

Uterine fibroid embolization for symptomatic myomas. Indication based on scientific evidences

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Interventional radiology has become increasingly prominent among the different medical specialties. Undoubtedly, one of the greatest developments in the field of gynecology is the technique of uterine fibroid embolization for treating uterine myomas that has benefited an increasing number of symptomatic patients. Annually in the United States, approximately 600 thousand women are submitted to hysterectomy. In Brazil, the accurate number of women submitted to hysterectomy is still to be known, and, consequently there is a lack of statistics on this procedure; however it is known that only a minority is aware of minimally invasive procedures as an alternative for preserving the uterus.

The traditional treatments for symptomatic patients are the following: pharmacological therapy, myomectomy and hysterectomy, all of them presenting satisfactory outcomes. Each of these methods, however, has its specific indication.

Uterine fibroids embolization for treatment of myomas is a minimally invasive procedure, and has been successfully utilized worldwide. Besides the preservation of the uterus and reduction in the volume of fibroids and uterus, this technique allows that the patients recover their normal menstrual cycle, with an early recovery, preserving their reproductive potential, thanks to the great development of new embolic agents.

The technique, previously adopted for treating other types of hemorrhages, was first employed specifically for treating fibroids by the French physician Jacques Ravina in 1991, and was introduced in Brazil in the last decade. The embolization procedure consists in the insertion of a microcatheter through the femoral artery to the uterine artery supplying the fibroids. The next step is a detailed angiographic evaluation of the uterus, fibroids, and adjacent structures such as ovaries and bladder. Then, a selective fibroid devascularization is performed, preserving the uterine arterial supply. Nowadays, this procedure is actually feasible thanks to the great developments of new embolic agents as the biocompatible calibrated microspheres approved specifically for this purpose by the American Food and Drug Administration (FDA).

The technique has developed so much that some medical groups have performed uterine fibroid embolization on a day-hospital basis. It represents an important achievement in the field of gynecological surgery, with costs reduction,

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early resumption of social and professional activities, and, mainly, quality-of-life improvement.

The uterine fibroid embolization outcomes can be observed immediately after the procedure, with improvement in menorrhagia. However, it should be observed that the reduction in the volume of uterus, fibroids, and, consequently, the improvement of symptoms typically occur along the first two years following the intervention.

Uterine fibroid embolization is no longer an experimental procedure. The quality and value of the scientific literature evaluating the procedure efficacy are comparable to those of the literature evaluating the other methods (myomectomy and hysterectomy). There are consistent data on the symptoms management, reduction in the uterine and fibroid volume, and high level of satisfaction of patients submitted to this procedure.

The close integration among the radiologist involved in the diagnosis (by ultrasonography or magnetic resonance imaging), the interventional radiologist and the gynecologist is essential for the success of the treatment.

Finally, a question remains to be answered: What is necessary for a more extensive dissemination of the method? The answer is: The overall awareness on the high efficacy of uterine fibroid embolization in the symptoms management, reduction in the uterine and fibroid volume, besides the esthetic advantages (absence of surgical cuts and scars), preserved femininity and preserved sexuality both of the women and their partners.