

# بسم الله الرحمن الرحيم



-C-02-50-2-





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار













بالرسالة صفحات لم ترد بالأصل





## New Surgical Technique For Salpingectomy During Vaginal Hysterectomy Versus Standard Technique

## **Thesis**

Submitted for partial fulfillment of the Master degree in **Obstetrics and Gynecology** 

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## List of Abbreviations

Abb.	Full term
A.C	Alternating current
	Abdominal hysterectomy
BMI	Body mass index
CI	Confidence interval
EOC	Epithelial ovarian carcinoma
D.C	Direct current
DUB	Dysfunctional Uterine Bleeding
FUO	Fever of unknown origin
HRT	Hormone relapcement therapy
LASER	Light amplification and stimulated emission of radiation
LAVH	Laproscopy assisted vaginal hysterectomy
MD	Mean Difference
NSAIDS	Nonsteroidal anti inflamatory drugs
OR	Operating room
POP-Q	Pelvic Organ Prolapse Quantification
RCTs	Randomized clinical trials
RF	Radiofrequency
SD	Standard Deviation
TLH	Total laproscopic hysterectomy
TOM	Transobturator Mesh
TOT	Transobturator Tape

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## **Protocol of A Thesis for Partial** Fulfillment of Master's Degree in **Obstetrics & Gynecology**

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### What is already known on this subject?

#### What does this study add?

Routes of hysterectomy are abdominal, laparoscopic and vaginal and it is well known that the vaginal route is the least invasive way for both hysterectomy and salpingectomy as vaginal hysterectomy means fewer infections, quicker return to normal activities and fewer episodes of raised temperature (Neiboer et al., 2010).

Before most surgeons performed laparoscopic salpingectomy which can cause more urological injury to the patient, but it was found that removing the fallopian tubes vaginally with the uterus is the safest method for the patient (Neiboer et al.,2010).

This study will add a new surgical technique which makes salpingectomy during vaginal hysterectomy easier and more feasible as opportunistic salpingectomy at the time of hysterectomy is currently recommended to reduce the lifetime risk of ovarian cancer, using this technique regularly will make the gynecologists more skilled and protect the patient from the complications of leaving the fallopian tubes without any benefit (Sheth et al., 2011).

It is hoped that this study will help all gynecologic surgeons to improve their skills of salpingectomy during vaginal hysterectomy as after removing the uterus there is no role for the fallopian tubes.

Before using this surgical technique it was not easy to do salpingectomy during vaginal hysterectomy, we hope that after trying this new surgical technique, salpingectomy during vaginal hysterectomy will be a routine. (Nieboer et al., 2010).

#### 1- Introduction

Hysterectomy is one of the most frequently performed surgeries in women. The long-term benefit of removing the fallopian tubes at the time of gynecologic surgery for benign indications is a subject of debate. There is strong evidence that most forms of ovarian cancer may arise from the fallopian tube, and opportunistic salpingectomy could prevent roughly 50% of ovarian cancers and it is known that endometrial ovarian cancer (EOC) is the gynecological malignancy with the highest mortality in the western world and the second highest globally after cervical cancer. For a majority of patients the disease is diagnosed at late stage and consequently has a poor prognosis. Approaches to reduce the burden of cancer include two major strategies: screening, resulting in early detection, and more

recently active prevention. Early diagnosis of EOC is challenging because of non specific symptoms until late stages. Although screening methods may show satisfactory sensitivity and specificity, no conclusive impact on EOC mortality has yet been demonstrated using these methods. The current screening method (transvaginal ultrasound and serum markers) often leads to unnecessary surgery with unclear benefit for the patient (Jacobs et al., 2011; Menon et al., 2015).

Based on the biological and genetic evidence that the fallopian tube is the origin of most of EOC, it has been suggested that bilateral salpingectomy would reduce the risk of EOC. This systematic review aims to evaluate the present scientific support for opportunistic salpingectomy as a method to reduce the incidence of EOC, and whether it affects survival, health-related quality of life, endocrine function, operative time, and hospital stay in adult women undergoing benign hysterectomy or other abdominal gynecological surgery leaving the ovaries intact (Hanely et al., 2017; Macalpine et al., 2017).

However salpingectomy may affect the ovarian functions but the benefits are more. Vaginal salpingectomy is feasible in the majority of women undergoing vaginal hysterectomy and increases operating time by eleven minutes and blood loss by six milliliter. Women with prior adnexal surgery or uterine fibroids should be counseled about the possibility that removal may not be feasible (Kerbage et al., 2017).

#### 2. AIM:

The population is all female undergo vaginal hysterectomy for any benign gynecological reasons, intervention is doing salpingectomy during vaginal hysterectomy. The primary objectives of this study will determine the feasibility of bilateral salpingectomy at the time of vaginal hysterectomy. Secondary objectives included identification of factors associated with unsuccessful salpingectomy and assessment of its impact on operating time, blood loss, and surgical complications.

#### **Research null hypothesis:**

This new surgical technique will not make salpingectomy during vaginal hysterectomy easier.

### **Research Question:**

Can this new surgical technique make salpingectomy during vaginal hysterectomy easier?

### 3. Methodology

**Type of Study**: Randomized clinical trial study

**Study Setting:** The study will be done in Ain Shams University Maternity University Hospital.

This will include 26 patients in two groups:

Group(N):Patients will undergo salpingectomy during vaginal hysterectomy by the new surgical technique

Group(S):Patients will undergo salpingectomy during vaginal hysterectomy by the standard technique

**Study Period:** started November 2018

### Inclusion criteria:

- Age 40-70
- Uterine size less than 20 weeks
- Absence of endometriosis (known by medical and surgical history)
- Absence of adnexal mass
- Sub pubic angle at least 80 degree will be required
- Body mass index not exceeding 40 kg/m2
- Motile uterus
- Vagina suitable for vaginal hysterectomy

#### Exclusion criteria

- Uterine size more than 20 weeks
- **Endometriosis**
- Presence of adnexal mass
- Patients with previous pelvic surgery who underwent exploratory laparotomy or intestinal surgery due to liability of having adhesions
- Body mass index more than 40 kg/m<sup>2</sup>
- Uterus fixed immotile or short cervix
- Narrow vagina

**Sampling Method**: random sampling method.

#### **Randomization:**

It will be done by Computer-Generated Random Number List (Attached)

### **Sample Size Calculation**

The required sample size has been calculated using the IBM© SamplePower© software version 3.0.1 (IBM© Corp., Armonk, NY).

The primary objective measure is the feasibility of performing bilateral salpingectomy. The secondary objective measures are the operative time and amount of blood loss.

A previous study reported that bilateral salpingectomy could be performed successfully in approximately 74% of patients undergoing vaginal hysterectomy with the standard technique (Lamblin et al., 2017). Another study reported that bilateral salpingectomy was feasible in 100% of patients undergoing vaginal hysterectomy with the new technique (Giraudet et al., 2018).

So, it is calculated that a sample size of 26 patients in either study group (total = 52 patients) achieves 81% power to detect a difference of 26% between the two groups as regards the feasibility of salpingectomy (corresponding to rate of 100% versus 74%) using a two-sided chisquared test with type I error of 0.05.

This sample size of 26 patients per group achieves a power of 80% to detect a statistically significant difference between the two groups as regards the operative time and amount of blood loss for a large effect size corresponding to a Cohen's d of 0.8 using a two-sided unpaired t-test with