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PROSPECTIVE EVALUATION OF PESSARY USE IN THE MANAGEMENT OF PELVIC ORGAN PROLAPSE

Hypothesis / aims of study

Pelvic organ prolapse affects 12-30% of multiparous and 2% of nulliparous women. Although pessaries are the most popular form of conservative management there is a paucity of prospective data in the literature regarding their efficacy and improvement of quality of life. The aim of this study was to evaluate the outcome of pessary use using a validated prolapse symptom questionnaire and identify reasons for discontinuation.

Study design, materials and methods

In this prospective study, the Sheffield Prolapse Symptom Questionnaire was given to all women with pelvic organ prolapse attending urogynaecology clinics. Women requesting pessaries had a ring inserted as first choice. If unsuccessful, other varieties including gellhorn, donut or cube were inserted. Data regarding prolapse awareness, urinary symptoms, bowel symptoms, sexual function and quality of life was collected before and 4 months after pessary insertion.

The Wilcoxon Rank-sum test was used to compare baseline and follow-up data. The Mann Whitney U test was used for non-parametric data and Chi Square for comparing proportions.

Results

In this on-going study 134 women with prolapse opted for pessary insertion. The median age was 71 years (range 31-98), 94% were Caucasian and the mean parity was 2.25 (range 0-8). 22% had a previous hysterectomy and 12% had a previous vaginal repair. The commonest pessary used was the ring (71%), followed by gellhorn (21%), cube (4%) and donut (4%).

At four months follow up, 73 (55%) retained their pessary. Retention was more successful in the older age group (P=0.05), higher parity (P=0.011) and no hysterectomy (P=0.015). There was no significant correlation between pessary success and previous repair, type or grade of prolapse. One woman had a temporary vaginal wall excoriation.

Of the 73 successful pessary users, 64 (88%) returned both their baseline and follow-up questionnaires. The symptoms with significant change before and after pessary insertion are shown in Tables 1-5.

Table 1 General prolapse symptoms

Symptom	Baseline	4 months	P value
	n (%)	n (%)	
Vaginal lump	35 (55)	16 (25)	0.000
Lump protruding	19 (30)	7 (11)	0.001
Dragging abdominal pain	9 (14)	5 (8)	0.022
Backache	13 (20)	6 (4)	0.015

Table 2 Urinary symptoms

Symptom	Baseline	4 months	P value
	n (%)	n (%)	
Manual reduction fempty bladder	7 (11)	2 (3)	0.001
Urgency	26 (41)	15 (23)	0.013
Urge incontinence	17 (27)	12 (19)	0.041

Table 3 Bowel symptoms

Symptom		Baseline	4 months	P value
		n (%)	n (%)	
Incomplete emptying	bowel	20 (31)	8 (13)	0.016

Table 4 Quality of life issues

Symptom		Baseline	4 months	P value
Interference physical activity	with	n (%) 19 (30)	n (%) 9 (14)	0.000
Interference enjoyment of life	with	25 (39)	9 (14)	0.000

Table 5 Sexual function

Symptom	Baseline	4 months	P value	
	n (%)	n (%)		
Sexually active	7 (11)	9 (14)	0.006	

There were also non-significant improvement in other parameters such as vaginal soreness stress incontinence, faecal incontinence etc. However there were no parameters that deteriorated following pessary insertion.

61 (45%) discontinued pessary use and reasons given were failure of retention 45 (74%), discomfort 7 (11%), preference for surgery 7 (11%), dyspareunia 1 (2%) and impacted pessary 1 (2%). Of these 61 women, 21 (35%) opted for no further action, 32 (52%) had a prolapse repair +/- hysterectomy, 8 (13%) had a sacrocolpopexy.

Interpretation of results

This is the first prospective study that has used a validated prolapse questionnaire to establish symptom improvement and bothersomeness following pessary insertion. Following insertion of a pessary significantly fewer women reported awareness and protrusion of a lump, dragging and lower back pain, manual reduction to empty bladder, urgency, urge and incontinence. The only improvement in bowel symptoms was that significantly more women could completely empty their bowels. Improvement in symptoms may have be due to anatomical correction. Pessary use improved quality of life and did not limit physical activity. In this study although there were only a small number of sexually active women, sexual activity continued despite the pessary.

Success in the older age group may be due to apprehension regarding surgery and better motivation to opt for pessary use. The presence of a uterus and cervix appears to allow for better accommodation and improved pessary retention. Although there were very few complications, (1 requiring GA to remove impacted Gellhorn pessary) this may reflect the need for continued long term follow-up.

Concluding message

Pessaries improve symptoms and quality of life in over half the women with prolapse. Short-term complications are rare and sexual intercourse appears to be unaffected. Pessaries can therefore be safely offered to all women who wish to avoid surgery, and those awaiting surgery. It can also be offered as a therapeutic trial to those who are undecided about surgery.