

2- Comparative study between endovascular coiling and laparoscopic excision of symptomatic ovarian vein

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 PeVD s with obvious significant statistical difference. In the laparoscopic group, not all PeVD s 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.

Keywords:

endovascular coiling, laparoscopic excision, ovarian vein reflux, pelvic venous disorder