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Case Report

Incarcerated vaginal ring pessary: a case report

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ABSTRACT

We report a rare case of a 75-year-old postmenopausal woman with a long-standing ring pessary for third-degree uterovaginal prolapse, managed conservatively due to significant cardiac comorbidities. She presented acutely with perineal pain, vaginal bleeding, and urinary difficulty. Examination revealed an incarcerated pessary embedded in the anterior cervical lip, encased by a fibrous band causing bladder compression. Prompt bedside surgical release under local anesthesia led to successful removal. This case underscores the importance of strict follow-up in elderly pessary users, as even well-tolerated long-term use can result in unexpected, serious complications.

Keywords: Pessary complication, Uterovaginal prolapse, Cervical incarceration, Fibrous band

INTRODUCTION

The use of vaginal ring pessaries in case of pelvic organ prolapse (POP) is an effective alternative in alleviating symptoms of patients with medical comorbidities or females unwilling for surgery.¹ The vaginal pessaries used are of different shapes and materials most common being the silicone ring pessaries. Vaginal pessaries are made primarily of medical grade silicone which makes them inert and less likely to have an odour or cause an allergic reaction.²

The complications associated with pessaries are well talked about in the literature like pain, discomfort, vaginal discharge, forgotten pessaries and sometime fistulas.³

Incarceration, a rarely reported event is a long-term complication seen due to lack of follow up. We hereby discuss a case of aged female who had ring pessary inserted for prolapse and was on regular follow up. She presented in emergency with severe pain in the perineal region, bleeding per vaginum, dysuria with incarcerated ring pessary into the anterior lip of cervix and required emergency removal under anaesthesia.

CASE REPORT

A 75-year-old, post-menopausal female, para 3 live 3 with history of normal vaginal deliveries, presented to the emergency in the department of obstetrics and gynaecology with complaints of excruciating pain in the perineal region, bleeding per vagina and difficulty in urination for one day. She was a follow up case of 3rd degree uterovaginal prolapse, chosen for conservative management because of her associated comorbidities of dilated cardiomyopathy and hypertension. She had been tolerating pessary well for past four years and was on a regular follow up of two and half months back, with no complaints, pessary was cleaned and reinserted after examination, no ulcerations or discharge was ensured.

On examination, an attempt was made to remove the ring pessary but inability of its removal lead to a surprise finding of a deeply incarcerated pessary (Figure 1) into the anterior lip of cervix with overlying thick band of around 2 cm encasing the ring, (Figure 2) pressing on the bladder anteriorly through the vaginal fornix. Decision for releasing the band was taken immediately in minor OT, the thick fibrous band was incised under local anaesthesia and

the pessary removed. Vaginal packing was done and patient discharged after observation in stable condition.



Figure 1: Thick band of tissue encasing the ring pessary.



Figure 2: Ring pessary through the anterior lip of cervix.

DISCUSSION

Vaginal ring pessary, a prosthetic device is one of the popular conservative tools in patients of pelvic organ prolapse (POP). They are usually considered in all females with symptomatic prolapse and/or in stress urinary incontinence. There are not many contradictions to its use, therefore used by most of the clinicians to alleviate symptoms of prolapse with minimal side effects like vaginal irritation, foul smelling discharge and urinary tract infection. Major complications rarely observed in long term neglected pessaries include incarceration, rectovaginal and vesicovaginal fistulas.³

The incarcerated vaginal pessary may require emergency removal due to severe symptoms (as in our index case).

The concomitant vaginal atrophy, inherent local tissue reaction or type of pessary used may be related to early vaginal ring entrapment. Therefore, it is advisable to treat vaginal atrophy with local estrogen before deciding for pessary placement.⁴ A similar case in 67-year-old women, who had a retained ring pessary with regular 6 monthly follow up, was removed in local anaesthesia. Govind et al had encountered a case where the pessary got entrapped in anterior vaginal wall and had to be removed under general anaesthesia using a bone cutter, with the patient having no major complaints except she felt pessary was hanging out.⁵

To avoid short- and long-term complications of vaginal ring pessary, careful selection along with proper training on its use and regular follow up is advocated. Women with vaginal pessary require regular follow-up. New users are seen within 2 weeks to assess fitness and for instructions on removal and care.⁶ Depending on the regulations at the care institution and caretaker's comfort level, pessary maintenance may be further overlooked.⁷ Additionally, local oestrogen cream did not change the difficulty to insert and remove the pessary.⁸

The patient reported had used pessary for four years and she was on regular follow up. A detailed examination, probably missed in her last visit was required not only to pick up early complications but to rule out other gynaecological pathologies with similar presentation.

CONCLUSION

Ring pessaries can be used to alleviate symptoms of advanced stage prolapse in women who need to avoid surgery. An appropriate size and material, proper examination at each visit ruling out any evidence of infection, cervical or vaginal abrasions and trauma and right technique of insertion are keystone for the successful management. Educating the patients about the need of self-care, personal hygiene practices and the need of regular follow up minimizes complication rate.

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REFERENCES

1. Zeitlin MP, Lebherz TB. Pessaries in the geriatric patient. J Am Geriatr Soc. 1992;40(6):635-9.
2. Jones KA, Harmanli O. Pessary use in pelvic organ prolapse and urinary incontinence. Rev Obstet Gynecol. 2010;3(1):3-9.
3. Lamers BH, Broekman BM, Milani AL. Pessary treatment for pelvic organ prolapse and health-related quality of life: a review. Int Urogynecol J. 2011;22(6):637-44.
4. Poma PA. Management of incarcerated vaginal Pessaries. J Am Geriatr Soc. 1981;29(7):325-7.

5. Govind A, Lakhi N. The enigma of early entrapment of vaginal ring pessaries. *J Obstet Gynaecol.* 2007;27(4):451-2.
6. Robert M, Schulz JA, Harvey MA; Urogynaecology Committee. Technical update on pessary use. *J Obstet Gynaecol Can.* 2013;35(7):664-74.
7. Palumbo MV. Pessary placement and management. *Ostomy Wound Manage.* 2000;46(12):40-5.
8. Asumpinwong C, Leerasiri P, Hengrasmee P. Neglected doughnut pessary in the uterine cavity. *BMJ Case Rep.* 2019;12(4):1.

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