A Preliminary Report on Pelvic Floor Reconstruction through Colpocleisis from 2001 to 2007 at the University Hospital of the Puerto Rico Medical Center

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Objective: Describe the pre-, intra-, and postoperative experience of colpocleisis in a group of patients at the University Hospital of the Puerto Rico Medical Center.

Methods: A chart review was done on a subgroup of patients, 70 years or older, on which colpocleisis was performed between January 2001 and December 2007. The evaluation included demographics, comorbidities, and previous pelvic surgeries. The Pelvic Organ Prolapse Quantification (POP-Q) System was used to evaluate pelvic organ prolapse. Surgical procedures, outcomes, and related data were tabulated.

Results: Nineteen patients with a mean age of 77 years underwent the procedure, 57.8% presenting more than one comorbidity. Seventy-three percent of the patients had a BMI over 25. Sixty-three percent reported prior pelvic surgeries, 94.7% had stage IV pelvic prolapse, and 73.6% underwent concomitant procedures. Spinal anesthesia was most often used (68%), and the mean hospital stay was 2.1 days. Thirty-one percent of interviewed patients reported preoperative impairment in their daily activities that resolved completely after surgery. Incontinence symptoms resolved in 69% of patients. Ninety-two percent of the patients reported full satisfaction with the surgery.

Conclusion: Colpocleisis is a safe pelvic reconstructive procedure for high-risk patients with multiple comorbidities. Regional anesthesia can be offered with minimal blood loss, short operative time, and early ambulation. [*P R Health Sci J 2010;4:394-396*]

Key words: Pelvic organ prolapse, Pelvic reconstructive surgery, Colpocleisis, Patient satisfaction

The number of patients affected by pelvic organ prolapse is increasing annually. Nearly 200,000 women undergo pelvic organ prolapse reconstructive surgery (1). The lifetime risk that a woman in the United States will have surgery for prolapse or urinary incontinence is 11%, with up to one third of surgeries representing repeated procedures (2). Risk factors for prolapse include increasing age, higher gravidity and parity (especially the number of vaginal births), and history of hysterectomy, having a history of hysterectomy (especially a hysterectomy for prolapse), or having undergone a prior prolapse or incontinence operation (2-4). Pelvic organ prolapse can cause genitourinary symptoms such as urinary incontinence, urinary retention, recurrent urinary tract infections, hydronephrosis, bowel disorders such as rectocele, enterocele, and difficult defecation, sexual dysfunction, and a sense of general discomfort (5). The primary aim of surgery is to relieve prolapse symptoms and, if possible, symptoms associated with the lower urinary and gastrointestinal tracts. In some women, this means an attempt to restore normal vaginal anatomy and maintain or improve sexual function. In others, an obliterative approach is more appropriate and still yields the desired result of symptoms relief (2). As mentioned by Weber et al, colpocleisis may be an appropriate choice for older patients who are not concerned with vaginal function (2). The main objectives of this study were to evaluate a sub-group of patients in our study group of women 70 years old or older, describe the preoperative, intraoperative, and postoperative experience with regard to colpocleisis, determine degree of pelvic organ

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prolapse prior to surgery, describe patient demographics, and report postoperative patient satisfaction, feelings of regret, and complications.

Methods

Patient charts from the University Hospital of the University of Puerto Rico Medical Sciences Campus and covering from January 2001 to December 2007 were evaluated in this retrospective study. From a total of 31 colpocleises, 19 patients met the criteria of being 70 years old or older. Data that were evaluated included demographics, comorbidities, and previous pelvic surgeries. The Pelvic Organ Prolapse Quantification System (POP-Q) was used to evaluate the stage of pelvic organ prolapse in the patients. Also surgical procedures, outcomes, and related data were tabulated. Before and after the procedure, the patients completed a postoperative quality-of-life questionnaire that evaluated social life, household chores, and symptoms before the procedure and after the procedure.

Results

Of the 31 patients who underwent colpocleisis from January 2001 to December 2007, nineteen patients were 70 years of age or older. Mean age was 77 ± 6.2 years. More than two systemic illnesses were reported in 57.8% of the patients. The leading systemic illnesses were hypertension, hypothyroidism, and type II diabetes mellitus. Twelve patients had a history of previous pelvic surgeries, and 91.6% of them had a history of hysterectomy. Of the patients with a history of hysterectomy, 54.5% of them had total abdominal hysterectomy and 45% had vaginal hysterectomy.

The population was multiparous, in that 89% of the patients had 2 or more vaginal deliveries and 70% of this group had 5-15 vaginal deliveries. The mean weight of the participating individuals was 69.0 kg, and the mean BMI was 27.9, with 73.6% of patients having a body mass index of more than 25. Almost 95% of the patients had stage IV pelvic organ prolapse.

Concomitant procedures were performed in fourteen patients, with the leading procedure being a vaginal hysterectomy (64.2%). Other procedures included the following: a suburethral sling, an enterocele repair, and levator ani placation.

The mean estimated blood loss was 85 mL for colpocleisis as a single procedure and 275 ml when colpocleisis was performed concomitantly with another procedure. The mean operative time was 91 minutes for colpocleisis and 164 minutes for colpocleisis done with another surgical procedure. Sixty-eight percent of patients received spinal anesthesia. In 100% of the cases, antibiotic prophylaxis was given. Patients were discharged home in 1.2 days when colpocleisis was the only surgical procedure. One patient who had had a vaginal hysterectomy done as a concomitant procedure had lost an estimated 1,000 ml of blood that required a transfusion with 3 units of packed red blood cells.

We were able to interview 13 patients after their surgeries; these individuals were queried regarding their pre- and postoperative symptoms. Questions explored the patient's ability to do household chores, determined whether the patient manifested any symptoms of depression, had experienced urine leakage, or had difficulty voiding, and asked whether the patient needed to introduce her fingers into her vagina in order to evacuate. Six patients could not be evaluated with this questionnaire as one of them died a couple of years after the surgery and 5 of them had no known phone number. Thirty-one percent of the 13 patients interviewed by phone reported preoperative impairment in their daily activities that resolved completely after surgery. Incontinence symptoms persisted in 30% of the patients interviewed postoperatively by phone, but a significant improvement was reported. Ninety-two percent of the patients interviewed by phone reported being completely satisfied with the surgery.

Discussion

Pelvic organ prolapse is currently being more studied due to an increase in prevalence. Nevertheless, studies investigating the benefits and complications of colpocleisis are lacking in the literature. Similarly, because both pelvic organ prolapse and pelvic reconstructive surgery are most frequently investigated in relatively younger patients, studies focusing on women 70 years of age or older are also deficient.

In our study all the patients were more than 70 years old and had multiple medical comorbidities that were risk factors for other type of pelvic prolapse surgeries (2-4). Colpocleisis is used to repair pelvic prolapse in elderly women who are not interested in being sexually active in the future and elderly women who are at high risk for other reconstructive surgeries (2, 6). In our experience colpocleisis is a safe procedure that can be offered as an alternative to elderly, high-risk surgical patients who are less interested in future sexual activity. Colpocleisis is an effective resolution of symptoms. Most of the patients were completely satisfied with the surgery, and only one had excessive blood loss that required a blood transfusion.

Colpocleisis can be done in a short time period with minimal blood loss. It may be performed under any type of anesthesia including local anesthesia and pudendal nerve block (7). In our study, most of those patients who were not undergoing multiple procedures received spinal anesthesia. The surgery takes approximately 45 minutes to perform and there is minimal pain during the postoperative period (7). In our study the mean operative time was 91 minutes, but the surgery was done in a teaching institution, affecting the mean time; also, 89% of the patients had stage IV pelvic organ prolapse, which complicates the procedure. Furthermore, minimal pain was reported by the

patients, permitting them to be discharged home in 1-2 days.

In addition, colpocleisis has a high rate of postoperative satisfaction. Most patients reported that after surgery there was a significant improvement in their ability to perform their daily activities and household chores.

This study helped us evaluate whether colpocleisis is a safe surgical procedure in a population of older women with multiple medical comorbidities, especially women 70 years old or older. The limitation of the study is that the number of patients is too low for statistical analysis. In conclusion, colpocleisis should be considered as an alternative for high-risk surgical patients who are not (or who are willing not to be) sexually active. It is a surgical procedure with a low complication rate, both intra- and postoperatively. The procedure can be done in a short period of time with minimal blood loss and complications. It is a procedure with a high degree of patient satisfaction and one that improves quality of life.

Resumen

Objetivo: Describir la experiencia pre, intra, y postoperatoria en colpocleisis en un grupo de pacientes mayores de 70 años en el Hospital Universitario del Centro Médico de Puerto Rico. Métodos: Un repaso de records médicos fue realizado en un subgrupo de pacientes de 70 años o más en quienes el procedimiento de colpocleisis fue hecho durante enero 2001 a diciembre de 2007. La evaluación incluyó demografías, comorbilidades y cirugías pélvicas previas. El sistema de POP-Q fue usado para evaluar prolapso pélvico. Resultados: Diecinueve pacientes fueron intervenidos con este tipo de procedimiento quirúrgico. La edad promedio fue de 77 años, y 57.8% presentaban con más de una comorbilidad. Sesenta y tres por ciento reportaron cirugías pélvicas y 94.7% presentaban un estadío cuatro de prolapso pélvico. Anestesia espinal fue usada en el 68% de los casos. El tiempo de hospitalización fue de 2.1 días. El 31% de los pacientes entrevistados reportaron problemas preoperatorios en sus actividades diarias que resolvieron por completo luego de la operación. Síntomas de incontinencia persistieron en 30% de los pacientes luego de la operación, pero un 92% de ellos reportaron una mejoría significativa. Conclusión: Colpocleisis es un procedimiento de reconstrucción pélvica para pacientes de alto riesgo con múltiples comorbilidades. Anestesia regional puede ser ofrecida con un sangrado mínimo, tiempo operatorio corto y ambulación rápida.

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