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CLINICAL ARTICLE

The Manchester operation for uterine prolapse

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Abstract

Objective: To evaluate the clinical characteristics, complications, and satisfaction scores of patients who underwent the Manchester operation. *Methods:* This retrospective observational study evaluated data from 204 women who underwent the Manchester operation at the Department of Obstetrics and Gynecology of Hacettepe University School of Medicine, Ankara, Turkey, from January 1985 to April 2004. *Results:* Mean age was 34.68 ± 4.24 years and parity 2.47 ± 0.96; 85.8% of the patients were premenopausal; 176 patients (86.28%) had grade 3 and 28 (13.72%) had grade 2 uterine prolapse; 95.1% of the patients had associated cystoceles and 51.3% had associated rectoceles; and 81.4% had urinary incontinence. Regarding early postoperative complications, 27 patients (13.23%) had febrile morbidity; retroperitoneal hematoma occurred in 1 patient (0.49%); urinary retention occurred in 45 patients (22.05%), and cervical stenosis occurred in 23 patients (11.27%). At 1 year, 1 patient had undergone abdominal hysterectomy because of unsuccessful cervical dilatation; and a mean of 3.6 years following the operation, 8 patients (3.9%) had undergone the tension-free vaginal tape procedure plus a vaginal hysterectomy for recurrent stress urinary incontinence and uterine prolapse. The mean satisfaction/acceptance score for the operation was 8.52 ± 2.13 (range, 2—10). *Conclusion:* A high degree of acceptance/satisfaction and a low morbidity rate show the Manchester operation to be a good option for the treatment of uterine prolapse in women who wish to keep their uterus.

1. Introduction

With or without cystocele and/or rectocele, uterine prolapse, i.e., the descent of the uterus and cervix down the vaginal canal toward the introitus, causes great discomfort. Vaginal hysterectomy is the preferred procedure for the treatment of

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uterine prolapse, unless the patient is of reproductive age and wishes to remain fertile. In this case, the surgical procedures of choice are uteropexy or the Manchester—Fothergill operation.

In the late 19th and early 20th century, 2 surgeons from Manchester, England, developed a successful technique for the correction of uterine prolapse [1]. Archibald Donald combined anterior and/or posterior colporrhaphy with amputation of the cervix into a single operation; later, W.E. Fothergill modified the technique, giving the anterior colporrhaphy incision a triangular shape with its base near the cervix and plicating the parametrium anterior to the cervix [1]. The operation has been known as the Manchester Donald—Fothergill operation but will be referred to as the Manchester operation.

The aim of this study was to assess the early and late complications of the Manchester operation as well as the satisfaction scores of women who underwent it.

2. Methods

The 204 available records of 232 eligible women who underwent the Manchester operation at the Department of Obstetrics and Gynecology of Hacettepe University School of Medicine, Ankara, Turkey, from January 1985 to April 2004 were reviewed. The institutional ethics board approved the study.

The degree of prolapse had not been reported at the time of surgery for most patients, either by the pelvic organ prolapse quantitation (POP-Q) classification proposed by the International Continence Society—which standardizes terminology for female pelvic organ prolapse and pelvic floor dysfunction—or by any of the more commonly accepted standards. Therefore, the level of descent was graded on a scale of 0 to 4, with grade 0 referring to no prolapse; grade 1, prolapse half-way to the hymen; grade 2, at the hymen; grade 3, half-way out of the hymen; and grade 4, total prolapse (i.e., procidentia). Patients with procidentia were excluded from this retrospective study. No patients had a history of pelvic surgery.

Endometrial biopsies were performed in all patients preoperatively and no sample revealed hyperplasia or neoplasia. Preoperative cervical Pap smear results were normal for all patients.

All Manchester operations were performed with a few modifications by the same pelvic surgeon team. The components of the standard Manchester operation are diagnostic curettage; detachment, suturing, and reattachment of both cardinal and uterosacral ligaments to the anterior aspect of the uterine isthmus; amputation of the cervix; and covering of the cervical stump with vaginal mucosa, as per the Sturmdorf technique. Tubal ligation was performed concomitantly via posterior colpotomy in 82 patients (40.2%) who no longer desired to become pregnant. No patients underwent culdoplasty. Of the 166 patients with urinary stress incontinence, 160 (96.3%) underwent the standard Kelly—Kennedy plication procedure and 6 (3.7%) the tension-free vaginal tape (TVT) procedure along with the standard plication.

A vaginal pack was placed into the vagina and removed on the second postoperative day. The urethral catheter was removed on the second postoperative day as well. If the patient had urinary retention, she was recatheterized, and if the residual urine volume was greater than 100 mL, the catheter was left in place for 3 days. During this period, the patient was taught to perform bladder exercises. If her condition persisted, 25 mg/day of bethanechol chloride (Myocholin; Glenwood, Essen, Germany) was prescribed.

Febrile morbidity was defined as a temperature higher than 38.3 °C on a single occasion or 38.0 °C or higher on 2 occasions more than 24 h after surgery.

Cervical stenosis was suspected in patients with pelvic pain, hypomenorrhea or amenorrhea, and negative results for blood pregnancy tests. It was confirmed if a Hegar dilator 3 mm or less in diameter could not be passed through the cervix, and by transvaginal sonography. Following confirmation of the diagnosis of cervical stenosis, patients underwent cervical dilatation with Hegar dilators.

Six weeks and 6 months after surgery, all patients underwent pelvic examinations by the same surgeon team to determine whether the uterine prolapse and the cystocele or rectocele had improved.

All patients were asked by questionnaire about their satisfaction with and acceptance of the Manchester operation at a median of 60 months (range, 4—228 months) after the procedure. They were asked to scale their degree of satisfaction from 0 (lowest) to 10 (highest).

The statistical software SPSS for Windows, version 10.0 (SPSS, Chicago, Illinois) was used to perform the statistical analyses. The χ^2, t, and Mann—Whitney U tests were used, and $P<.05$ was considered significant.

3. Results

A total of 232 patients underwent the Manchester operation from January 1985 to April 2004 but data