

**Name of Candidate: Ismail Fathi Ismail Mohmmmed Degree: MD**

**Title of Thesis: Comparative Study between Endovascular Coiling and Laparoscopic Excision of Symptomatic Ovarian Vein Reflux**

**Supervisors: 1- Prof. Dr. Ayman Mahmoud fawzy Essawy**

**2 Dr. Amr Abdel-Rahim Mohamed Abo zaid**

**3- Dr. Ahmed Abd El-Rahman Ahmed Mohammed**

**Department: General surgery      Specialization: General surgery      Approval Date: / /**

## ABSTRACT

### Background:

Pelvic venous disorders (PeVD) are a network of disease syndromes that cause chronic pelvic pain and/or lower extremity symptoms in women.

### Aim:

The aim of this study was to compare the endovascular and laparoscopic interventions for symptomatic ovarian veins reflux assessing the technical feasibility, complications, and early clinical and radiographic outcomes from 6 weeks to 6 months.

### Patients and methods:

This study was conducted on 40 women complaining of chronic pelvic pain. The patients were classified into two groups: the first group (20 patients) was laparoscopically treated by resection of part of the ovarian (gonadal) vein near the site of connection with left renal vein or inferior vena cava (according to the side of vein refluxing), and the other group was treated by endovascular coiling and sclerotherapy of the refluxing gonadal vein. They were followed up from 6 weeks to 6 months.

The endovascular procedure was carried out under local anesthesia via the transfemoral vein approach with routine supine position and then the left ovarian vein was cannulated using a 5-Fr catheter. Then, renal venography with Valsalva technique was done to detect reflux of the left ovarian vein. Embolization was typically performed using a 'sandwich' technique, which combines metallic devices (coils) with 2 or 3% atroxysclerol foam. Although the laparoscopic operation was carried out under general anesthesia with right lateral position for handling of the left gonadal vein and left lateral position for handling of the right gonadal vein. Endoscopic titanium clips were used for occlusion of proximal end of the gonadal vein without traction to prevent detachment from the renal vein followed by part of vein excision.

### Results:

In the endovascular group, there was marked improvement concerning all of the preprocedural symptoms of PeVDs with obvious significant statistical difference.

In the laparoscopic group, not all PeVDs showed significant postoperative improvement. Patients with menorrhagia, vulvar varicosities and urinary or anal symptoms showed no significant statistical difference, with P value more than 0.05.

### Conclusion:

Endovascular and laparoscopic interventions are effective and safe in eliminating pathologic blood reflux along the gonadal veins; however, the laparoscopic intervention cannot improve the urinary symptoms or vulvar varicosities. Moreover, laparoscopy may be beneficial in exclusion of any gynecological pathology, but the endovascular procedure is more effective in all pelvic congestion symptoms, with satisfactory improvement, shorter duration, and less complications.