



Complications and outcome following use of pessary in women with pelvic organ prolapse

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Abstract

Background: Vaginal pessary is very important in the conservative management of women with pelvic organ prolapse. It is patient friendly, safe and minimally invasive. The aim of this study was to review our experience with the use of vaginal pessary for management of pelvic organ prolapse.

Methods: This retrospective study was conducted at the National Obstetric Fistula Centre, Abakaliki South-East Nigeria. The medical records of women that were managed for pelvic organ prolapse using vaginal pessary between June 2012 and May 2016 were reviewed. Data was analysed using Statistical Methods. Ethical clearance for this research was obtained from the Research and Ethics committee of the National Obstetric Fistula Centre, Abakaliki.

Results: One hundred and one (101) women with pelvic organ prolapse had vaginal pessary. These women had various forms of pelvic organ prolapse (those with third degree uterovaginal prolapse were offered surgery). The mean age was 49 years while the mean parity was 5. All women who were offered pessaries accepted this modality of treatment. Overall, 12(11.9%) had minor complications. The main complication was dislodgement of pessary requiring multiple insertions as seen in 10 (9.9%) of the patients. Sixty-two (61.4%) of the patients had complete or partial resolution of symptoms.

Conclusion: Vaginal pessary is an option in the conservative management of pelvic organ prolapse. It is acceptable with few associated complications and can lead to improvement of symptoms in women with pelvic organ prolapse.

Keywords: pelvic organ prolapse, uterovaginal prolapse, vaginal pessary

Introduction

Pelvic organ prolapse is of particular importance to gynaecologists in sub-Saharan Africa. Management of pelvic organ prolapse is usually influenced by the severity of symptoms and the degree of prolapse. Pessary is widely used in the treatment of uterovaginal prolapse. The use of pessary in the treatment of pelvic organ prolapse seems to have declined because of advancement in gynaecological surgeries. It is patient friendly, minimally invasive, effective, acceptable and appears to be a safe treatment modality for pelvic organ prolapse [1]. Pessaries can also be easily applied by the health care provider.

There are currently different types of pessaries in clinical use. Despite the usefulness of pessaries in pelvic organ prolapse, there is no well defined protocol for its use in our setting. Indications for pessary use include women awaiting definitive surgery, unsuccessful surgical repair, treatment for women who are not surgical candidates and for those who prefer medical management [2]. Vaginal pessary is an effective and simple method of alleviating symptoms of pelvic organ prolapse [3]. In pregnant women with pelvic organ prolapse, use of pessary is a treatment option [4]. There are currently different types, shapes and sizes of pessaries currently available. Pessaries are made from silicon, acrylic, latex or rubber but silicone pessary offer many advantages over the other pessaries [4]. The main limitation with the use of vaginal pessary is difficulty with self-removal and insertion [6]. Other side effects are vaginal

discharge and constipation [6]. Vaginal Ulcer may also develop following use of pessary [5]. Serious complications are however uncommon. Patient satisfaction with the use of pessary is remarkable, making it an important tool in the management of pelvic organ prolapse [8]. Long term use of pessary is acceptable to women who are sexually active [9]. In situations where women refuse surgery, use of pessary becomes an acceptable option in the management of pelvic organ prolapse. In low and middle income countries where health seeking behaviour is poor, women who have uterovaginal prolapse tend to arrive late with advanced disease which may limit the use of pessary. The cost of surgery for pelvic organ prolapse is usually more than that of pessary which makes it a good option, when indicated. Despite the usefulness of pessary in the treatment of pelvic organ prolapse, the definitive treatment of prolapse remains surgery.

The aim of this study was to review our experience (complications and outcome) with the use of vaginal pessary for management of pelvic organ prolapse.

Methods

This was a retrospective study conducted at the National Obstetric Fistula Centre, Abakaliki South-East Nigeria. The study facility is involved in the management of women with genital fistula and pelvic organ prolapse. It has a bed space capacity of 96. Medical records of women that were managed for pelvic organ prolapse between June 2012 and May 2016

were reviewed in this study. Data was analyzed using Statistical Methods. During the study period, vaginal pessary was recommended for women with various forms of pelvic organ prolapse. The patients were followed up for six months. They were also encouraged to do pelvic floor exercises. Those with complete uterovaginal prolapse were offered surgery. Ethical clearance for this research was obtained from the Research and Ethics committee of the National Obstetric Fistula Centre, Abakaliki.

Results

One hundred and one (101) women with pelvic organ prolapse had vaginal pessary in this study. The age range was between 40 and 55 years with a mean age of 49 years. Their parity ranged from 2 to 10 with a mean parity of 5. Urinary incontinence as seen in 58 (57.4%) and feeling of mass in the vagina as seen in 41 (40.6%) of the patients were the major reasons for presentation to the hospital (Table 1). Apical prolapse occurred in 96 (95%) of the patients and most of them had associated anterior compartment prolapse. Posterior compartment prolapse was found in 5 (5%) of the patients. All women accepted vaginal ring pessary. Overall, 12(11.9%) of women experienced minor complications. The main complication following use of pessary in women with pelvic organ prolapse observed in this study was dislodgement requiring multiple insertions as seen in 10 (9.9%) of the patients (Table 2). Sixty-two (61.4%) of the patients had complete or partial resolution of symptoms (Table 3). Nineteen (18.8%) of patients were lost to follow up. Out of the 41 women that presented with a feeling of mass in the vagina, 25 (61%) had complete or partial resolution of symptom while 35 (60%) of women that presented with urinary incontinence had complete or partial resolution of symptom after 6 months of follow up. The two patients that had constipation did not have any symptom at follow up.

Table 1: Main presenting complaint

Presenting complaint	Frequency (%)
Feeling of mass in the vagina	41 (40.6)
Urinary incontinence	58(57.4)
Constipation	2(2)

Table 2: Complications of pessary use among women with pelvic organ prolapse

Complication	Frequency (%)
Infection	1 (0.99)
Persistent discomfort	1(0.99)
Dislodgement and multiple insertions	10(9.9)

Table 3: Outcome of pessary use in women with pelvic organ prolapse

Outcome	Frequency (%)
Complete resolution	20 (19.8)
Partial resolution	42(41.6)
No change	20(19.8)
Lost to follow up	19(18.8)

Discussion

Pelvic organ prolapse remains the most common indication for

pessary use.¹⁰ Vaginal ring pessary is useful in the management of pelvic organ prolapse. It may offer some form of symptom relief in women with uterovaginal prolapse. It is patient friendly and usually free of major complications. It however may not offer a definitive cure for pelvic organ prolapse.

Vaginal ring pessary appears to be an acceptable option in women with uterovaginal prolapse. It is associated with good compliance^[11]. As shown in this study, all patients that were offered ring pessary for treatment of prolapse accepted the option. This shows a high acceptance rate for the use of vaginal ring pessary. The reason that may be attributed to this is its relatively safety profile and the ease associated with its use. It is also minimally invasive^[9]. Also, most women affected were in the reproductive age group which will make them accept conservative management with pessary rather than definitive surgery. Another reason for the high uptake of vaginal ring pessary may be because those with advanced forms of pelvic organ prolapse were not offered pessary. A significant number of patients are usually satisfied with pessary use when it is properly fitted^[10]. It has also been described as an acceptable first line option in the treatment of advanced pelvic organ prolapse^[11].

The problems observed with the use of vaginal pessary were vaginal discharge, persistent discomfort and dislodgement of pessary requiring reinsertion. These complications were however infrequent. Other studies have similarly documented minimal complications with the use of vaginal ring pessary^[15, 16, 17]. Dislodgement of the pessary may be caused by the use of an inappropriate size. It may be a source of patient dissatisfaction hence should be minimised by using appropriate fitting pessary so as to avoid rejection by patients as frequent pessary expulsion is a common reason why patients discontinue pessary use^[18]. Most pessaries are made up of inert substances hence would not be degraded by the body. The occurrence of vaginal ulcer following the use of pessary has been documented⁷ but this was not recorded in this study. The short duration of use following review may have contributed to the fewer complications recorded in this study.

The outcome of treatment with vaginal pessaries in this study ranged from complete to no resolution of symptoms. A previous study showed that pessary use was effective in 60 % of women^[19]. This is similar to the index study. The degree of prolapse also plays a role in the resolution of symptoms as more severe forms of prolapse may be less likely to respond to vaginal pessaries. Proper fitting is also essential for its effectiveness^[20]. Late presentation with advanced forms of prolapse has made vaginal hysterectomy and pelvic floor repair a common modality for treatment of pelvic organ prolapse^[21, 22]. A high success rate has also been documented even in cases of advanced pelvic organ prolapse^[7].

Conclusion

Vaginal ring pessary is a safe and minimally invasive technique for the treatment of pelvic organ prolapse. It is acceptable to patients with pelvic organ prolapse. Complications can occur but are minimal. The use of vaginal pessary can lead to improvement of symptoms in women with pelvic organ prolapse.

Acknowledgement

Authors thank I.E Ehighibe (Nursing Department, National

Obstetric Fistula Centre, Abakaliki) for her support during data collection.

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