An audit of uterovaginal prolapse in Ogbomoso, south-west Nigeria.

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Original article

Abstract

Objective: Uterovaginal prolapse (UVP) as a gynaecological problem is very common especially in multipara. This condition is important to gynaecologists practicing in Sub-Saharan Africa because of its strong link with multiparity, poor conduct of labour, and most importantly, its role as a cause of chronic morbidity in many post-menopausal women necessitating major gynaecological surgeries..

Methods: A retrospective study of utero-vaginal prolapse to determine the prevalence, presentation , management patterns and complications of UVP at the Bowen University Teaching Hospital , Ogbomosho, Oyo State, Nigeria between January 1, 2010 and December 31, 2014. Relevant data were obtained from the case notes, which included age, parity, presenting symptoms, number of living children, types of delivery, types of surgical management and associated operative morbidity and mortality. The data were presented as simple percentages.

Results : The prevalence of uterovaginal prolapse was 5.4%. The mean age at presentation was 51.4± 3.3 years. The mean parity was 4.2± 1.6. Fifty-six (90.3%) of them were at least 40 years old . Majority of the patients(80.6%) were grand-multiparous. The commonest symptom was 'something coming down the vagina' in 96% of the study subjects. Difficult labour was found to be the most common associated factor in 47 (76.2%) of the patients Second degree prolapse was the commonest type of presentation (74.2%). The most common form of treatment offered was vaginal hysterectomy with pelvic floor repair, 46 (74.2%) of the patients. Twenty -four (38.7%) patients had vaginal pessaries inserted for various degrees of UVP.

Conclusion: Uterovaginal prolapse is a common gynaecological condition of the parous and elderly postmenopausal women associated with a decreased body image and quality of life. Supervised hospital deliveries and limiting the family size by efficient contraception deserve priority attention to prevent this social malady.

Keywords: Difficult labour, uterovaginal prolapse, hysterectomy, multiparity

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Un audit de prolapsus uterovaginal dans Ogbomoso, au sud-ouest du Nigeria.

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Resume

Objectif: prolapsus utérovaginale (UVP) comme un problème gynécologique est très fréquent surtout chez les multipares. Cette condition est importante pour les gynécologues pratiquant en Afrique sub-saharienne en raison de son lien étroit avec la multiparité, la mauvaise conduite du travail, et surtout, son rôle en tant que cause de morbidité chronique chez beaucoup de femmes post-ménopausées nécessitant des chirurgies majeures gynécologiques.

Méthodes: Une étude rétrospective de utéro-vaginale prolapsus pour déterminer la prévalence, la présentation, les modèles et les complications de UVP gestion à l'hôpital universitaire Bowen Enseignement, Ogbomosho, Etat d'Oyo, au Nigeria entre le 1er Janvier 2010 et le 31 Décembre 2014. Les données pertinentes ont été obtenu à partir des notes de cas, qui comprenaient l'âge, la parité, présentant des symptômes, le nombre d'enfants vivants, types de livraison, les types de prise en charge chirurgicale et de la morbidité opératoire et la mortalité associées. Les données ont été présentées sous forme de pourcentages simples.

Résultats: La prévalence du prolapsus uterovaginal était de 5,4%. L'âge moyen à la présentation était de 51,4 ± 3,3 ans. La parité moyenne était de 4,2 ± 1,6. Cinquante-six (90,3%) d'entre eux étaient âgés d'au moins 40 ans. La majorité des patients (80,6%) étaient grand-multipares. Le symptôme le plus courant était «quelque chose qui descend dans le vagin» dans 96% des sujets de l'étude. travail difficile a été trouvé pour être le facteur le plus commun associé à 47 (76,2%) des patients Deuxième prolapsus de degré était le type le plus commun de présentation (74,2%). La forme la plus courante de traitement offert était l'hystérectomie vaginale avec la réparation du plancher pelvien, 46 (74,2%) des patients. Vingt-quatre (38,7%) patients avaient pessaires vaginaux insérées pour divers degrés de UVP.

Conclusion: utérovaginale prolapsus est une condition gynécologique commune des femmes multipares âgées et ménopausées associées à une image corporelle diminué et la qualité de vie. accouchements à l'hôpital supervisées et limiter la taille de la famille par la contraception efficace méritent une attention prioritaire pour prévenir cette maladie sociale.

Mots-clés: Travail difficile, prolapsus uterovaginal, l'hystérectomie, la multiparité

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INTRODUCTION

Uterovaginal prolapsed (UVP) is defined as the descent of the pelvic organ(s) beyond its anatomical confines, it is also known as Pelvic Organ Prolapse (1). it is a very common gynaecological condition especially in multiparous and postmenopausal women . It is due to defects in the support structures of the uterus and vagina namely the uterosacral ligaments, the cardinal ligaments complex and connective tissue of the urogenital membrane (2). The true incidence of this disorder is not known because many of the cases are asymptomatic and many women feel shy to complain of uterovaginal prolapsed (3,4). Some degree of uterovaginal prolapse is seen in 50% of parous women with 10-20% of these causing symptom[s] (2) . The development of uterovaginal prolapse is multifactorial (5).

Pelvic floor defects may develop as a result of repeated pregnancies and childbirth and are caused by the stretching and tearing of the endopelvic fascia, levator ani muscles, perineal body, and associated pelvic floor nerve injuries (6). Poor conduct of labour, as in bearing down before full cervical dilation, prolonged traction from high forceps delivery, and downward pressure on the fundus during attempts to deliver the placenta (Crede's manoeuvre) are all obstetric factors which predispose to uterine prolapse (7,8,9).

Precipitating factors for uterovaginal prolapse include conditions of chronically raised intra-abdominal pressure, such as chronic obstructive airway diseases, obesity, abdominal tumours, straining during defaecation and heavy physical exertion (2,3,10). Uterovaginal prolapse in young and nulliparous or low parous womencould be due to congenital weakness of the pelvic floor muscles (as in spina bifida), joint hypermobility (as in connective tissue abnormalities), and altered collagen metabolism (11,12). The female genital organs are maintained in their normal anatomical position by a number of fascial condensations (endopelvic fascia) referred to as *ligaments*, especially the transverse cervical (cardinal) and uterosacral ligaments (2). Weakness in any of these supportive structures leads to uterine descent, particularly around the period of menopause when estrogen withdrawal causes additional insult to the integrity of the pelvic supports already weakened by repeated vaginal deliveries. Hence, childbirth and aging constitute the most important associated factors of female genital prolapsed (7). Skilled attendants give clear instructions to women in labour when to start bearing down . They will also ensure adequate analgesia thereby preventing bearing down before full cervical dilatation which has been shown to weaken pelvic support and precipitate uv prolapsed. Appropriately timed caesarean section has also been shown to reduce incidence of difficult instrumental vaginal deliveries (3).

Three degrees of uterovaginal prolapse are described using the location of the cervix (the lowest and dependent part)of the prolapsed uterus in relation to the introitus. This is assessed while the patient is straining. First degree prolapse is diagnosed when the descent is still within the vagina; second degree when it has descended to the introitus and third degree when it has descended outside the introitus.

Certain factors are considered in the management of uterine prolapse such as age, the desire for preservation of reproductive function, the desire for preservation of coital function, general medical status, , symptomatology and physical examination findings (8).The definitive treatment is surgery. Vaginal hysterectomy with pelvic floor repair is offered to patients who have completed their family size. Conservative surgery (Manchester repair) is offered to those where reproductive function is desired (3,10). Leforte's operation is an option in the patients who no longer desire sexual functions or are too old to withstand vaginal hysterectomy (10). Pessaries can be used in patients not fit for surgery, patients on waiting list for surgical repair, or those who do not wish to have surgery. It can also be used in those who are pregnant with a prolapse.

Uterovaginal prolapse affects multiparous and elderly women and the cost of its management is substantial (11). This study was designed to determine the prevalence and management outcome of this condition at Bowen University Teaching Hospital, Ogbomosho, and also, the attendant morbidities associated with repair procedures. .

METHODOLOGY

This was a retrospective study of uterovaginal prolapse at the Bowen University Teaching Hospital , Ogbomosho , Oyo State - Nigeria between January 1, 2010 and December 31, 2014. Data was retrieved from gynaecological ward admission register, case files, theatre records , ward reports and outpatient records of the 62 women who were treated for U-

V prolapse. Only those cases of uv prolapse with proper record of one form of management or the other were included in the study. Cases with incomplete or missing record were excluded

Information sort were socio-demographic characteristics (age, parity, occupation, tribe, menopausal status), presenting complaint, duration of symptoms, degrees of prolapse, management modality and outcome, complications as well as operative findings. The data were analyzed by descriptive and inferential statistics using the statistical package for social science (SPSS) version 20 and the results expressed in descriptive statistics by simple percentages with frequency tables.

Ethical clearance was obtained from the ethics and research committee of the Bowen University Teaching Hospital, Ogbomosho before the commencement of the study.

RESULTS

The prevalence of uterovaginal prolapsed calculated from this study was 5.4% of total gynaecologic cases managed during the period of study. The mean age at presentation was 51.4± 3.3 years with a range of 20-91years. About 90.3% of them were at least 40years old while the remaining 10% were younger than 40 years (Table 1). The parity distribution ranged from 0 to 7 with a mean of 4.2±1.6. Grand multiparity accounted for 80.6% of the cases (Table 2). Two (3.2%) patients (20 and 25 year old primigravidae) presented with UVP in the first trimester of pregnancy and had vagina pessary inserted until 36th week of pregnancy .

The most common presenting symptom was the sensation of a protrusion down the vagina in 60 (96.8%) patients. Urinary symptoms such as dysuria and stress incontinence occurred in 18 (29%) and 11 (17.7%) of the patients respectively while urinary retention occurred in 2 (3.2%) patients. Decubitus ulcer occurred in 14 (22.6%) of the patients (Table 3).

Difficult labour was the most common associated factor 47 (76.2%), while postmenopausal changes accounted for 40 (64.5%) of the cases (Table 4). The most common type of genital prolapse as seen in this review was the second degree, which accounted for 46(74.2%) of the cases while third degree prolapse occurred in 14 (22.6%) of the patients as shown in Table 5. The most common form of treatment offered was vaginal hysterectomy with pelvic floor repair in 46 (74.2%) of the patients. 24 (38.7%) of the patients had vaginal pessaries inserted for various degrees of UVP. Bladder injury occurred in one of the vagina hysterectomies and was repaired primarily. No mortality was recorded throughout the period of study.

DISCUSSION

The prevalence of 5.4% for uterovagina prolapsed in this study was similar to that of Balogun et al (13) in Ilorin in 1997, and that of a population based study (6%) but higher than that of Port Harcourt study (3.7%) (3) and Nnewi study (2.1%) in 2003 (12). Variations in prevalence might be due to the differences in the populations studied, and the differing periods of the studies.

. The mean age at presentation was 51.4 years. The condition was commoner in older patients with more 90% of them at least 40 years old Higher proportion of these older age groups were postmenopausal. This was not surprising as the hypooestrogenic state and genital atrophy of menopause are strong risk factors for the development of uv prolapse since the supports of the pelvic organs are oestrogen dependent. About eighty-one percent of the women were grandmultiparous and this buttresses the fact that multiparity is a significant risk factor in the development of uterovaginal prolapsed (7). The stress of multiple unsupervised vaginal deliveries at home with prolonged labour is probably the main factor in these women. Unsupervised labour with bearing down efforts before full cervical dilatation weakens the genital supporting ligaments and pelvic fascia (14).The finding of prolapse in a young multipara and unmarried young girl is documented though uncommon(15). Forty-eight percent of the women were farmers and lifted heavy objects for years which were contributory to the development of this condition. .

Most of the women had 2nd degree prolapse 74.2%, and 22.6% had 3rd degree prolapse. They however presented relatively late as the mean duration of symptoms was 4.8 years.

The symptoms of uterovaginal prolapse in this review are similar to those reported in other centers (13,16,17). The sensation of "something coming down the vagina" was the most common symptom, accounting for 96.8% of the cases; this was similar to the 92.8% reported from Ilorin, and 93.4% from Ibadan (13,16). Stress incontinence was noted in 17.7% and is in agreement with14.5% reported by Osinusi, *et al,* but higher than those reported by Ogunbode, et al, from

Ibadan (16,17). 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 where as high as 52.4% of cases of stress incontinence have been reported in association with uterovaginal prolapsed (9,11). Other symptoms are dysuria, frequency and urinary retention. Backache and constipation are also reported by some women.

Vaginal hysterectomy and pelvic floor repair are the main definitive treatment in this study (74.2%), though multiple modalities of management were observed. The two patients with uterovaginal prolapse in pregnancy had pessary inserted in the first trimester. The pessary holds the uterus in correct position before it enlarges and become incarcerated in the pelvic cavity. Some of the patients who had vaginal hysterectomy eventually were initially treated with various forms of pessaries either to allow healing of decubitus ulcers or temporarily during work up for definitive surgery .

The limitation of this study was lack of follow-up and poor documentation of data. Data was scanty and poorly documented. Other limitations of this study were the fact that it was an institution-based study with the limited power of the study on account of the small sample size. These limitations must be borne in mind when making extrapolations to the general population.

CONCLUSION

Uterovaginal prolapse affects women both in the child bearing age and post menopausal period. Grand multiparity with unsupervised delivery has been identified as the major risk factor in uterovaginal prolapse in this study. Efforts should be geared towards public enlightenment and health education, effective antenatal care, supervised hospital deliveries, and limiting of family size with the use of effective contraception..

Ethical Consideration

Ethical clearance was obtained from the ethics and research committee of Bowen University Teaching Hospital, Ogbomoso before the commencement of this study

Conflicts of interest: No conflict of interest is declared.

REFERENCES

1. Tarney CM, Dorr CH: Relaxation of Pelvic Support In: DeCherney AH, Nathan L (eds) Current Obstetric and Gynecological Diagnosis and Treatment, 9th Edition. New York McGraw-Hill Companies 2003; 776-797.
2. Robinson D. Urogenital Prolapse, In: Luesley DM, Baker PN (eds). Obstetrics and Gyaecology: An evidence-based text for MRCOG 1st Edition London, Anorld 2004; 661-670.
3. John CT. Genital Prolapse. In: Okonofua FE, Odunsi K (eds) Contemporary Obstetrics and Gynaecology for Developing Countries. Benin City, WHARC 2003; 214-226.
4. Stanton SL. Vaginal Prolapse. In: Edmonds DK (ed) Dewhurt's Textbook of Obstetrics and Gynaecology for Post graduates, 6th Edition: London, Blackwell Science 1999; 462-473
5. Jeffcoates TNA. Genital prolapse. In: Jeffcoates TNA (Ed). Principles of gynaecology. 7th ed; India, Jaypee; 2008:324-334.
6. Lewis AC. Major Gynaecology surgery in the elderly. J Int Fed Gynaecol Obstet 1968; 6:244-258
7. Agboola A. Urogenital prolapse and displacement of the uterus. In: Agboola A (Ed). Textbook of obstetrics and gynaecology for medical students, 2nd ed; Ibadan, Heinemann Educational Books (Nig) Plc; 2006: 31-39.
8. Smi ARB. Pelvic floor dysfunction 1: uterovaginal prolapse. In: Edmonds DK (Ed). Dewhurst's Textbook of Obstetrics and Gynaecology; 7th ed; Oxford, Blackwell Publishing; 2007:496-503.
9. Tindall VR. Genital prolapse. In: Tindall VR. (Ed). Jeffcoates principle of gynaecology. 5thed. London, Butterworths and Co. Publishers; 1987:260-274.
10. O' Leary JA, O' Laery JL. The extended Manchester operation: A review of 289 cases. Am J Obstet Gynecol 1990; 107:564-559.
11. P. Pelvic Kushtagi Organ Prolapse. In: Arulkumaran S, Sivanesaratnam V, Chatterjee A, Kumar P (Eds). Essentials of Gynaecology; New Delhi, Jaypee Brothers Medical Publishers; 2005:147-155
12. Okonkwo JE, Obiechina NJ, Obionu CN. Incidence of pelvic organ prolapse in Nigerian women. J Nath Med Assoc. 2003; 95(2):132-136.
13. Balogun OR. Genital Prolapse in Ilorin: A-seven year review. Niger J Med 1997: 6(3):77-82.
14. Onowhakpor EA, Omo-Aghoja LO, Akani CI, Feyi-Waboso P. Prevalence and determinants of uterovaginal prolapse in Southern Nigeria. Niger Med J. 2009; 50(2): 29-32.
15. Omolayole JA, Akingba JB. Procidential in adolescence. Niger Med J. 1975; 5: 277-279
16. Osinusi BO, Adeleye JA. The symptomatology and clinical presentation of uterovaginal prolapse in Ibadan. Niger Med J 1976; 8:451-454
17. Ogunbode O, Aimakhu VE. Uterine proplapse during pregnancy in Ibadan. Am J Obstet Gynaecol 1973; 16:622-625.

Table 1. Aspect of Socio - Demographic Characteristics of Patients with U-V Prolapse (n=62)

Age (in years)	Frequency	Percentage
<40	6	9.7
≥40	56	90.3
Parity	Frequency	Percentage
0	2	3.2
1-4	10	16.2
5 and above	50	80.6

Table 2. Showing Signs and Symptoms+ of U-V prolapse

Symptoms	Number of patients N= 62	Percentage
Sensation of something coming down the vagina	60	96.8
Dysuria	18	29.0
Decubitus ulcer	14	22.6
Stress incontinence	11	17.7
Urinary retention	2	3.2
Low back ache	44	71.0
Others	16	25.8

+ Multiple symptoms and signs in most cases

Table 3. Showing Associated aetiological factors+ in uterovaginal prolapse

Aetiological factors	Number o patients N= 62	Percentage
Difficult labour	47	75.8
Postmenopausal	40	64.5
Chronic cough	15	24.2
Lifting heavy load	30	48.4
Others	10	16.1

+ Multiple aetiological factors in most cases

Table 4. Showing Type of U-V Prolapse and Treatment Modalities+ (n=62)

Variables	Frequency	Percentage
Type of U-V prolapse		
1st Degree	2	3.2
2nd Degree	46	74.2
3rd Degree	14	22.6
Treatment Modalities		
Vaginal hysterectomy with Pelvic floor repair	46	74.2
Vaginal pessaries	24	38.7

+ multiple treatment modalities observed in some cases