## 8th International Conference GYNECOLOGY AND OBSTETRICS

April 27-28, 2023 | Amsterdam, The Netherlands

Received Date: 16-01-2023 | Accepted date: 18-01-2023 | Published date: 15-05-2023

# Percutaneous transcatheter uterine artery embolization a new approach to the treatment of Uterine Fibroids

### Mariami Kaviladze

First Moscow State Medical University, Russia

**Study objective:** Percutaneous transcatheter embolization of the uterine arteries has been used in Obstetric and Gynecological practice since the late 1970s. The founder of the operation in patients with uterine leiomyoma was J.H. Ravina, who in 1994 in France performed the occlusion of the uterine arteries in order to reduce blood loss during subsequent myomectomy.

Aims: Aim of study was improving the reproductive health and quality of life of patients with uterine fibroids through the use of modern minimally invasive technologies.

**Materials and methods:** 208 patients diagnosed with Uterine Fibroids preparing for surgical treatment underwent uterine artery embolization using two types of embolizates: occlusive coils, particles of polyvinyl alcohol (PVA). Of these, 174 (83%) subsequently underwent myomectomy (72 (34%) planned pregnancy), 34 (17%) underwent radical surgery. Surgical treatment was carried out at various times (from 2 to 7 days) after UAE, both to assess the hemostatic effect and to assess the morphological changes in myomas and perifocal tumors of the myometrium, endometrium and serous membrane.

**Results:** Intraoperative blood loss decreased by an average of 30%. In all cases, fibroids transformed into a non-proliferating clinical and morphological variant, if it was proliferating. It should be noted that when PVA particles were used, not a single tumor was subjected to necrosis in any case, as well as the preservation of growth zones located perifocal to the myoma in the myometrium and small forming nodes of other myomas. During occlusion with spirals, more pronounced foci of Necrosis affecting the surrounding myometrium were noted.

**Conclusion:** The use of UAE in uterine myoma is advisable to reduce intraoperative blood loss, or in isolation in somatically severe patients. In patients planning pregnancy, it is advisable to use PVA particles as an embolizate, while in other cases it is necessary to use occlusal coils. Recurrence of fibroids (more precisely, recurrence of fibroid growth during its reverse transformation into a proliferating variant) or the development of new fibroids after UAE is possible.

#### Reference

- 1. Rosch J., Dotter C.T., Brown M.J. Selective arterial embolization: A new method for control of hemorrhage. Radiology. 2019.
- 2. Lumsden M.A. Embolization versus myomectomy versus hysterectomy: which is best, when?. Hum. Reprod. 2020.
- Hwang G.L., Razavi M.K., Chen B.H. A single center study comparing abdominal myomectomy with uterine artery embolization for treatment of myomas. Obstet. Gynecol. 2020.

#### **Biography**

Mariami Kaviladze is a Medical Professional who obtained her education from the prestigious First Moscow State Medical University in Russia. She is a highly skilled practitioner with a passion for providing quality healthcare to patients.

mariam-kaviladze@mail.ru