

## Prolonged Retention of Ring Pessary Resulting in Vaginal Wall Fibrosis: A Case Report

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**Abstract:** A ring pessary may be used for a prolapsed uterus. Forgotten pessaries produce many complications. We describe a case where the pessary was embedded in the vaginal mucosa following prolonged retention resulting in vaginal wall fibrosis. A 70 year old woman presented to the OPD with complaints of foul smelling discharge from vagina and occasional bloody discharge. She was found to be having an impacted ring pessary and it was removed under sedation. A review of the relevant literature was undertaken and complications associated with vaginal pessaries are reviewed. The pessaries should be checked at 3 to 6 monthly intervals, and cleaned or changed as necessary. It is advisable to use polythene pessary which is inert. If pessaries are neglected and remain in situ for long periods of time (generally more than 4 months), complications can occur.

**Keywords:** Ring pessary, Embedded pessary, Pelvic organ prolapse

### INTRODUCTION

Pessaries have been used for centuries in the management of uterine prolapse. Vaginal pessaries still have a role in the management of uterine prolapse, particularly in elderly patients. Although surgery is the definitive treatment for severe uterine prolapse, pessaries can give satisfactory results in women who wish or need to avoid surgery [1]. Pessaries are indicated in elderly women who have significant comorbidities and are high risk for pelvic floor reconstructive surgeries, in women temporary relief prior to surgery, in women who want child bearing, and those who cannot afford surgery. However, they are known to cause serious complications if proper care is not taken. Forgotten pessaries produce many complications like persistent vaginal discharge, uterovaginal fistula, VVF, RVF, carcinoma etc., due to the erosive nature of the material the pessary is made of. Here we present a case of prolonged retention of ring pessary resulting in vaginal wall fibrosis.

### CASE REPORT

A 70 year old para 6, with last child birth 30 years back and attained menopause 20 years back, presented to the outpatient department complaining of foul smelling discharge from vagina and occasional bloody discharge. She gave history of insertion of a ring pessary 15 years ago by a general practitioner for utero vaginal prolapse. She was not followed up due to unknown reasons. There was no difficulty in bladder or bowel habits. She was a known hypertensive on beta

blockers. There was no other significant history. Per speculum examination showed a polythene ring pessary embedded in the posterior and lateral vaginal wall with 3 cm band of fibrosed vaginal epithelium covering the ring (Fig-1&2). There was no necrosis or ulcer but she had vaginal discharge. No signs of any genitourinary fistula. Rectal examination revealed an intact rectal mucosa. All haematological and biochemical investigations were within normal limits. The pessary was removed under i.v. sedation by cutting the fibrosed vaginal walls overlying the pessary with the scalpel and ligating the cut edges with catgut for haemostasis.

Re-examination of the rectum confirmed intact mucosa. She was treated for mixed vaginitis. Follow up of the patient after 1 month showed not only a healthy vagina and cervix but no descent of the cervix except minimal rectocele.

### DISCUSSION

Two broad categories of pessaries exist: support and space-filling pessaries. Support pessaries, such as the ring pessary, use a spring mechanism that rests in the posterior fornix and against the posterior aspect of the symphysis pubis. Vaginal support results from elevation of the superior vagina by the spring, which is supported by the symphysis pubis. Ring pessaries may be constructed as a simple circular ring or as a ring with support that looks like a large contraceptive diaphragm. These are effective in women

with first- and second-degree prolapse, and the support ring's diaphragm is especially useful in women with accompanying anterior vaginal wall prolapse. When properly fitted, the device should lie behind the pubic symphysis anteriorly and behind the cervix posteriorly. In contrast, space-filling pessaries maintain their position by creating suction between the pessary and vaginal walls (cube), by creating a diameter larger than the genital hiatus (donut), or by both mechanisms

(Gellhorn). The Gellhorn is often used for moderate to severe prolapse and for complete procidentia. It contains a concave disk that fits against the cervix or vaginal cuff and has a stem that is positioned just cephalad to the introitus. The concave disk supports the vaginal apex by creating suction, and the stem is useful for device removal. Of all pessaries, the two most commonly used and studied devices are the ring and Gellhorn pessaries [2].



**Fig. 1&2: Ring pessary embedded in posterolateral wall of vagina**

There are several case reports in the literature describing long forgotten pessaries [3-7]. The complications include ulceration, necrosis, vaginitis, rectovaginal fistula, vesicovaginal fistula and carcinoma. There is a similar case report describing encapsulation of the pessary [6-7]. The pessaries are made of different material like PVC, silicone and polythene. Complications like rectovaginal fistula, vesicovaginal fistula etc., are common with either rubber or PVC pessaries compared to polythene pessaries which are soft and produce minimal tissue reaction. Selecting a right sized non irritant and pliable material like polythene and silicone and proper instructions to the patient regarding follow up make the long term use of pessary a safe alternative to surgery in selected cases. With patient education and regular follow up complications of pessary use could be avoided.

#### REFERENCES

1. Zeitlin MP, Lebher TB; Pessaries in the geriatric patient. *J Am Geriatr Soc.*, 1992; 40(6): 635-639.
2. Schorge JO, Schaffer JI, Havorson LM, Hoffman BL, Bradshaw KD, Cunnigham FG; Williams Gynecology. Section 3, Chapter 24, Available from <http://www.accessmedicine.com>
3. Kankam OK, Geraghty R; An erosive pessary. *J R Soc Med.*, 2002; 95(10): 507.
4. Powers K, Grigorescu B, Lazarou G, Greston WM, Weber T; Neglected pessary causing a rectovaginal fistula: a case report. *J Reprod Med.*, 2008; 53(3): 235-237.
5. Nidhi S, Dahiya K; Forgotten Vaginal Pessary. *The Internet Journal of Gynecology and Obstetrics*, 2011;14(2) ISPUB.
6. Stephan WB, Zaaijman Jdu T; Retention of a vaginal ring pessary in a postmenopausal patient. *S Afr Med J*, 2007; 97(8): 552.
7. Sivasuriya M; Cervical entrapment of a polythene vaginal ring pessary--a clinical curiosity. *Aust N Z J Obstet Gynaecol.*, 1987; 27(2): 168-169.