

Original Article

Comprehensive Evaluation of Genital Prolapse — A Clinical Perspective

DOI: dx.doi.org

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Received: 18 January 2024
Accepted: 27 January 2024
Published: 10 February 2024

Published by:
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Barishal, Bangladesh

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Editor: [Prof. Dr. HN Sarker](#)



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ABSTRACT

Introduction: Genital prolapse is a prevalent and multifaceted medical condition that significantly impacts the quality of life for affected individuals, predominantly women. This study provides an overview of a comprehensive clinical perspective on the evaluation of genital prolapse. The evaluation process begins with a detailed medical history, encompassing factors such as parity, previous pelvic surgeries, and relevant medical conditions. **Methods and materials:** This cross-sectional study was conducted in the obstetrics and gynecology department at the Shaheed Tajuddin Ahmad Medical College Hospital in Gazipur, Bangladesh. The research was carried out between January and December of 2019. All information was gathered by standardized questionnaires, including all relevant factors, physical examinations, and interviews. The statistical package for social science (SPSS) program was used for statistical analysis following data collection. **Result:** The study revealed that 100% of patients had a history of vaginal delivery. Notably, 90% of these deliveries occurred at home and 44% of patients experiencing prolonged labor. Uterine prolapse severity analysis indicated that 80% of

patients exhibited a 2nd degree of prolapse. **Conclusion:** Childbirth-related injuries, particularly among homemakers with limited education, were identified as the predominant cause of acquired vaginal prolapse in a recent study. Common patient conditions included stress incontinence, moderate rectocele, and cystocele. Post-surgery, complications like fever and urinary tract infections were more common, but a significant 94.0% of cases reported complete relief after intervention.

(The Planet 2023; 7(1): 343-351)

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Keywords: Genital Prolapse, Prolonged Labor, Parity, Hysterectomy

INTRODUCTION

Genital prolapse, a condition characterized by the descent or herniation of pelvic organs, represents a multifaceted challenge in the realm of women's health. More than 50,000 Bangladeshi women are currently suffering from Pelvic Organ Prolapse (POP), which affect their quality of life in numerous ways ^[1]. The country has no strategic health plan or intervention program for screening and management of POP. It is a prevalent disorder that significantly impacts the quality of life for affected individuals, posing both physical and psychological burdens ^[2]. The prevalence of genital prolapse varies across populations, affecting women of different ages and ethnicities ^[3]. Factors such as childbirth, aging, and connective tissue disorders contribute to the pathophysiology of this condition ^[4]. The clinical manifestations of genital prolapse often manifest as a spectrum of symptoms, including pelvic pressure, urinary incontinence, and sexual dysfunction. Given the diverse and sometimes subtle nature of these symptoms, a comprehensive clinical evaluation becomes paramount for accurate diagnosis and subsequent management ^[5].

Research attempting to link clinical data to symptoms related to the bladder or bowel has typically shown negative results ^[6,7]. Pelvic organ prolapse is not predicted by the majority of bladder or bowel dysfunction symptoms commonly thought to be signs of prolapse ^[8]. Therefore, the feeling of a vaginal lump or bulge should be the only thing included in the phrase "prolapse symptoms," and there are slightly greater connections between this sensation and clinical findings ^[9]. Several authors have demonstrated that women who report vaginal bulges are more likely to have prolapse discovered during a

clinical examination ^[10]. Still, the statistical aspects of this relationship between symptoms and single-compartment prolapse have not been thoroughly examined.

Prolapse symptoms are prevalent in parous women; however, they can vary greatly depending on the degree of pelvic organ descent ^[11]. Clinical examinations clearly show that a significant fraction of the general population has "prolapse," and the majority of these individuals are asymptomatic, meaning they are not aware of a vaginal lump ^[12]. The reproductive health profile of women in developing countries like Bangladesh is burdened from diseases and injury related to sexuality and child bearing. The scenario is more disastrous in rural communities ^[13]. Despite some advancement in family planning & fertility control, overall reproductive health status is still critically lagging behind ^[14].

The purpose of this research is to unravel the intricacies of genital prolapse diagnosis by providing a comprehensive analysis from a clinical perspective.

METHODS & MATERIALS

This cross-sectional study was conducted at the Department of Obstetrics and Gynaecology department of Shaheed Tajuddin Ahmad Medical College Hospital, Gazipur, Bangladesh. The study was conducted from January 2019 to December 2019. 200 patients with genital prolapse who attended outdoors and indoors and were admitted for surgery were included in this study. A conventional type of sampling technique was used and patients with genital prolapse were recruited for the study purposively. The patients were evaluated by detailed history, thorough physical

examination & relevant laboratory investigations.

The patients confirmed that the maximal extent of prolapse, which was clinically evaluated while performing a Valsalva maneuver or coughing, was the most severe protrusion. The assessment of complications that arose following the procedure determined the post-operative outcome. Written informed consent was obtained to take part in this study. Interviews, physical exams, and laboratory analyses were used to gather data, and a standardized questionnaire with all the relevant factors was used. The statistical package for social science (SPSS) program was used for statistical analysis following data collection. The local ethical committee has approved the research protocol.

Inclusion criteria dictate that the study will enroll female patients within the age range of 50 to 70 years, representing a demographic where the incidence and impact of genital prolapse are significant. Eligible participants must also be diagnosed with genital prolapse, emphasizing the focus on this specific pelvic floor disorder. Additionally, the study requires participants to provide informed consent, emphasizing the ethical consideration of respecting individuals' autonomy and ensuring their willingness to engage in the research. Patients with vault prolapse, a distinct form of pelvic organ descent, are excluded to maintain homogeneity among the study population and concentrate on the primary focus of genital prolapse. Similarly, patients presenting with an elongated cervix are excluded, as this condition may introduce confounding variables. Lastly, individuals who decline to give consent are excluded from participation, reinforcing the ethical principles of voluntary participation and informed decision-making.

RESULTS

Table I outlines that 130 (65%) were found to be between the ages of 51 and 60. The age ranged from 50 to 70, with a mean of 59 ± 5.4 years. In terms of the patients' educational background, 170 (85%) of them lacked literacy. Regarding marital status, 94 (47%) were widows, and 104 (52%) were living with their husbands. In terms of their employment status, three out of every 144 patients (72%) were homemakers, 36 (18%) were day laborers, and 20 (10%) were workers.

Table I: Socio-demographic status of the patients (N=200)

<i>Particulars of the patients</i>	<i>Frequency</i>	<i>%</i>
Age (years)		
51-60	130	65.0
61-70	70	35.0
mean \pm SD	59.0 \pm 5.4	
Range (min, max)	(50,70)	
Educational status		
Illiterate	170	85.0
Signature	28	14.0
Primary	2	1.0
Marital status		
Living with husband	104	52.0
Husband living abroad	2	1.0
Widow	94	47.0
Occupational status		
Housemaker	144	72.0
Day laborer	36	18.0

The patients' parity and number of living children are displayed in **Table II**. Primipara was determined to be 4 (2%), multipara to be 106 (53%), and grand multipara to be 90 (45%). In terms of the

number of live children, 20 patients (10%) had 1-2 children, 96 patients (48%) had 3–4 children, and 24 patients (12%) had ≥5 children. There were 4.98 ± 2.3 live children on average.

Table II: Distribution of the study population by parity and number of living children (N=200)

<i>Parity</i>	<i>Frequency</i>	<i>%</i>
<i>1 (primipara)</i>	<i>4</i>	<i>2.0</i>
<i>2-4(multipara)</i>	<i>106</i>	<i>53.0</i>
<i>≥5 (grand multipara)</i>	<i>90</i>	<i>45.0</i>
<i>Number of living children</i>		
<i>1-2</i>	<i>20</i>	<i>10.0</i>
<i>3-4</i>	<i>96</i>	<i>48.0</i>
<i>≥5</i>	<i>24</i>	<i>12.0</i>
<i>Mean ±SD</i>	<i>4.98±2.3</i>	
<i>Range (min, max)</i>	<i>(1, 10)</i>	

The patient's clinical features are displayed in **Table III**. It was noted that 12(6%) of the patients had a history of abdominal surgery, 200(100%) had vaginal births, 180(90%) had home births, the majority 44% had to extend labor during delivery, and 2% had instrumental delivery. Besides, 20 % of the patients had a history of chronic cough, 15% had chronic constipation, 22% had a family history of genital prolapse, and 31% engaged in heavy physical activity.

Table III: Distribution of the study population by clinical characteristics (N=200)

<i>Clinical characteristics</i>	<i>Frequency</i>	<i>%</i>
<i>Abdominal surgery history</i>	12	6.0
<i>Mode of delivery</i>		
<i>Vaginal</i>	200	100.0
<i>Cesarean section</i>	0	0.0
<i>Place of delivery</i>		
<i>Home</i>	180	90.0
<i>Hospital</i>	20	10.0
<i>Complication during delivery</i>		
<i>Prolonged labor</i>	88	44.0
<i>Obstructed labor</i>	24	12.0
<i>Precipitate labor</i>	48	24.0
<i>Instrumental delivery</i>	04	2.0
<i>Obesity</i>	20	10.0
<i>Etiology</i>		
<i>Chronic Cough</i>	40	20
<i>Chronic Constipation</i>	30	15
<i>Heavy Physical Work</i>	62	31
<i>Family History</i>	44	22

The patient's presenting symptoms are depicted in the accompanying **Figure I**. A total of 200 patients (100%) reported feeling as though something was about to fall, 40 patients (20%) experienced urine retention, 184 patients (92%) experienced frequent micturition, 102 patients (51%) experienced back pain, 106 patients (53%), experienced burning during micturition, 90 patients (45%), experienced stress incontinence, 50 patients (25%) experienced dragging pain in the lower abdomen, 44 patients (22.0%) experienced white discharge, and 10 patients (5%) experienced irreducible prolapse.

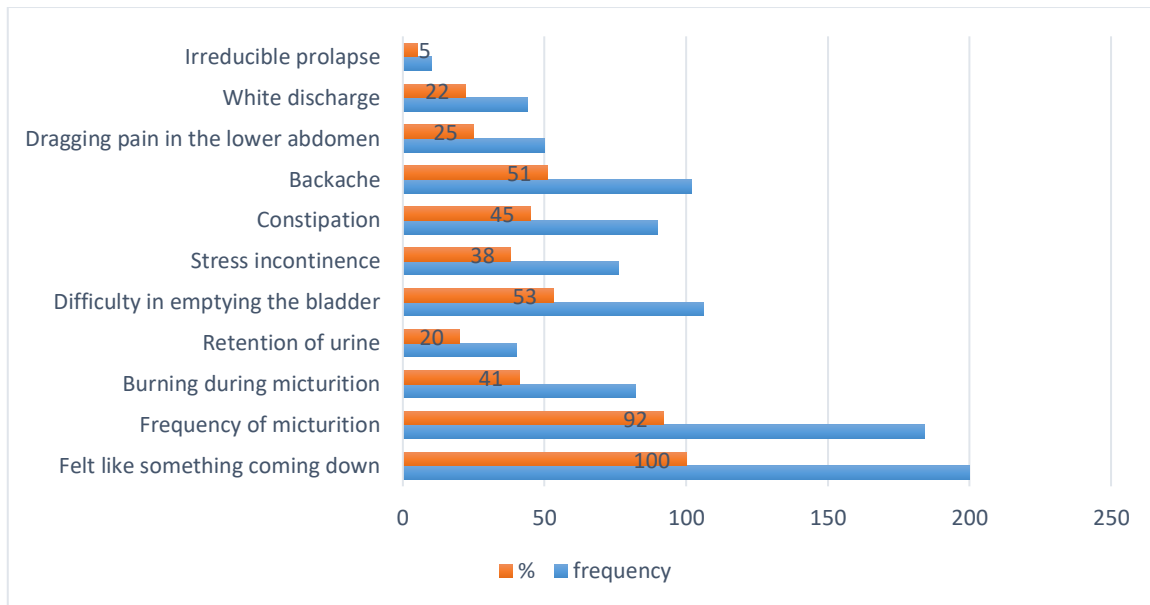


Figure I: Distribution of the study population by presenting symptom (N=200)

Figure-II shows the degree of prolapse among the participants. Only 10 patients experienced third-degree uterine prolapses,

compared to 160 who had second-degree prolapses and 30 who had first-degree prolapses.

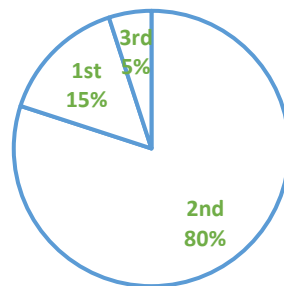


Figure II: Distribution of the study population by degree of prolapse (N=200)

Table IV shows the distribution of examination findings among the participants. 90% of the patients had moderate cystocele, 69% had moderate rectocele, 27% had urethrocele, 36% had decubitus ulcers, 40% had stress incontinence, and 17% had an elongated cervix.

Table IV: Distribution of the study population by examination findings (N=200)

Condition	Frequency	%
Cystocele		

<i>Mild</i>	6	3.0
<i>Moderate</i>	180	90.0
<i>Severe</i>	14	7.0
Rectocele		
<i>Mild</i>	62	31.0
<i>Moderate</i>	138	69.0
<i>Severe</i>	0	0.0
Urethrocele	54	27.0
Decubitus ulcer	72	36.0
Stress incontinence	80	40.0
Elongation of cervix	34	17.0

Figure III shows the surgical management of the study population. The study group was treated with a vaginal hysterectomy that included pelvic floor repair (10%),

anterior colpoporrhaphy and posterior colpoporrhaphy (70%) and anterior colpoporrhaphy and posterior colpoporrhaphy (15%).

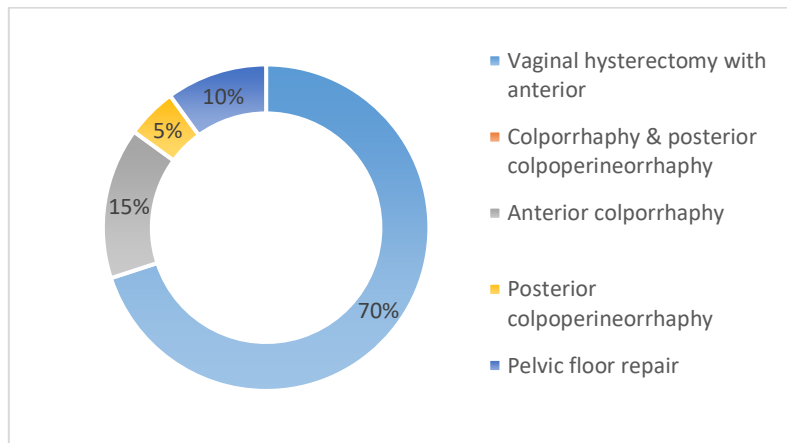


Figure III: Surgical management of the study population (N=200)

Figure IV shows the distribution of post-surgery complications. There was no mortality. There were 40 cases of pyrexia (20%), 10 cases of bleeding (5%), urine infections (15%), 8 cases of local sepsis

(4%), and 6 cases of urinary retention (3%). Fifty-five percent of patients had no issues, while forty-five percent suffered complications.

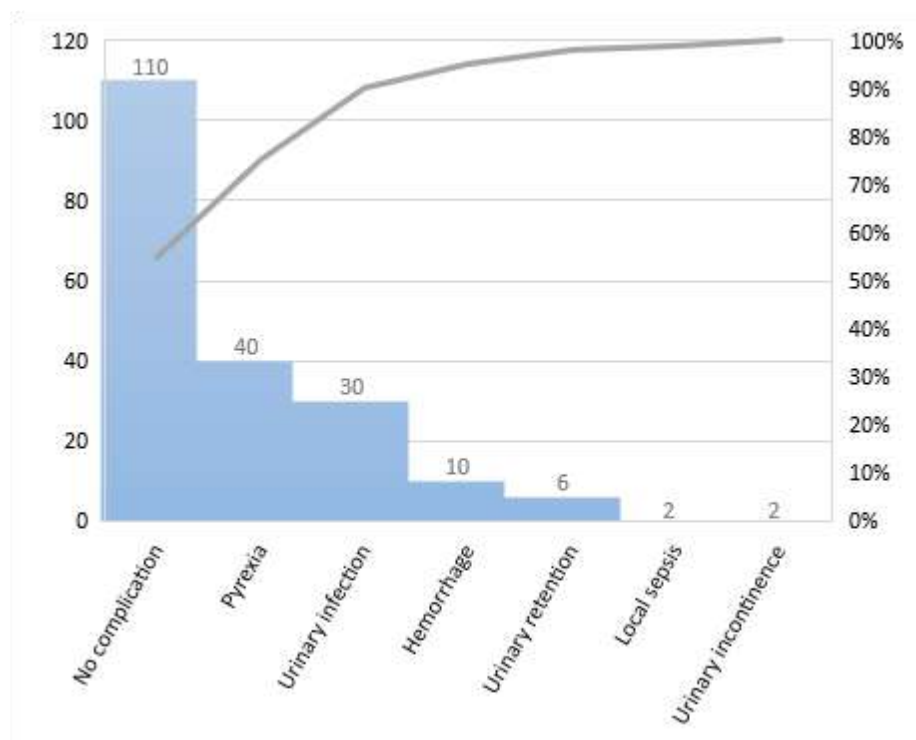


Figure IV: Distribution of the study population by type of complication after operation (N=200)

DISCUSSION

The investigation at hand focused on patients aged between 50 and 70 years with genital prolapse, excluding cases of vault prolapse and those who declined participation. The study findings were then compared with existing relevant research. Results revealed that 65% of participants were in their sixth decade, with a mean age of 59 ± 5.4 years, ranging from 50 to 70 years. A comparable study by Kishwara et al. (2010) indicated that 46% of genital prolapse cases were in the 30-49 years age group, while Akhter (1996) found 74% in the over 40 years age group [15,16]. Educational status analysis showed that 85% of patients in the current study were illiterate, aligning with Kishwara et al.'s findings that 78.5% of women in their study had no education [15].

In terms of marital status, over half (52%) of the participants were living with their husbands, and 47% were widows, consistent with observations by Puri et al. (2011) [14]. Occupational status revealed that 72% of patients were homemakers, 18% were day laborers, and 10% were workers, with Puri et al. (2011) reporting similar findings of 66.6% performing normal housewife work and 27.4% involved in strenuous activities [14].

The association between grand multiparity and genital prolapse, as found in the present study, echoed the results of Kishwara et al. (2010), Chauvin et al. (2012), Marcelli et al. (2011), and Onwude (2009) [2,15,17,18,19]. The prevalence of genital prolapse was observed to be higher in multiparous and grand multiparous women. Regarding delivery history, the majority (100%) in this study had a history of vaginal delivery, with 90% experiencing home delivery and 44% encountering prolonged labor. This aligns with Puri et al.'s (2011) finding that 80.2% delivered vaginally, while Marcelli et al.

(2011) noted 20.5% having instrumental delivery [14,2].

A noteworthy family history of genital prolapse was found in 22% of patients, supporting the familial incidence highlighted by Jeffcoate [20]. Additionally, 6% of patients engaged in heavy physical work, 20% reported chronic cough during puerperium, and 15% had constipation, all identified as risk factors for prolapse.

Symptomatology among participants included something coming down (100%), retention of urine (20%), frequency of micturition (92%), backache (51%), burning during micturition (41%), constipation (45%), stress incontinence (38%), dragging pain in the lower abdomen (25%), white discharge (22%), and irreducible prolapse (5%). These findings were consistent with studies by Dietz and Simpson (2008), which noted various associated symptoms [12].

The degree of uterine prolapse indicated that 80% had a second-degree prolapse, 15% had a first-degree prolapse, and 5% had a third-degree prolapse. This aligns with Durnea et al.'s (2014) observations, emphasizing the prevalence of second-degree uterine prolapse [6].

The surgical intervention in 70% of cases involved vaginal hysterectomy with anterior colporrhaphy and posterior colpoperineorrhaphy, while 15% underwent anterior colporrhaphy, 5% had posterior colpoperineorrhaphy, and 10% had pelvic floor repair. Postoperative complications included pyrexia (20%), hemorrhage (5%), urinary infection (15%), local sepsis (4%), urinary retention (3%), and urinary incontinence (1%). Complete relief was observed in 93% of cases, with 7% experiencing partial relief. Comparable findings were reported by Mitra (1973), where 90% found the operation successful [3].

Postoperative mortality was nil in the present study, and other complications were managed conservatively. Mitra (1973) reported a success rate of 90% with complete relief, emphasizing the effectiveness of the surgical intervention [3].

CONCLUSION

According to this study, childbirth injuries are the primary cause of the majority of vaginal prolapse instances, which are acquired in nature. The majority of the patients were homemakers and illiterate. The most common causes of genital prolapse were multiparity, having more than two children, home births, prolonged labor during delivery, second-degree prolapses, and intense physical labor during puberty. The most common conditions among the patients were stress incontinence, moderate rectocele, and moderate cystocele. Following genital prolapse surgery, complications such as pyrexia and urinary tract infections were more prevalent. In 94.0% of the cases, there was total alleviation.

FUNDING

No funding sources

CONFLICT OF INTEREST

None declared

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee

RECOMMENDATION

This study advises the establishment of legislation that fully protect women from early marriage, multiple pregnancies, domestic abuse, and gender discrimination in order to ensure the availability and enhancement of services for health workers at the grassroots level. In addition,

more research with several centers and a substantial sample size should be done.

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