بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

A New Technique for Sacrospinous-Sacrotuberous Fixation for the Treatment of Uterovaginal and Vaginal Vault Prolapse A Randomized Controlled Trial

A Thesis

Submitted for partial fulfillment of the M.D degree in ***Obstetrics and Gynecology***

By

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2021

Acknowledgement

I am Praising **ALLAH** the most merciful for the blessings embracing me throughout my life.

Foremost, I would like to express my sincere gratitude to my lead supervisors **Professor Hassan Awwad, Professor Hazem Sammour and Professor Hisham Ashour**, for the continuous support of my MD study and research, for their patience, motivation, enthusiasm, and immense knowledge. Their guidance helped me in all the time of research and writing of this thesis. I could not have imagined having better mentors and advisors for my study.

I would like to extend my gratitude to **Ass. Professor Mohamed Sweed and Dr. Ossama Ismail,** for their encouragement, insightful comments, and thorough revision and modifications they made to have this thesis completed in its final form.

My sincere thanks also goes to my colleagues in Egypt and Germany for the stimulating discussions, for the sleepless nights we were working together, and for all the fun we have had in the last two years.

To all the wonderful women in Egypt and Germany who accepted to be part of this study: Warm thanks and gratitude for entrusting me with your pains and problems and for having so willingly be kind during the period of follow up.

Last but not the least, I would like to thank my family: my parents for supporting me in every possible way throughout my life, **Rola** my wife for being beside me despite the pains she endured during her pregnancy and childbirth which happened during the preparation of this thesis and my parents in-law for their infinite support and dedication.

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A Protocol of a Thesis

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Introduction

The prolapse of one or several pelvic organs is a condition that has been known by medicine since its early days, and different therapeutic approaches have been proposed and accepted. But one of the main problems concerning the prolapse of pelvic organs is the need for a universal, clear and reliable staging method. **Pelvic Organ Prolapse Quantification system (POP-Q)** refers to an objective, site-specific system for describing, quantifying, and staging pelvic support in women **(Bump et. al., 2011).**

It provides a standardized tool for documenting, comparing, and communicating clinical findings with proven interobserver and intraobserver reliability. The POP-Q system gained the attention of the specialists all over the world, being approved by the International Continence Society (ICS), the American Urogynecologic Society (AUGS), and the Society of Gynecologic Surgeons for the description of female pelvic organ prolapse. It is the most common system used by gynecologists and urogynecologists, although other systems have been devised **(Muir et. al., 2007)**.

Vaginal prolapse is associated with weakness of pelvic floor due to childbirth and postmenopausal atrophy. The upper vagina is suspended in the pelvis by the caudal portion of the cardinal uterosacral ligament complex. These ligaments attach the cervix and upper vagina to the pelvic wall in the area of the greater sciatic foramen **(Monk et. al., 2004)**. When these suspensory fibers are damaged, the cervix, upper vagina prolapses downward away from the greater sciatic foramen and fall below the normal position at the level of the ischial spine. Women who have undergone hysterectomy and in whom the suspensory apparatus was not

reconstructed are at increased risk for vaginal eversion. The true incidence of vaginal vault prolapse following hysterectomy is approximately 0.5 percent of patients **(Baessler et. al., 2010)**.

Numerous operative techniques are described for the correction of vaginal prolapse. Fixation of the vaginal apex to the sacrospinous ligament has many advantages. By using a transvaginal approach, the incumbent potential complications of laparotomy are avoided, and hospital stay as well as recovery to normal activity is shortened as well as maintenance of sexual potency **(Adams et. al., 2012)**.

Sacrospinous colpopexy, introduced by Randall and Nichols in 1971, has become a favored method for restoring vaginal support in women with vault prolapse, massive eversion of the vagina and procidentia **(Randall & Nichols, 2007).** Defects in apical vaginal support are crucial to recognize and address when undertaking surgery for prolapse. The upper third of the vagina (level I) is suspended from the pelvic walls by vertical fibers of the paracolpium, which is a continuation of the cardinal ligament. The uterosacral and sacrospinous ligament suspension seek to restore the level 1 vaginal support. The age-specific incidence increased with advancing age and thus better surgical techniques are required.

Sacrospinous ligament fixation (SSLF) is a safe and effective procedure for the treatment of POP. Known complications of a sacrospinous fixation with or without uterine preservation for the treatment of pelvic organ prolapse or vaginal vault prolapse are hemorrhage, cystitis, perforation of the bladder, rectum or small bowel, rectovaginal fistula, post-operative pain of the gluteal region and nerve injury **(David-Montefiore et. al., 2007)**. Exposure

and direct visualization of the sacrospinous ligament, coccygeus muscle complex require adequate dissection of the pararectal space, avoiding injury to the rectum. Injury to the pudendal nerve and the internal pudendal vessels is avoided by placing the fixation suture minimally 1.5 cm medial to the ischial spine **(Ramp et. al., 2008)**.

Multiple studies have shown sacrospinous ligament fixation to be highly effective therapy for vaginal vault prolapse. Several authors have suggested that the marked vaginal retroversion subsequent to sacrospinous ligament fixation may predispose to recurrent pelvic support defects in the anterior fascial segment, resulting in cystocele or urethrocele, or both **(Robert et. al., 2007)**. Pelvic support defects at long-term follow-up evaluation occurred more commonly in the anterior fascial segment. Retroversion and fixation of the upper vagina predisposes the anterior fascial segment to excess pressure and a higher incidence of cystocele than could be attributed to the effects of aging and menopause **(Varner et. al., 2011)**.

Peri-operative complication occurred during surgery; not all occurred during the SSLF itself but as concomitant prolapse surgery. This indicates that possibly some of the complications occurring during a sacrospinous ligament fixation with or without uterine preservation and pelvic floor repair are caused not during the ligament fixation itself but during one of the other procedures. Patients who underwent sacrospinous ligament fixation with uterine preservation had significant fewer complications than the patients who underwent sacrospinous fixation with a hysterectomy (11.5% vs 31.2%) **(Hefni et. al., 2011)**.

Aim of the Work

This is a pilot study aiming to compare a modified technique for Sacrospinous-Sacrotuberous fixation with the traditional sacrospinous ligament fixation technique for treatment of uterovaginal and/or vaginal vault prolapse.

Research Question

Is the modified technique of Sacrospinous-Sacrotuberous fixation comparable to the traditional technique in the treatment of uterovaginal and / or vaginal vault prolapse?

Research hypothesis

The outcomes of the suggested new technique for Sacrospinous-Sacrotuberous fixation are comparable to those of the traditional technique.

Null hypothesis

The outcomes of the suggested new technique for Sacrospinous-Sacrotuberous fixation are worse than those of the traditional technique.