

# Submucous myoma in premenopausal patient: about a case

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## Aim

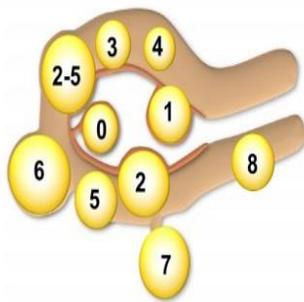
About a case of submucous myoma, we decided to review the latest updates of myomas in premenopausal patients and their impact on fertility.

## Methods

A review of a case of submucosal myoma is performed by means of a clinical history and complementary tests by the Gynecology and Obstetrics service of the *Hospital de Tortosa Verge de la Cinta*. It is also complemented by a search on scientific platforms such as UpToDate and PubMed.

## Presentation of the case

A 33 year old woman with no remarkable pathological and personal history apart from hypermenorrhea. A vaginal bidimensional ultrasonography was performed, with the following findings:



SM - Submucous	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
	3	Contacts endometrium; 100% intramural
O - Other	4	Intramural
	5	Subserous ≥50% intramural
	6	Subserous <50% intramural
	7	Subserous pedunculated
	8	Other (specify e.g. cervical, parasitic)
Hybrid	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below	
(contact both the endometrium and the serosal layer)	2-5	Submucous and subserous, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

She was proposed an hysteroscopic myomectomy.

## Results

Uterine leiomyomas are the most common pelvic tumor in women. The prevalence of leiomyomas increases with age during the reproductive years. Pelvic ultrasound is the imaging study of choice for uterine leiomyomas, based on the ability to visualize genital tract structures and cost-effectiveness. Ultrasound is typically performed in all patients, and then other studies, such as saline-infused sonogram, hysteroscopy, or magnetic resonance imaging (MRI), are ordered depending on the clinical indications. Pelvic ultrasound is the first-line study used to evaluate for uterine fibroids. Transvaginal ultrasound has high sensitivity (95 to 100 percent) for detecting myomas in uteri less than 10 gestational weeks' size. Saline infusion sonography allows identification of submucosal lesions (some of which may not be seen on routine ultrasonography). Diagnostic hysteroscopy is useful for visualizing the endometrial cavity. Similar to saline infusion sonography, this allows evaluation for submucosal or protruding myometrial fibroids and can characterize the extent of protrusion. This can be performed in the office or operating room.

The differential diagnosis of uterine leiomyomas includes other conditions that cause uterine enlargement, abnormal uterine bleeding (AUB), pelvic pain, or infertility. It is important to note that leiomyomas are a common condition, and other coexisting conditions may be the etiology of the presenting symptoms.

The differential diagnosis of an enlarged uterus includes both benign and malignant conditions: pregnancy, benign leiomyoma, adenomyosis, leiomyosarcoma, metastatic disease, endometrial polyp, endometrial carcinoma or hyperplasia, carcinosarcoma, endometrial stromal sarcoma and hematometra.

Fibroids themselves can contribute to a number of reproductive impairments, including infertility and recurrent pregnancy loss. Also, increasing age is associated with increased risk of infertility, fibroids, and miscarriage. Fibroids that distort the cavity (FIGO types 0 to 3) have more of an impact on fertility, and surgical treatment can be effective. Infertility and other reproductive dysfunction are often multifactorial, and, thus, a complete infertility evaluation of both partners is indicated before fertility treatment for fibroids.

## Conclusions

With modern pelvic imaging, we have achieved an increased appreciation of the variability of growth and shrinkage of myomas during the reproductive years. It is important to make a differential diagnosis and consider it as a possible cause of infertility, since its surgical treatment could solve reproductive dysfunction.