COMORBIDITIES AMONG WOMEN WITH PELVIC ORGAN PROLAPSE

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ABSTRACT

BACKGROUND: Comorbidities are a source of worry in women with pelvic organ prolapse. With increasing age, incidence of other medical conditions tends to increase hence it is not surprising to find comorbidities in women with pelvic organ prolapse.

OBJECTIVE: To document the comorbidities among women with pelvic organ prolapse.

METHODS: This retrospective study was conducted at the National Obstetric Fistula Centre, Abakaliki South-East Nigeria. This study involved the review of medical records of women with uterovaginal prolapse between June 2012 and May 2017. The data of 1168 women were available for review.

RESULTS: The mean age was 49.76 ± 13.57 years. Comorbidities occurred in 250 (21.4%) of the cases reviewed. The comorbidities commonly encountered were hypertension in 139 (11.9%), obesity in 56 (4.8%), peptic ulcer disease in 17 (1.5%) and diabetes mellitus in 16 (1.4%). Others were anaemia and human immunodeficiency virus infection. Sixty-three women (5.4%) experienced a delay in surgery as a result of these comorbidities.

CONCLUSION: The comorbidities encountered in this study were obesity, hypertension, diabetes, anaemia, peptic ulcer disease and human immunodeficiency virus infection. There is need to adequately manage these comorbid conditions so as to prevent adverse surgical outcome.

KEYWORDS: Comorbidities; pelvic organ prolapse; uterovaginal prolapse; hypertension; obesity; anaemia.

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INTRODUCTION

With increasing life expectancy, urogynaecologists worldwide should expect a growing demand for counselling and treatment of women with pelvic floor disorders.[1] Pelvic organ prolapse has continued to remain a source of worry to gynaecologists in middle and low income countries. Its causes are multifactoral and they vary from one geographical region to another. Childbirth and problems relating to labour are the usual causes in developing nations.[2]

Comorbidities are a source of worry in women with pelvic organ prolapse. With increasing age, other medical conditions tends to increase hence it is not surprising to find comorbidities in women with pelvic organ prolapse. These comorbidities are very important in the management of such women especially when surgery is contemplated since they may adversely influence its outcome. Early diagnosis of these comorbidities would ensure adequate preparation for surgery with a better outcome. Incidental discovery of these comorbidities and their management contributes to a better maternal health thereby increasing life expectancy. Cancellation of surgeries are usually done if the affected patients will not be able to withstand surgery, including anaesthesia as a result of these comorbidities and this is for the benefit of the patient as continuation of such surgeries without controlling such comorbidities may have fatal consequences. It should also be noted that advancing age in the absence of comorbidities may adversely affect surgical outcomes. Hence, when comorbidity is superimposed with advancing age, the outcome may be unfavourable.

Also comorbidities may increase duration of hospital stay in the affected patients following surgery and this will definitely put more strain

on the available scarce resources. There is therefore need for proper identification and treatment of comorbidities in women with pelvic organ prolapse.

The objective of this study was to document the comorbidities among women with pelvic organ prolapse.

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 manages women with pelvic organ prolapse. It has a bed space capacity of 96. This study involved the review of medical records of women with uterovaginal prolapse between June 2012 and May 2017. The data of 1168 women were available for review. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 21. The study protocol was approved by the Research and Ethics committee of the National Obstetric Fistula Centre, Abakaliki. The various comorbidities encountered were adequately managed before surgery. All patients with hypertension were stabilised before surgery. Those that were diabetic achieved a good glycaemic control before surgery. Women with packed cell volume less than 30% were considered anaemic and had oral haematinics until packed cell volume appreciated to 30% or more. Those that had peptic ulcer disease were treated with anti-ulcer medications. Conservative management was attempted for women with mild degree of prolapse. Such women opted for surgery when conservative management did not yield the desired result.

RESULT

The mean age was 49.76 ± 13.57 years. Age group 60 - 69 had the highest frequency of prolapse (Table 1). Comorbidities occurred in 250 (21.4%) of the cases reviewed. The commonly encountered comorbidities were hypertension in 139 (11.9%), obesity in 56 (4.8%), peptic ulcer disease in 17 (1.5%) and diabetes mellitus in 16 (1.4%) as shown in table 2. The other comorbidities encountered were anaemia and retroviral disease. Sixty-three women (5.4%) experienced a delay in surgery as a result of these comorbidities. The various forms of pelvis organ prolapse encountered were cystocoele, rectocoele and uterovaginal prolapse of various degrees.

These comorbidities did not appear to influence surgical outcomes as they were adequately managed before surgery. The only mortality recorded during the study period was not related to any comorbidity but rather postoperative complication. For those that

TABLE 1: AGE RANGE OF THE STUDY POPULATION

Age	Frequency (%)
10 – 19	4 (0.3)
20 – 29	85 (7.3)
30 – 39	183 (15.7)
40 – 49	237(20.3)
50 – 59	270 (23.1)
60 – 69	305 (26.1)
70 – 79	80 (6.8)
80 and above	4 (0.3)

TABLE 2: VARIOUS COMORBIDITIES IN WOMEN WITH PELVIC ORGAN PROLAPSE.

Comorbid condition	Frequency (%)
Hypertension	139 (11.9)
Diabetes mellitus	16 (1.4)
Anaemia	11 (0.9)
Peptic ulcer disease	17 (1.5)
HIV	11 (0.9)
Obesity	56 (4.8)

were hypertensive, the duration of hospital stay after surgery was an average of 10 days. The long term follow up for the patients studied were good.

DISCUSSION

Pelvic organ prolapse is a burden to the aging population. Medical illnesses also abound in this age group. Comorbidities in these women may influence the timing of surgery and certain precautions may be taken in the perioperative period to prevent adverse outcomes. With increasing age, the incidence of comorbid conditions increases hence it is important to study the comorbidities in this group of women.

The comorbidities encountered include hypertension, obesity and diabetes mellitus. These may adversely affect outcome in the management of women with uterovaginal prolapse especially when surgery is required. Essential hypertension tends to occur with increasing age[3] hence it is not unusual to find this disease among women in this study. It is often advocated to stabilize the blood pressure of such women before surgery. Obesity was also a comorbid condition in this study. Obesity predisposes women to pelvic floor disorders including pelvic organ prolapse.[4] For such women, weight reduction may improve treatment outcome. Diabetes mellitus was also encountered in this study. Diabetes mellitus is known to impair wound healing as well as other complications.[5,6] It is therefore a routine practice to ensure a good glycaemic control before a surgical intervention. No diabetic emergency was recorded among our patients presumably because we ensured a proper blood glucose control before and after surgery. In a study conducted in Poland, obesity and overweight were the most common comorbidities affecting urogynaecological patients.[7] Other comorbid conditions encountered in that study were hypertension, diabetes and coronary artery disease. In another study that compared complications and comorbidities of young and old patients, those over 80 years of age had comparatively more comorbidities and surgical complications after prolapse surgery.[8]

The other comorbid conditions encountered in this study were anaemia, human immunodeficiency virus infection and peptic ulcer disease. Anaemia is usually corrected following investigation of its cause. This is of importance particularly in patients who are to undergo surgery so that blood loss at surgery will not tilt the patient into shock or anaemic heart failure. Anaemia may also impair wound healing in the postoperative period. Human immunodeficiency virus infection is also of concern in our setting. Usually following adequate counselling the test is carried out followed by a post test counselling. It in the first place offers patients the opportunity to know their status and those that are positive can then be placed on highly active antiretroviral therapy (HAART) to

avoid development of Acquired Immunodeficiency Syndrome (AIDS). Also, its occurrence in a patient may influence their clinical state. The disease itself and drugs used in its treatment may predispose to anaemia. Peptic ulcer disease is also another comorbidity that needs to be adequately managed before surgery. During hospital stay, some women may experience exacerbation of its symptoms. This would lead to a general feeling of being unwell in the postoperative period. There may be increased duration of hospital stay and increased cost to the affected patient.

The strength of this study lies in the number of cases that were reviewed and the duration of study. It however did not explore the psychological issues associated with pelvic organ prolapse.

CONCLUSION:

Pelvic organ prolapse is common in our setting and surgical intervention is a management option. In such women comorbidities may have adverse effects following surgery if not properly managed in the preoperative period. The comorbidities encountered in this study were obesity, hypertension, diabetes, anaemia, peptic ulcer disease and human immunodeficiency virus infection.

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