

# Non-surgical Treatment Approach of uterine Fibroids: a New Therapeutic Dilemma?



**Georgios Androutsopoulos\*, Georgios Adonakis and Georgios Decavalas**

*Department of Obstetrics and Gynecology, University of Patras, Greece*

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**\*Corresponding author:** Georgios Androutsopoulos, Assistant Professor, Department of Obstetrics and Gynecology, University of Patras, Medical School, Rion 26504, Greece, Tel: +306974088092; E-mail: androutsopoulos@upatras.gr, androutsopoulosgeorgios@hotmail.com

## Editorial

Uterine fibroids are benign tumors and most commonly affect women of reproductive age [1-6]. Despite the fact that a wide variety of symptoms can be associated with them (heavy menstrual bleeding, abdominal and pelvic pain, pressure upon adjacent organs, fertility issues and adverse pregnancy outcomes), most of them are asymptomatic [1-3,5-8]. Although there are many therapeutic protocols, the surgical approach with either myomectomy or hysterectomy and preoperative administration of GnRH analogues, represents the primary treatment [1-3,5,8-15]. The non-surgical management with either embolization of uterine vessels or focused ultrasound energy, represents a promising alternative approach in well selected patients [2-6,10,16-23]. However, the final therapeutic decision should be carefully individualized based on fibroid location and features, patient's general medical status and desire of fertility preservation [2-6,10,16-23].

Patients who wish to retain their uterus and dislike any surgical operation, are the appropriate population for non-surgical management of uterine fibroids [2-8,18,22-27]. Similarly, patients who deny any blood transfusion because of health issues or religious and spiritual concerns, are also suitable for non-surgical approach [2-8,18,22-27]. Furthermore, patients with compromised general medical status because of coronary artery disease, obesity or diabetes mellitus, are at high risk for perioperative complications and they are convenient for non-surgical treatment [2-8,18,22-28]. In patient's selection process the location, total number and clinical features of uterine fibroids, are really essential [2-8,18,22-28].

It is worth noting that pregnancy, active pelvic infection, malignancies of the female genital system, previous pelvic radiotherapy and compromised immune system, are the most common absolute contraindications for the non-surgical management of uterine fibroids [2-8,18,22-29]. Likewise, severe vasculopathy, allergy in radiocontrast agents, coagulation disorders, renal impairment and desire of fertility preservation,

are some relative contraindications for the non-surgical treatment approach [2-8,18,22-30]. Shorter operative time, no perioperative hemorrhage and less postoperative pain, are the most important advantages of the non-surgical therapeutic approach of uterine fibroids when compared with the standard surgical treatment [2-6,19-23,25,27,31-35]. Furthermore, there is a significantly decreased length of hospitalization and a more favorable postoperative course and earlier return to normal activities in patients having non-surgical management [2-6,19-23,25,27,31-35]. In addition, there is a substantial and persisting improvement regarding general symptoms and quality of life aspects in the majority of patients having non-surgical treatment approach [2-6,19-23,25,27,31-35]. The EMMY and REST trials and FIBROID Registry, evaluated the clinical role of non-surgical treatment (embolization of uterine vessels) in patients with uterine fibroids [19-21,25,27,31,32].

According to recent studies, the intraprocedural complication rate is almost similar among patients with uterine fibroids having either non-surgical or surgical therapeutic approach [2-6,20,22,23,31,32]. Pulmonary embolism, arterial spasm, arterial injury, hematoma, uterine artery dissection, nerve injury, allergy in radiocontrast agent and nephrotoxicity, are the most common intraprocedural complications in patients treated with uterine artery embolization [2-6,20,22-24,27,28,32]. The clinical consequences of non-surgical therapeutic approach on ovarian reserve, are not well-established [2-6,22,23,36]. In addition, a future pregnancy is possible in patients having non-surgical management of uterine fibromas [37-39]. However, a detailed evaluation of placental location and status should be performed, in order to provide the proper medical care and diminish the risk for complications during pregnancy (spontaneous abortions, placental disorders, preterm labor, fetal malpresentation and postpartum hemorrhage) [2-6,22,23,27,37-40].

In conclusion, the non-surgical management of uterine fibroids, has shown promising results regarding safety, quality

of life and long-term outcome and represents an alternative approach in well selected patients [2-6,10,16-23]. Nevertheless, there is a great therapeutic dilemma in patients with fertility issues, because the non-surgical treatment approach does not represent the standard of care [2-6,10,16-23].

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