

DOES MONTHLY SELF-REMOVAL OF VAGINAL RING PESSARIES FOR STRESS INCONTINENCE/ PROLAPSE REDUCE COMPLICATION RATES? A 5 YEAR AUDIT

Hypothesis / aims of study

In 2009, a seven year follow up (range 1-14 years) of women who used vaginal ring pessaries for stress incontinence/ prolapse showed that 56% of patients experienced bleeding, profuse malodorous discharge or other significant adverse events (1). These patients were managed traditionally, in that a nurse or doctor changed their vaginal ring every 4-6 months. Since then, some gynaecologists (2) have moved towards teaching patients monthly self-removal, washing and self- insertion of their pessary, with annual medical review. Currently, there are no publications about significant adverse events in women who self-manage their rings.

The aim of this audit was to evaluate all women who were taught self-insertion and removal over a period of 5 years, to determine the complication rate in comparison to previously published studies. Based on our clinical experience, we hypothesised that the complication rate would be lower in women who removed and washed their own ring pessary every month.

Study design, materials and methods

This was a retrospective audit at a tertiary referral urogynaecology unit. The notes of all patients who had previously been taught, or were newly taught self-insertion during the audit period 2011 and 2015, were reviewed. Patients typically used Portex rings, Schaatz or Gellhorn if only complaining of prolapse, while those with mixed prolapse and urinary incontinence were mainly fitted with a Continence Dish. Patients using Contiform devices were excluded (as they routinely self-change their device each week from the start).

After initial fitting of a continence or prolapse ring, women were encouraged to learn from a specialist nurse how to self-remove and self-insert their pessary once monthly after washing it in hot soapy water. Annual speculum examination by a urogynaecology clinician, and provision of a new vaginal ring each 12 months, was conducted.

Demographic data collected comprised age, parity, body mass index, prolapse and urinary symptoms, menopausal status, pre-existing constipation, duration of self-insertion. Complications enquired about included vaginal bleeding, malodorous discoloured vaginal discharge, extrusion of the device, pain/discomfort, disorders of defaecation or de novo urinary incontinence. Malodorous discharge was defined as profuse discoloured mucopurulent discharge, which was treated by ring removal for 2-3 weeks, salt baths and metronidazole oral therapy (1). In women with persistent red vaginal bleeding (not staining), a speculum examination was performed to identify possible erosions (or granulation tissue, which was treated with silver nitrate) and the pessary was left out of the vagina for 2-3 weeks, with daily salt baths and topical oestriol cream.

Patients who discontinued are denoted separately from long term successful users, as duration of use might influence the incidence of complications.

Results

Seventy-seven women were taught to self-insert and remove their vaginal pessary. Three are awaiting follow-up data and have not been included in our analysis. Of the 74 patients included in this study 70 women were trained during the audit period (Jan 2011- March 2016) and 4 had been trained up to 5 years previously. The practice of teaching this self-management technique gradually increased over the years, from 8 women in the year 2011 to 15 new patients in 2015.

Median age at first visit was 62 (IQR 51-66), median BMI 27 (IQR 23-33), median parity 2 (IQR 2-3), 77% were post-menopausal. The main complaint comprised urinary incontinence (25.7%), pelvic organ prolapse (52.7%) and mixed symptoms (21.6%). Ring types used included Portex (39.2%), Continence Dish (39.2%), Schaatz (16.2%), Introl (2.7%) and Gellhorn (2.7%).

Complications: In the 74 women, 2 significant and 3 minor pessary-related complications were identified (Table 1).

Significant Complications	Number of patients (%)	Continued/Discontinued	Duration of use (months)
Bleeding and constipation (large erosion, delayed healing)	1 (1.4%)	Discontinued, awaiting surgery	25.4
Constipation (removing ring to defecate)	1 (1.4%)	Discontinued, has had surgery	7.2
Minor complications			
Malodorous discharge	2 (2.7%)	Continued	17.6; 70.5
Bleeding	1 (1.4%)	Continued	23.2

Both significant complications influenced patients to cease pessary use and undertake surgical repair. Of the minor complications, there were two episodes of malodorous discharge that responded to three weeks of removal and salt baths and one episode of bleeding due to a small erosion that healed quickly. The overall complication rate was 5/74 (6.8%).

Duration of Followup: Of the 74 patients, 49 (66.2%) are ongoing with self-management. The median duration of ongoing ring self-management observed was 23 months (IQR 16-42, range 7-128). The complication rate for long term self-management was 5/49 (10.2%).

In the 25 women who were taught self-management but discontinued, 13 subsequently had surgical treatment, 4 are ongoing with six monthly nurse pessary changes, 4 who did not tolerate pessary self-management discontinued all therapy and 4 were lost to follow up. The median duration of use in this group was 6 months (IQR 3-12, range 0.5-27). Reasons for discontinuation included patient preference for surgery, failure of self-management (due to barriers such as obesity or worsening arthritic fingers), pessary related complications (see Table 2).

<i>Destination</i>	<i>Reason</i>	<i>n (%)</i>
Surgery	Patient preference	9 (36%)
	Failed pessary self-management	2 (8%)
	Pessary related complication	1 (4%)
No treatment	Pessary related complication (awaiting surgery)	1 (4%)
	Did not tolerate pessary	4 (16%)
4 monthly nurse changes	Failed self-management	4 (16%)
Lost to follow up	Unknown	4 (16%)

Interpretation of results

Our novel data support the hypothesis that women who self-remove, wash monthly and self-insert their vaginal ring have a low complication rate (overall 6.8%), although the duration of follow-up is still rather short (because many of the earlier women from 2011 or 2012 have since preferred to discontinue). Nevertheless, this complication rate compares favourably with studies in which rings were left in situ for 4-6 months, such as a rate of 56% over 7 years (1) and a recent rate of 12.1% over 5 years from (3) (the latter report did not define vaginal bleeding, erosions nor granulation tissue).

Concluding message

Patient self-insertion/ self-removal of vaginal rings appears to be associated with a lower complication rate, although longer duration of follow-up is recommended. This practice also provides women with greater self-control over their incontinence/ prolapse problems.

References

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Disclosures

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