

Genital prolapse: A 5-year review at Federal Medical Centre Umuahia, Southeastern Nigeria

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ABSTRACT

Background: Genital prolapse is an important cause of morbidity among postmenopausal and multiparous women especially in our environment where a high premium is placed on large family size. This study was done to determine the prevalence, risk factors, clinical presentation, and management options of genital prolapse. **Patients and Methods:** Data of those diagnosed with genital prolapse were retrieved from records in the clinic, wards, theater, and from patients' folders in the medical records department. **Statistical Analysis Used:** Data were analyzed using Statistical Package for Social Sciences version 20 with $P < 0.05$. **Results:** Genital prolapse accounted for 0.8% of gynecological clinic attendances and 5.2% of major gynecological operations. The mean age of patients was 56.7 ± 15.5 years. Farmers constituted 60.7% of the patients while 72.1% and 70.5% were postmenopausal and grandmultiparous women, respectively. The sensation of something coming down the vagina was the most common symptom noted in 98.4% of the patients. Most (23.0%) of the patients had unsupervised delivery at home. Uterovaginal prolapse was the most common (70.5%) type of genital prolapse, and third-degree uterovaginal prolapse was its most frequent presentation. Majority of the patients (44.4%) were managed expectantly while the most common surgery performed was vaginal hysterectomy with pelvic floor repair (33.3%). **Conclusion:** Widespread availability of antenatal services especially in the rural communities and limitation on family size can significantly reduce the burden of this disease.

Key words: Genital prolapse, umuahia, uterovaginal prolapse

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INTRODUCTION

Genital prolapse is an important cause of morbidity among females especially in our setting due to the high premium on large family size.¹ Worldwide approximately 50% of women over 50 years of age are affected.² In Nigeria, prevalence ranges from 7.55 to 39.1 per 1000 gynecological patients.^{1,3,4} Predisposing factors are poorly conducted labor, chronic cough, heavy physical exertion, smoking, etc.^{1,5-7} Treatment modalities include conservative measures and a variety of surgical procedures.^{2,8}

The aim of this study was to determine the prevalence, risk factors, clinical presentation, and management options of genital prolapse. Furthermore, no such study has been done in our facility.

PATIENTS AND METHODS

This was a retrospective descriptive study carried out in Federal Medical Centre (FMC) Umuahia over a 5-year period from January 1, 2009, to December 31, 2013.

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Data of those diagnosed with genital prolapse during this period were collected from the records in the clinic, wards, theater, and from patients' folders in the medical records department. The patients were diagnosed/classified using the Beecham grading system.^{1,9} For this system, the introitus was used as reference to classify the severity of the vaginal supporting defects from first to third degree including rectocele, cystocele, uterine prolapse, enterocele, and prolapse of the vaginal vault; first degree prolapse was diagnosed when the descent was still within the vagina; second degree when it had descended to the introitus; and third degree when it had descended outside the introitus. Patients who presented with symptoms suggestive of pelvic organ prolapse in whom prolapse could not be demonstrated were excluded from this study. This study was approved by the ethical committee of FMC, Umuahia.

Data obtained included age, occupation, pre/menopausal status, parity, symptoms at presentation, past obstetric history, past surgical history, type of treatment offered, and major posttreatment complications. Data were analyzed using Statistical Package for Social Sciences version 20 (IBM Corp, Armonk, New York, USA). Statistical significance was calculated using Chi-squared test with level of significance set at $P < 0.05$.

RESULTS

During the study, there were 11,971 gynecological clinic attendances with 96 cases diagnosed as genital prolapse. This gave a prevalence of 0.8% of gynecological consultations. However, only 64 folders were retrieved out of which 61 had adequate information for analysis. In addition, within the period of the study 384 major gynecological surgeries were performed and 20 of these were for genital prolapse. Genital prolapse, therefore, accounted for 5.2% of major gynecological surgeries. The mean age was 56.7 ± 15.5 years. Table 1 shows the sociodemographic characteristics of the patients. The modal age group was 60–69 years. Farmers made up 60.7% of the patients while 72.1% of the patients were postmenopausal. Grandmultiparous and multiparous women made up 70.5% and 23.0% of the patients, respectively.

Figure 1 shows the presenting symptoms. The sensation of something coming down the vagina was the most common symptom noted in 98.4% of the patients which was followed by low backache (16.4%). Only 1 patient had urinary stress incontinence. Figure 2 shows the various risk factors associated with genital prolapse. Even though some patients had multiple risk factors, unsupervised delivery at home was noted in 23.0% of the patients with prolonged labor documented in 14.8%. Table 2 shows the type/degree of prolapse diagnosed. Uterovaginal prolapse was the most commonly (70.5%) diagnosed type of genital prolapse with third-degree uterovaginal prolapse as its most frequent

presentation. There was a significant association between menopausal status and the degree of genital prolapse as depicted in Table 3.

Figure 3 shows the management options. The majority of patients (44.4%) were managed expectantly. The most common surgical procedure performed was vaginal hysterectomy with pelvic floor repair (33.3%), and this was done mainly in those with third-degree uterovaginal prolapse. A significant

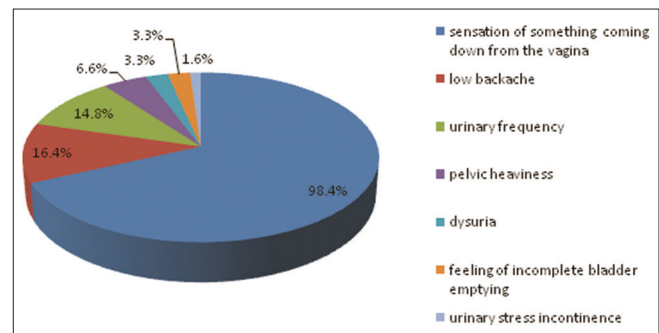


Figure 1: Presenting symptoms of patients

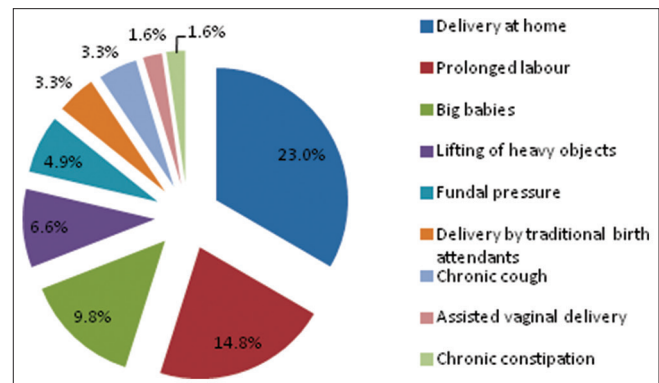


Figure 2: Risk factors for genital prolapse

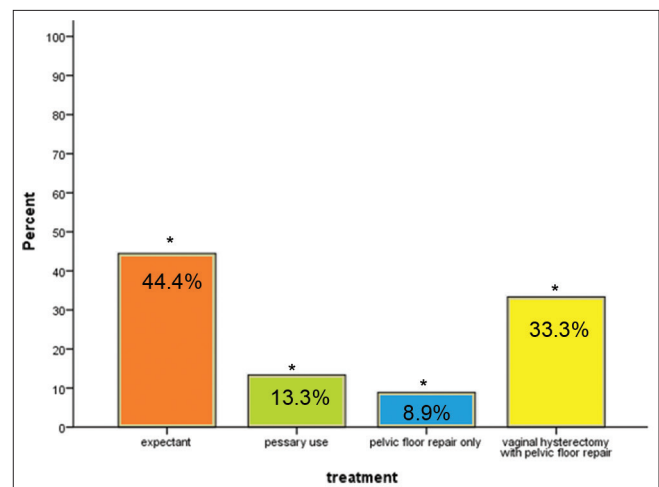


Figure 3: Management options*. *15 patients were lost to follow-up and one patient eventually had abdominal hysterectomy

Table 1: The sociodemographic characteristics of the patients

	Frequency (n=61)	Percentage
Age group (years)		
20-29	4	6.6
30-39	9	14.7
40-49	4	6.6
50-59	12	19.7
60-69	16	26.2
70-79	13	21.3
80-89	3	4.9
Occupation		
Farming	37	60.7
Trading	12	19.7
Civil service	6	9.8
Teaching	3	4.9
Clergy	1	1.6
Homemaker	1	1.6
Hair dressing	1	1.6
Menopausal status		
Premenopausal	17	27.9
Postmenopausal	44	72.1
Parity		
Nullipara	1	1.6
Primipara	3	4.9
Multipara	14	23.0
Grandmultipara	43	70.5

Table 2: Type/degree of genital prolapse

Type/degree of genital prolapse	Frequency	Percentage
Uterovaginal prolapse		
First degree	8	13.1
Second degree	14	23.0
Third degree	21	34.4
Cystocele only	12	19.7
Rectocele only	1	1.6
Cystocele and rectocele	5	8.2
Total	61	100

association was noted between menopausal status and the choice of hysterectomy as a treatment option which was shown in Table 4. The duration of hospital stay postoperatively ranged from 2 to 11 days with a mean duration of 5 days.

DISCUSSION

Genital organ prolapse constituted 0.8% of gynecological consultations in this study. This was, however, lower than 3% noted in Gboko, Northcentral Nigeria.¹⁰ This may be explained by the fact that many women feel shy to complain of this disorder.¹¹ In addition, women in many developing societies are socialized to endure pain and discomfort, particularly if these result from conditions related to their reproductive function. Furthermore, they may not be given permission by husband and/or family to seek medical help for such conditions and there may be lack of funds for transport and hospital fees.⁵ Surgery for genital prolapse

Table 3: Association between menopausal status and degree of uterovaginal prolapse

Menopausal status	Degree of uterovaginal prolapse			Total	P
	First degree	Second degree	Third degree		
Premenopausal	4	5	2	11	0.047
Postmenopausal	4	9	19	32	
Total	8	14	21	43	

$\chi^2=6.105$, $df=2$, $P<0.05$, Cramer's $V=0.377$

Table 4: Association between menopausal status and choice of vaginal hysterectomy as a treatment option

Menopausal status	Vaginal hysterectomy		Total	P
	Yes	No		
Premenopausal	0	15	15	0.001
Postmenopausal	15	15	30	
Total	15	30	45	

$\chi^2=11.250$, $df=1$, $P<0.05$

however constituted 5.2% of major gynecological surgeries and this was similar to the global prevalence of prolapse surgeries that range from 6% to 18%.¹²

The mean age was 56.7 ± 15.5 years, and the modal age group was 60–69 years. Those within the reproductive age group were 27.9%, and this was comparable to 30% noted in a study in Port Harcourt, Nigeria.¹³ Farmers constituted 60.7% of the patients which was similar to a study done in Ethiopia where most of the women were farmers, an occupation that may have detrimental effect to the genitourinary supporting structures.⁶ Majority of the patients (72.1%) were postmenopausal which was in keeping with the fact that the supports of the pelvic organs are estrogen dependent.¹¹ Grandmultiparas made up 70.5% of the patients which was comparable to 73% documented in Port Harcourt, Nigeria.¹³ This is not surprising because myofascial fibers can be disrupted or torn due to distension of the fetal head and body during labor.⁷ Moreover, this would expectedly get worse with repeated childbirth.

The sensation of something coming down the vagina was the most common symptom noted in 98.4% of the patients. This was comparable to that reported in other health facilities.^{3,11,13} In contrast, low backache which was noted in 16.4% of the patients was less than that reported in Ilorin and Orlu.^{1,3} Other symptoms include urinary frequency, pelvic heaviness, dysuria, and feeling of incomplete bladder emptying. Only one patient was diagnosed with stress incontinence in this study. Stress incontinence as a complication of genital prolapse is not a common problem among Nigerian women when compared to their counterparts in the developed world.¹ However, only vaginal protrusion is the specific symptom of genital prolapse.⁹ Most (23.0%) of the patients had unsupervised delivery at home, and this was followed by prolonged labor. This was in keeping with a study done at Ilorin, Nigeria where most of the patients had home deliveries.³

Unsupervised labor with bearing down efforts before full cervical dilatation weakens the genital supporting ligaments and pelvic fascia.¹¹

Uterovaginal prolapse was the most commonly (70.5%) diagnosed type of genital prolapse with third-degree uterovaginal prolapse as its most frequent presentation. This was in contrast to studies done at Enugu and Port Harcourt where second degree uterovaginal prolapse was commonest.^{1,11,13} This may be explained by the fact that over two-thirds of our patients were postmenopausal which was found in this study to be significantly associated with the degree of uterovaginal prolapse.

The majority of patients (44.4%) with mildly symptomatic genital prolapse were managed expectantly. The most common surgical procedure performed was vaginal hysterectomy with pelvic floor repair (33.3%) which was done mainly in those with third-degree uterovaginal prolapse. This was in keeping with other studies where vaginal hysterectomy with pelvic floor repair was the main definitive operative procedure.^{1,11,13} For the subset of women with uterovaginal prolapse, menopausal status, was found to influence their choice of hysterectomy as a management option. This is because postmenopausal women are unlikely to desire future childbearing.

For those who underwent surgery, no intra-operative adverse event was recorded. However, one of the patients had the uterus eventually removed abdominally in the course of vaginal hysterectomy due to difficulties encountered when attempting to remove it vaginally. The mean duration of hospital stay postoperatively was 5 days. Only one of the patients stayed up to 11 days postoperatively due to persistent vaginal discharge. Proper patient workup before surgery, meticulous surgical technique and routine antibiotic prophylaxis may have contributed to the reduced rate of postoperative morbidity.

CONCLUSION

Genital organ prolapse is a significant cause of morbidity in women. This is especially so in multiparous and postmenopausal women. Unsupervised/poorly conducted delivery and conditions associated with chronically raised

intra-abdominal pressure have been shown to be important risk factors. Public enlightenment, women empowerment, adequate antenatal coverage especially in the rural settings, limitation of family size, and widespread use of contraceptives are measures which if implemented would reduce the burden of this disease in our environment.

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Conflicts of interest

There are no conflicts of interest.

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