 31% of women with pelvic organ prolapse also have symptoms of fecal/ flatus incontinence.[18,19] There is a high rate of sexual satisfaction (81%-84%) in women with pelvic organ prolapse who are in an intimate relationship.[9,20]

Data ascertaining which women are most likely to be symptomatic and what symptoms they experiences, are critical to better define & understand prolapse.This study was conducted to estimate the frequency of symptomatic pelvic organ prolapse that required hospital admission and surgery and to measure the symptoms of pelvic organ prolapse.

By knowing the association of multiparity with prolapse, as a risk factor, the frequency of pelvic organ prolapse can be reduced by counseling the importance of contraception & small family size.

Patients and methods:

This prospective study used a database of 86 women who were admitted in Gynae Unit V of Sindh Government Lyari Hospital with a diagnosis of symptomatic pelvic organ prolapse from 1st August 2005 to 30th June 2008. All symptomatic prolapse were diagnosed when patients complained that they had the sensation of a vaginal lump and it was confirmed on examination. All women were provided informed consent for participation. Data on symptomatic prolapse were ascertained by interview including questions on age, race or ethnicity, demographic characteristics, reproductive and menopause history, presence of selected medical conditions (for example current constipation & history of irritable bowel syndrome), prior pelvic and other surgeries (including hysterectomy, and pelvic organ prolapse repair),general health status now & compared with one year ago,sexual function, mode of delivery (vaginal or caesarean) and other delivery measures, such as birth weight and duration of the second stage of labour, were ascertained by inquiry.

Other pelvic floor disorders assessed by inquiry were urinary incontinence and flatus or fecal incontinence, by frequency, in the past year. Women were defined as having these conditions if they reported weekly or more urinary or flatus incontinence or monthly or greater fecal incontinence, because these frequencies have been observed as having substantial effect on daily activities. Participants were further questioned "Does this cause any problem emp-

tying your bladder or bowel?" & "Do you need to reduce this bulge with your fingers to empty bladder or bowel?"

All participants were requested to undergo a physical examination. The physical examination was performed in the dorsal position & in Sims position using a Sims speculum. The examination included an assessment of pelvic organ relaxation. Participants were asked to perform maximal Valsalva. Pelvic examination was performed, noting pelvic organs or their absence, palpable pelvic masses, extent of the prolapse & compartments of the vagina affected (anterior, posterior or apical).

In this study frequency of symptomatic pelvic organ prolapse, association of age and parity with symptomatic pelvic organ prolapse and pelvic symptoms are presented as percentage.

Results:

Total 781 gynae patients were admitted in the Gynae Unit V of Sindh Government Lyari General Hospital during the study period. Out of these 781 patients, 86 patients were admitted with the diagnosis of symptomatic uterovaginal prolapse. So the frequency of prolapse was 11% in the Gynae Unit V of Sindh Government Lyari General Hospital. All of these patients presented with the complain of something coming out of vagina as their main complain. 2.33% (2/86) of patients were found to have urinary stress incontinence. 3.49% (3/86) of patients had increased frequency of micturation. 3.49% of patients had complain of backache. While only 1.16% (1/86) complained of voiding difficulty. 2.33% (2/86) of patients had complain of constipation. 4.65% (4/86) of patients had complain of lower abdominal pain. None of these patients required digitation for voiding or defecation (Table 1).

44.19% (38/86) of patients were ≤ 40 years of age and 55.81% (48/86) of patients were >40 years of age (Table 2).

63.95% (55/86) patients had parity of 5 and above and 32.56% (28/86) patients were para 4 and below. Nulliparity was found in 2.33% (02/86) of patients and 1.16% (01/86) patients were unmarried (Table 3).

Table 1: *Frequency of symptoms in women with symptomatic prolapse (n=86)*

Symptoms	N	Percentage
Something coming out of vagina	86	100
Urinary stress incontinence	2	2.33
Increased frequency of micturation	3	3.49
Backache	3	3.49
Voiding difficulty	1	1.16
Constipation	2	2.33
Lower abdominal pain	4	4.65

Table 2: *Association of age with symptomatic prolapse*

Age (Yrs)	N	Percentage
1 -- 10	0	0.00
11 -- 20	2	2.33
21 -- 30	13	15.12
31 -- 40	23	26.74
41 -- 50	20	23.25
51 -- 60	20	23.25
61 -- 70	6	6.98
71 -- 80	2	2.33

37.21% (32/86) patients had 3rd degree cervical descent and procidentia was found in 27.90% (24/86) of patients .

Discussion

The frequency of pelvic organ prolapse observed in our study is 11% which is higher than that reported by the Tegerstedt and Bradley in the population based studies in Sweden (8%) and in the United States (4%).[13,14]

Literature indicates that many women with mild prolapse have urinary stress incontinence.[21] In a study Yalcin suggested that patients with advanced prolapse commonly donot have urinary stress incontinence but are more likely to have

Table 3: *Association of parity with symptomatic prolapse*

Parity	N	Percentage
Unmarried	1	1.16
Nulliparous	2	2.33
1 -- 4	28	32.56
≥ 5	55	63.95

voiding difficulties.[22] Our findings also suggests that patients with advanced prolapse are less likely to have urinary stress incontinence. This supports the theory that advanced prolapse alters the anatomical relationship of urethra & bladder and obscure the manifestation of stress incontinence in some women.

It might be expected that women with advanced prolapse and possibly obstructed voiding would have more irritative symptoms such as frequency and urgency. Romanzi et al found that lower urinary tract symptoms such as urgency, frequency, urge incontinence and difficulty in voiding were more common in women with more advanced prolapse.[23] However, we found out that only few patients with advanced prolapse suffered from these symptoms.

The extent of prolapse is not predictive of bowel symptoms[21]. Only 2.33% of patients had complain of constipation in this study. This is contrary to our expectation that patient's with more advanced posterior compartment prolapse would have bowel symptoms.

Our data showed that prolapse had very little correlation with sexual activity. Inspite of having prolapse, >60% of women in this study were sexually active. Some authors have found that prolapse has a negative impact on sexual function.[24] However our findings are consistent with those of Weber et al[20] and Burrows who found that measures of sexual function were similar in women with or without prolapse.

It is widely accepted that vaginal parity is a major risk factor for prolapse[10,25] and this study of symptomatic pelvic organ prolapse is well suited to test this assumption. Our data reported increase frequency of symptomatic pelvic organ prolapse in multiparous women with previous vaginal deliveries. This is consistent with results from other population based studies. One study showed association of vaginal parity with symptomatic prolapse, which increased threefold with one, to five-fold with three or more vaginal deliveries.[4] Similar to other studies that included mode of delivery, we did not observe any increased risk of symptomatic prolapse with caesarean deliveries, suggesting that delivery method, rather than pregnancy, contributes to the developing symptomatic prolapse.

Besides parity, age has been implicated as a major risk factor for prolapse.[6,10,25] In our study 55.81% of patients were >40 years of age. Swift & coworkers[26] suggested a doubling of the incidence of severe prolapse with every decade of life.

Conclusion

Women with pelvic organ prolapse can present with a wide variety of bladder, bowel and pelvic symptoms. With the exception of the symptom of something coming out of vagina, none are specific to prolapse. Prolapse of pelvic organs beyond the introitus is associated with increase in frequency and severity of symptoms. Grandmultiparity clearly confers a risk for severe prolapse. Small family size and delivery under supervision should be adopted to reduce the risk of pelvic organ prolapse.

References

1. Webber AM, Richter HE. Pelvic organ prolapse.Obstet Gynecol. 2005; 106: 615- 34.
2. Doshani A, Teo REC, Mayne CJ, Tincello DG. Clinical review: Uterine prolapse. BMJ. 2007; 335: 819- 23.
3. Cardozo L.Prolapse. In: Whitfield CR, ed. Dewhurst,s textbook of Obstetrics and gynaecology for postgraduates. Oxford: Blackwell Science, 1995: 642- 52.
4. Rortveit G, Brown JS, Thom DH, Van den Eeden S, Creasman JM, Subak LL. Symptomatic Pelvic Organ Prolapse. Obstet Gynecol. 2007; 109: 1396- 403.
5. Brown JS, Wooten LE, Subak LL, Thom DH, Van den Eeden S, Vittinghoff E. Pelvic organ prolapse surgery in the United States, 1997. Am J Obstet Gynecol. 2002; 186: 712- 6.
6. Hendrix SL, Clark A, Nygaard I, Aragaki A, Barnabei V, Mc Tiernan A. Pelvic organ prolapse in the women,s health initiative: gravity and gravidity. Am J Obstet Gynecol. 2002; 186: 1160- 6.
7. JHA S, Hobson T, Parsons M & Gull F. Does preoperative urodynamics change the management of prolapse? Obstet Gynecol. 2008; 28(3): 320- 2.
8. Bradshaw HD, Hiller L, Farkas A.G, Radley S, Radley S.C. Development and psychometric testing of a symptom index for pelvic organ prolapse. Obstet Gynecol. 2006; 26(3) : 241-52.
9. Barber MD, Symptoms and outcome measures of pelvic organ prolapse. Obstet Gynecol. 2005; 48(3) : 648- 61.
10. Samuelsson EC, Victor FTA, Tibblin G, Svardsudd KF. Signs of genital prolapse in a Swedish population of women 20 to 59 years of age and possible related factors. Am J Obstet Gynecol. 1999; 180: 299- 305.
11. Swift SE, Tate SB, Nicholas J. Correlation of symptoms with degree of pelvic organ support in a general population of women: what is pelvic organ prolapse. Am J Obstet Gynecol. 2003; 189: 372- 9.
12. Thakar R, Stanton S. Regular review: Management of genital

prolapse. BMJ. 2002; 324: 1258- 62.
13. Bradley CS, Nygaard IE. Vaginal wall descensus and pelvic floor symptoms in older women. Obstet Gynecol. 2005; 106: 759- 66.
14. Tegerstedt G, Maehle- Schmidt M, Nyren O, Hammarstrom M. Prevalence of symptomatic pelvic organ prolapse in a Swedish population. Int Urogynecol J Pelvic Floor Dysfunct. 2005; 16: 497- 503.
15. Nygaard I, Bradley C, Brandt D; Women,s Health Initiative. Pelvic Organ Prolapse in Older Women: Prevalence and Risk Factors. Obstet Gynecol. 2004; 104: 489- 97.
16. Tegerstedt G, Miedel A, Maehle- Schmidt M, Nyren O, Hammarstrom M. Obstetric risk factors for symptomatic prolapse: a population- based approach. Am J Obstet Gynecol. 2006; 194: 75- 81.
17. Buchsbaum GM, Duecy EE, Kerr LA, Huang LS, Perevich MA, Guzick DS. Pelvic Organ Prolapse in Nulliparous Women and Their Parous Sisters. Obstet Gynecol. 2006; 108: 1388- 93.
18. Nichols NM, Gill EJ, Nguyen T, et al. Anal sphincter injury in women with pelvic floor disorders. Obstet Gynecol. 2004; 104: 690- 6.
19. Jackson SL, Weber AM, Hull TL, et al. Fecal incontinence in women with urinary incontinence and pelvic organ prolapse. Obstet Gynecol.1997; 89: 423- 7.
20. Weber AM, Walters MD, Schover LR, Mitchinson A. Sexual function in women with uterovaginal prolapse and urinary incontinence. Obstet Gynecol.1995; 85: 483-7.
21. Burrows LJ, Meyn LA, Walters MD, Weber AM. Pelvic Symptoms in Women With Pelvic Organ Prolapse. Obstet Gynecol. 2004; 104: 982- 8.
22. Yalcin OT, Yildirum A, Hassa H. The effects of severe cystocele on urogynecologic symptoms and findings. Acta Obstet Gynecol Scand. 2001; 80: 423- 7.
23. Romanzi LJ. Chaikin DC, Blaivas JG. The effect of genital prolapse on voiding. J Urol. 1999; 161: 581- 6.
24. Barber MD, Visco AG, Wyman JF, Fantl JA, Bump RC. Sexual function in women with urinary incontinence and pelvic organ prolapse. Continence Program for Women Research Group. Obstet Gynecol. 2002; 99: 281- 9.
25. Gurel H, Gurel SA. Pelvic relaxation and associated risk factors: the result of logistic regression analysis. Acta Obstet Gynecol Scand 1999; 78: 290- 3.
26. Swift SE, Pound T, Dias JK. Case- control study of etiologic factors in the development of severe pelvic organ prolapse. Int Urogynecol J Pelvic Floor Dysfunct 2001; 12: 187- 92.