EFFECT OF VAGINAL PESSARY IN TREATMENT OF CONCOMITANT SYMPTOMS OF PELVIC ORGAN PROLAPSE

Bastani P1, Mallah F1, Hajebrahimi S2, Danandeh N1, Ebrahim Solbian F3, Khaneshi S4

1. Women's Re-prodactive Health Research Center, Alzahra Hospital, 2. Emam Reza Hospital, 3. Talegani hospital, 4. Tabriz University

Hypothesis / aims of study

Pelvic organ prolapse (POP) affects approximately 50% of parous women over 50 years of age, with a lifetime prevalence risk of 30–50% (1). Women with clinically significant pelvic organ prolapse usually complain of a sensation of a vaginal bulge that may be accompanied by symptoms of urinary, bowel, or sexual dysfunction. However, many of these women do not seek medical advice for a bulge in the vagina because of embarrassment or fear that it might be a cancer (2). Treatment for POP includes both surgical and nonsurgical options. Pessary use is an excellent conservative treatment option for some patients with POP. A survey conducted by the American Urogynecology Society reported that nearly two thirds of physitions would choose the vaginal pessary over surgery as the first-line treatment for this condition (3). On the other hand, Iranian physicians are not very nterested to use pessary for women complaining POP and most of them choose surgical options as a first-line treatment. Therefore, this study was designed to prospectively evaluate POP degree, bladder symptoms, bowel symptoms, and patient's quality of life before and 6 months after pessary use.

Study design, materials and methods

All women referred to the urogynecology clinic in an educational hospital between May 2012 and April 2016 with symptomatic pelvic organ prolapse (stage 2 or greater according to the International Continence Society Pelvic Organ Prolapse Quantification questionnaire [POP-Q]) who agreed to pessary treatment, were included in this study. All patients underwent pretreatment evaluation including comprehensive medical history, physical examination and vaginal examination. Unless contraindicated, appropriate topical estrogen therapy included conjugated estrogen cream twice weekly in all postmenopausal patients before and once a week after pessary insertion. Various sizes of ring pessary with support were typically used for the initial fitting, followed by Gellhorn, at last donut pessary during one visit to determine the correct size and shape for each patient. In general, the largest pessary in any shape that was comfortable for the patient and she could stand, cough and strain with the pessary retained, was used. Follow-up visits were scheduld at 1 week, 3 and 6 months after the initial fitting. In every visit, the pessary was removed and cleaned. The vagina was examined for erosions, then reinserted and maintained. A questionnaire about constipation, the Urinary Distress Inventory questionnaire (UDI-6), and the **Incontinence** Impact Questionnaire (IIQ-7) were administered to assess stool passage symptoms, urinary symptoms and patients quality of life (QoL) assessment before treatment (baseline), then 3 months and 6 months after treatment. All statistical analyses were performed using commercially available software (SPSS version 17). The paired-sample t test and the McNemar test were used to analyze the results. A P value of <0.05 was considered to be statistically significant.

Result

A total of 120 patients with advanced symptomatic POP agreed to participate in this clinical trial. The median age was 72 years (range 33-91 years), and the median parity was 5 (range 0-10). 10 patients were in reproductive age (8.3%) and 110 patients were postmenopausal (91.7%). More than half of the patients [63/120 (52.5%)] had concomitant medical diseases. 19 patients (16%) had a previous history of surgery for prolapse or hysterectomy. 91 patients (75.8%) were able to use the ring pessary with support. 24 women were fitted by Gellhorn (20%) and 5 patients (4.16%) used donut pessary. In 5 patient (4.16%), pessary size changed during 6 months. Just 1 patient (0.83%) accepted to manage the pessary by herself. The proportion of patients who utilized size 4 or 5 ring pessary were higher than that for other sizes [71/91 (80%)]. Only 8 patients (6.6%) discontinued pessary use within the first 3 months of treatment because of bulding and pessary extrusion . 4 of them did surgery and others didn't choose any alternative treatment. In patients with urinary symptoms [76/120 (63.3%)], UDI-6 demonstrated significant improvement from baseline at 6 months after pessary treatment (p value< 0.05). also patients QoL (IIQ-7) improved more significantly during 6 months specially first 3 months after pessary insertion (p value<0.0001). Of the 44 asymptomatic patients,18 patients [18/44 (40.9%)] got de novo urinary symptoms (urgency incontinence in 14 patients and stress incontinence in 4 patients). The most common adverse , nonserious event was vaginal discharge, which was reported by 18 patients.

Interpretation of results

112 patients (93.4%) were successfully fitted with one of 3 different types of pessary longer than 6 months that, it was very important result for our country (because most of gynaecologists choose surgery as first-line treatment for POP). Also , patients QoL improved dramatically that, it was another important result. Sexually active patients who were fitted by ring pessary with support, had intercourse without significant problems. Patients who got de novo urinary symptoms, were undergone medicaltherapy and physiotherapy successfully.

In our study, nearly all the patients [119/120 (99.16%) rejected to clean pessary by themselves at home, but they were controlled every 3 – 4 months regularly in clinic. Maybe for this reason, 18 patients (15%) got vaginal discharge during 6 months and in the long time, other complications like vaginal erosion and bleeding will be probable.

Concluding message

More women tend to opt for pessary as the initial treatment of POP when conservative options are offered. Pessary as an effective, cheep, nonsurgery method can be a safe treatment option specially in older women with POP.

References

1. Subak LL, Waetjen LE, van den Eeden S, Thom DH, Vittinghoff E, Brown JS. Cost of pelvic organ prolapse surgery in the United States. Obstet Gynecol 2001;98:646–51.
2. Palumbo MV. Pessary placement and management. Ostomy Wound Manage 2000;46:40–5.
3. Cundiff GW, Weidner AC, Visco AG, Bump RC, Addision WA. A survey of pessary use by members of the American Urogynecologic Society 2000;Obstet Gynecol 95:931-935.

Disclosures

Funding: In this study, we didn't have any financial support. Clinical Trial: Yes Registration Number: Tabriz University Of Medical science research center IRCT2016072618311N2 RCT: No Subjects: HUMAN Ethics Committee: Ethics committee of Tabriz University of Medical Science Helsinki: Yes Informed Consent: Yes