#539 Effectiveness of ring pessaries versus vaginal hysterectomy for advanced pelvic organ prolapse

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Hypothesis / aims of study

Treatment options for symptomatic prolapse include pelvic floor muscle training (PFMT), pessary use, and surgery. .

The aim of this prospective observational, no randomized and descriptive study, was to compare the outcomes of a pessary or surgery in women with symptomatic POP.
The hypothesis was that continuous use of a ring pessary (without support) is as effective as and less risky than surgery in non hysterectomized, postmenopausal Spanish women with advanced-stage prolapse (POP-Q).

Study design, materials and methods

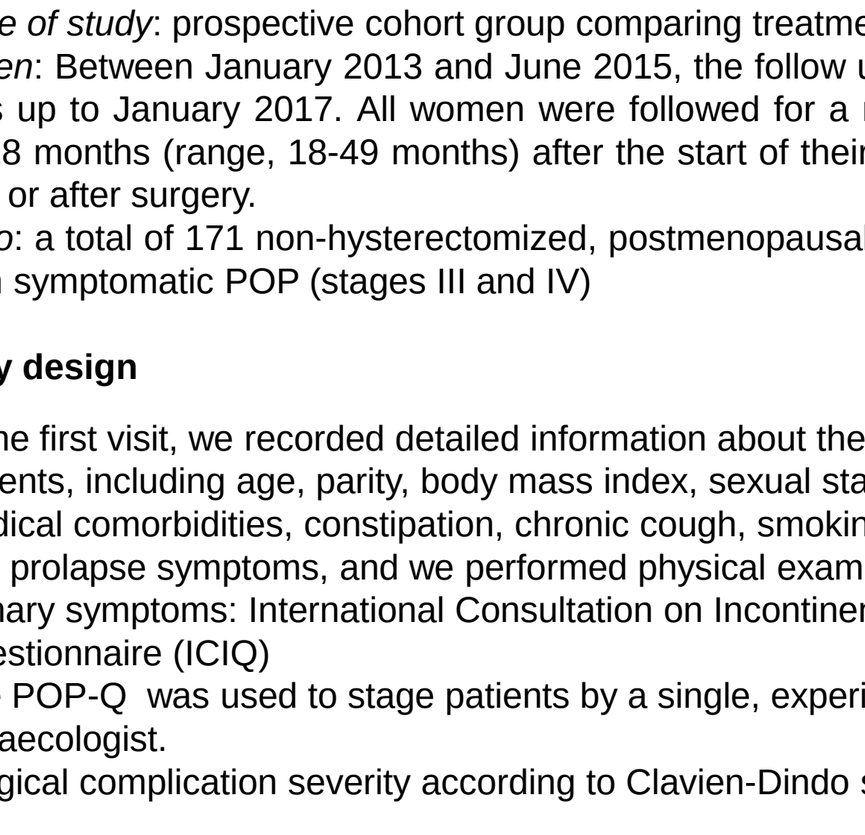
Study participants

- *Type of study*: prospective cohort group comparing treatments.
- *When*: Between January 2013 and June 2015, the follow up period was up to January 2017. All women were followed for a minimum of 18 months (range, 18-49 months) after the start of their pessary use or after surgery.
- *Who*: a total of 171 non-hysterectomized, postmenopausal patients with symptomatic POP (stages III and IV)

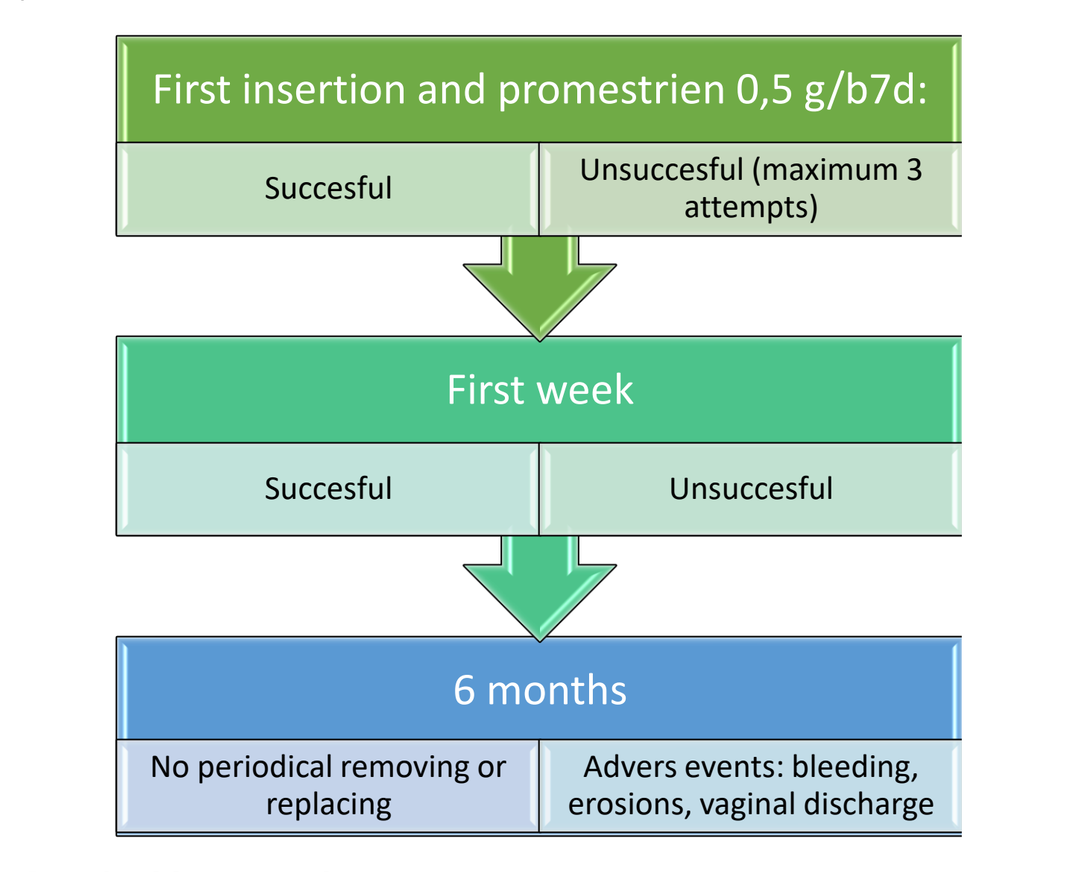
Study design

- In the first visit, we recorded detailed information about the patients, including age, parity, body mass index, sexual status, medical comorbidities, constipation, chronic cough, smoking status, and prolapse symptoms, and we performed physical examinations.
- Urinary symptoms: International Consultation on Incontinence Questionnaire (ICIQ)
- The POP-Q was used to stage patients by a single, experienced gynaecologist.
- Surgical complication severity according to Clavien-Dindo scale

Pessary treatment



Surgical intervention



Results and interpretation

A total of 94 (54.0 %) women expressed a treatment preference for the ring pessary, and 77 (45.0 %) underwent surgical intervention. In this study, no patients were lost during follow-up.

Table 4. Comparison of effectiveness and adverse events from vaginal pessary or surgery for POP treatment

Effectiveness	Pessary	Surgery	*p* value, post-hoc power
Yes	76 (84.4%)	69 (89.6%)	0.115[b] 44.1%
No	14 (15.6%)	8 (10.4%)	
	90	77	
Adverse events[a]			
Grade 1	24/76 (31.6%)	11/77 (14.3%)	< 0.001[b] 99.8%
Grade 2	0	8/77 (10.4%)	
Grade 3	0	11/77 (14.3%)	
Total	24/76 (31.6%)	30/77 (39.0%)	

[a] Clavien-Dindo grade
[b] Continuity-corrected chi-square test

- At the end of the study, the successful use of a pessary was 84.4 %, and 89.6 % of patients in the surgical group did not complain of any prolapse recurrence (p=0.115), The efficacy was similar in both treatment groups.
- During analysis of complications there was a significant difference between groups when Clavien-Dindo grades were considered (p<0.001).

Pessary group

	Value	
Type of pessary ($n = 94$), ring without support	94 (100)	
Size of ring pessary used ($n = 94$) *n* (%)		
60 mm	1 (1.1)	
65 mm	1 (1.1)	
70 mm	7 (7.4)	
75 mm	39 (41.5)	
80 mm	19 (20.2)	
85 mm	16 (17)	
90 mm	9 (9.6)	
95 mm	2 (2.1)	
Continuation rates ($n = 94$), *n* (%)		
1 week	87 (92.6)	
1 month	85 (90.4)	
6 months	82 (87.2)	
12 months	80 (85.1)	
End of the study (median follow-up, 24 months Range (18–49 months)	76 (80.8)	
Reason for discontinuation ($n = 18$), *n* (%)		
Death of patient from non-pessary-related causes	4 (22)	
Feeling of discomfort	9 (50)	
Extrusion of pessary during daily activities	3 (16)	
Bleeding	1 (5.5)	
Dislike of the ring pessary by the husband	1 (5.5)	
Adverse events ($n = 76$), *n* (%)		Clavien-Dindo classification
Extrusion of pessary during daily activities	14 (18.4)	Grade 1
Bleeding because of erosion	8 (10.5)	Grade 1
Vaginal discharge	1 (1.3)	Grade 1
Vaginal pain	1 (1.3)	Grade 1

Surgery group

	Value	
Type of operation ($n = 77$), *n* (%)		
TVH	24 (31.2)	
TVH + ACR	47 (61.0)	
TVH + ACR + PCR	4 (5.2)	
TVH + PCR	1 (1.3)	
TVH + ME	1 (1.3)	
Operative time (min), mean (95%CI)	99.4 ± 34.7	
Hospital stay (days), median (min, max)	3 (2–4)	
Complications during surgery ($n = 77$), *n* (%)	1 (1.2)	Clavien-Dindo classification
Bladder injury	1	Grade 2
Complications during admission ($n = 77$), *n* (%)	16 (20.8)	
Vaginal erosion	1	Grade 1
Vault haematoma	5	Grade 1
Urinary tract infection	3	Grade 2
Bladder retention	1	Grade 2
Vaginal wound infection (antibiotics)	3	Grade 2
Vaginal wound infection (vaginal drainage)	2	Grade 3a
Parametrial abscess (drained percutaneously)	1	Grade 3a
Complications after admission ($n = 77$), *n* (%)	13 (16.9)	
De novo stress urinary incontinence (SUI)	1	Grade 1
Urgency urinary incontinence	4	Grade 1
Vaginal vault prolapse (conservative treatment: pessary)	1	Grade 3a
Vaginal vault prolapse (surgical colposacropexy)	6	Grade 3b
Posterior compartment prolapse (posterior vaginal repair)	1	Grade 3b
Total complications ($n = 77$), *n* (%)	30 (39.0)	

ACR, anterior colporrhaphy; PCR, posterior colporrhaphy; TVH, transvaginal hysterectomy; ME, mesh excision

- Complications were more frequent in the pessary group (31.6 %)
- In the surgery group, 24.6 % of patients had a second- or third-degree adverse event.

Conclusions

1. The pessary is effective and has mild adverse events in non-hysterectomized, postmenopausal women with advanced POP.
2. It is a first line of treatment together with PFMT.
3. The preference of the patients must be considered at counselling.

References

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