

Decubitus Ulcers among Women with Utero-vaginal Prolapse

Isikhuemen ME^{1*}, Ekwedigwe KC², Sunday-Adeoye I², Eliboh MO² and Asiegbu OG²

¹Department of Obstetrics and Gynecology, University of Benin Teaching Hospital, Nigeria

²National Obstetric Fistula Centre, Abakaliki, Ebonyi State, Nigeria

*Corresponding author: Isikhuemen ME, Department of Obstetrics and Gynecology, University of Benin Teaching Hospital, Benin City, Edo State, Nigeria, Tel: +2348050638600; E-mail: maradona4real2002@yahoo.com

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Abstract

Objective: To document our experience with decubitus ulcers among women with utero-vaginal prolapse.

Methods: This retrospective study was conducted at the National Obstetric Fistula Center, Abakaliki, South-East Nigeria. Medical records of women with utero-vaginal prolapse who had decubitus ulcers between June 2012 and May 2017 were reviewed. Data was analyzed using statistical methods.

Results: The mean age was 56.37 ± 11.62 years. The mean parity was 6.89 ± 2.57 . Duration of prolapse ranged from 1 to 40 years. One hundred and seven (9.2%) had decubitus ulcers. The occurrence of decubitus ulcers increased with increasing age. Of those that had second and third degree utero-vaginal prolapse, 4.3% and 18.8% respectively had decubitus ulcers. Estrogen gel was used in the treatment of decubitus ulcers. All patients had vaginal hysterectomy with pelvic floor repair after the ulcer had healed.

Conclusion: Decubitus ulcers can complicate utero-vaginal prolapse. Its occurrence increases with increasing severity of utero-vaginal prolapse. Estrogen gel is effective in its treatment.

Keywords: Decubitus ulcers; Utero-vaginal prolapse; Pelvic organ prolapse; Estrogen gel

Introduction

Pelvic organ prolapse is the protrusion of the pelvic organs into the vagina [1]. It represents weakening of the pelvic floor muscles. It usually occurs with increasing age, increasing parity and exposure to difficult and prolonged labor [2]. The incidence of utero-vaginal prolapse varies from one location to the other and it is difficult to determine because some women with small degree of prolapse may not seek medical care. As we expect life expectancy to continue to increase in middle and low income countries, diseases such as pelvic organ prolapse which occurs with ageing will need to receive adequate attention.

Decubitus ulcer is a complication of pelvic organ prolapse [3,4]. It usually occurs when the disease has advanced and it is a feature of long standing utero-vaginal prolapse. Affected women are usually concerned not just about their prolapse but on the developing ulcer. This ulcer has been attributed to venous congestion in the affected organ [4]. Venous congestion causes oedema of the local tissue and this may result in decrease in tissue strength thereby making it more friable [4]. All these may reduce the strength of the vaginal tissue. Also, friction between the prolapsed organ and the patients' clothes may play a role. It is also of concern when surgery is contemplated because the affected tissues appear friable which may cause difficulties during vaginal hysterectomy. This may eventually lead to delay in surgery thereby depriving the affected women of the cure to their physical and psychosocial problem. In women with utero-vaginal prolapse, ulcers

may be associated with cervical intraepithelial neoplasia and cervical malignancy [5,6].

The treatment of decubitus ulcers varies in different settings. The use of estrogen-soaked vaginal packing in the treatment of decubitus ulcers in women with utero-vaginal prolapse has been described [3]. Some authors have also documented the usefulness of vaginal packing with povidone iodine in women with ulcerated utero-vaginal prolapse [4]. Due to the enormous distress caused by an ulcerated utero-vaginal prolapse, there is need to prevent occurrence of the disease and appropriately treat affected women.

The aim of this study was to document our experience with decubitus ulcers among women with utero-vaginal prolapse.

Materials and Methods

This retrospective study was conducted at the National Obstetric Fistula Centre, Abakaliki South-East Nigeria. The study facility offers free services to women with genital fistula. It also provides care for women with pelvic organ prolapse and other forms of pelvic floor dysfunctions. It has a bed space capacity of 96. This study involved the review of medical records of women with utero-vaginal prolapse who had decubitus ulcers between June 2012 and May 2017. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 21. Ethical clearance for the study was obtained from the Research and Ethics committee of the National Obstetric Fistula Centre, Abakaliki. Women who had decubitus ulcers were treated with estrogen gel. Ulcers were allowed to heal before surgery was considered. They were then followed up.

Results

The age range was 22-78, with a mean age of 56.37 ± 11.62 years. Parity ranged from 1-15, with a mean parity of 6.89 ± 2.57 . Duration of prolapse ranged from 1 to 40 years.

The occurrence of decubitus ulcers increased with increasing age, but there was a reduction from 70 years and above (Table 1).

Variables		Frequency (%)
Age	20-29	3 (2.8)
	30-39	6 (5.6)
	40-49	20 (18.7)
	50-59	23 (21.5)
	60-69	37 (34.6)
	70-79	18 (16.8)
Occupation	Trading	12 (11.2)
	Farming	86 (80.4)
	Teaching	2 (1.9)
	Artisan	3 (2.8)
	Unemployed	4 (3.7)
Level of Education	No formal education	97 (90.7)
	Primary	6 (5.6)
	Secondary	4 (3.7)
Parity	Primipara	2 (1.9)
	Multipara	15 (14)
	Grandmultipara	90 (84.1)
Marital Status	Married	50 (46.7)
	Widow	57 (53.3)

Table 1: Socio-demographic variables of the women that were reviewed.

Out of 1168 women who presented with utero-vaginal prolapse during the review period, 107 (9.2%) had decubitus ulcers. They were mostly menopausal (Table 2).

No woman with cystocele, rectocele or first degree utero-vaginal prolapse had decubitus ulcers. Of those that had second and third degree utero-vaginal prolapse, 4.3% and 18.8% respectively had decubitus ulcers (Table 3). Out of the 107 women that had decubitus ulcers, 90 (84.1%) had third degree utero-vaginal prolapse while 17 (15.9%) had second degree utero-vaginal prolapse. Decubitus ulcers were treated for 1 to 4 months with estrogen gel.

All the patients had vaginal hysterectomy with pelvic floor repair after the ulcer had healed. Only one had significant intraoperative bleeding and another one had postoperative bleeding which may not have been related to the presence of decubitus ulcers. None had surgical site infection or pyelonephritis following surgery. The long

term prognosis was good as all recovered well and none had recurrence of symptoms.

Menopausal status	Frequency (%)
Premenopausal	25(23.4)
Postmenopausal	82 (76.6)

Table 2: Menopausal status of women with ulcerated utero-vaginal prolapse.

Parity	Frequency (%)
Cystocele/Rectocele (n=142)	0 (0)
First degree utero-vaginal prolapse (n=151)	0 (0)
Second degree utero-vaginal prolapse (n=397)	17 (4.3)
Third degree utero-vaginal prolapse (n=478)	90 (18.8)

Table 3: Occurrence of decubitus ulcers in various types of pelvic organ prolapse.

Discussion

Decubitus ulcers are a source of concern in the management of women with pelvic organ prolapse. In this study, the mean age of women with ulcerated utero-vaginal prolapse was 56.37 years. This is not surprising as utero-vaginal prolapse tends to occur in the older age group. The mean age in this study is slightly lower than the value reported from a case series of 13 patients in which the mean age of women with ulcerated pelvic organ prolapse was 69 years [3]. Also, the occurrence of decubitus ulcers in women with pelvic organ prolapse progressively increased from the third to seventh decade of life. With increasing age, the duration of prolapse tends to increase and this may account for the above finding. With an ageing population, the demand for experts in the management of pelvic organ prolapse will also increase [7].

The study showed that women with decubitus ulcers were mostly post-menopausal (76.6%). Menopause is known to play a role in the occurrence of utero-vaginal prolapse [8]. Its role in the formation of decubitus ulcers in women with utero-vaginal prolapse is not clearly documented. However, the finding from this study indicates that menopause may be a risk factor for the formation of decubitus ulcers in women with pelvic organ prolapse. In a related study, all women with ulcerated utero-vaginal prolapse were postmenopausal [3]. The hallmark of menopause is withdrawal of estrogen. This may explain why ulcerated utero-vaginal prolapse can be treated with estrogens.

Decubitus ulcers occurred in 9.2% of women with pelvic organ prolapse. In a study conducted in South-East Nigeria, decubitus ulcers occurred in 33.3% of the patients [9]. This may have differed from our study because of the small sample sized used in that study. The occurrence of decubitus ulcers in women with pelvic organ prolapse may be a source of worry and requires prompt attention. No woman with cystocele, rectocele or first degree utero-vaginal prolapse had decubitus ulcers. Of those that had second and third degree utero-vaginal prolapse, 4.3% and 18.8% respectively had decubitus ulcers. This clearly shows that severity of prolapse is important for the formation of decubitus ulcers in utero-vaginal prolapse. Those with severe forms of prolapse which is a feature of long standing disease are

more likely to have ulcerated utero-vaginal prolapse. Again, the role of venous congestion and tissue edema in the pathogenesis of decubitus ulcers in women with utero-vaginal prolapse have been documented [4]. Also, friction between the patient's clothes and the prolapsing organ may contribute to the formation of decubitus ulcers in women with utero-vaginal prolapse and this may be one of the reasons why it is not usually encountered in milder forms of pelvic organ prolapse. It is therefore not surprising that women with cystocele, rectocele and first degree utero-vaginal prolapse did not present with ulcers in the prolapsing organ. These are usually of short duration and the prolapsing organ is not usually in contact with the patients' clothes.

Use of estrogen gel in the treatment of ulcerated utero-vaginal prolapse has been previously documented by other authors [3]. Also the uses of povidone iodine in similar conditions have also been described [4]. With effective treatment of ulcers prognosis of surgery is usually good as shown in this study. We treated our patients with estrogen gel with duration of treatment ranging from one to four months. There were problems of financial constraint thereby leading to poor compliance with treatment and this resulted in the fairly long duration of treatment seen in this study.

The strength of this study is in its large sample size. Studies related to this subject appear to be few. Also the duration of study gives additional credit to this research. This study is however limited by the fact that it did not explore the various treatment options for women with ulcerated utero-vaginal prolapse. Also, this study has the disadvantage of being a retrospective study.

Conclusion

Decubitus ulcers can complicate utero-vaginal prolapse. Its occurrence increases with increasing severity of utero-vaginal prolapse.

It can be treated with estrogen gel. The occurrence of decubitus ulcers in women with utero-vaginal prolapse does not appear to influence outcome of surgery.

References

1. Thakar R (2002) Management of genital prolapse. *BMJ* 324: 1258-1262.
2. Adeoye IS, Ekwedigwe K, Daniyan B, Okonta P, Eliboh O (2015) Pelvic organ prolapse: a significant cause of psychosexual and social burden. *Sky J Med Sci* 3: 067-070.
3. Abdullah B, Khong SY, Tan PC (2016) Oestrogen-soaked vaginal packing for decubitus ulcer in advanced pelvic organ prolapse: a case series. *Int Urogynecol J* 27: 1057-1062.
4. Manidip P, Soma B (2013) Moist vaginal packing for utero-vaginal prolapse: A clinical study. *J Evol Med Dent Sci* 2: 619-623.
5. Ganta SJ, Holkar P, Dabade T, Sharma S (2016) A case of UV prolapse with cervical intraepithelial neoplasia 2. *Int J Reprod Contracept Obstet Gynecol* 5: 4509- 4513.
6. Massinde AN, Rumanyika RR, Kihnurwa A, Rambau P, Magoma M (2012) Malignant mixed Mullerian tumour of the prolapsed cervix: A case report. *Tanzan J Health Res* 14: 158-161.
7. South M, Amundsen CL (2007) Pelvic organ prolapse: a review of the current literature. *Minerva Ginecol* 59: 601-612.
8. Kim CM, Jeon MJ, Chung DJ, Kim SK, Kim JW, et al. (2007) Risk factors for pelvic organ prolapse. *Int J Gynaecol Obstet* 98: 248-251.
9. Ojiji EC, Dike EI, Anolue FC, Nzewuihe ACE, Ejikem CC (2013) Uterovaginal prolapse at a university teaching hospital in South-East Nigeria. *Orient J Med* 25: 107-112.