PHYSICIAN MANAGEMENT OF NON-CAVITY DISTORTING INTRAMURAL FIBROIDS & INFERTILITY: A SURVEY OF REI PROVIDERS

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BACKGROUND

- Uterine fibroids are common non-cancerous smooth muscle tumors affecting up to 80% of women of reproductive age.[1]
- While submucosal fibroids are well known to impair fertility, increasing evidence suggests that even non-cavity distorting intramural fibroids impact fertility.[2]
- Despite growing awareness, there is limited consensus on when surgical removal should be pursued before fertility treatment.
- This results in significant practice variation among reproductive endocrinology and infertility (REI) physicians.

OBJECTIVE

To characterize current practice patterns among U.S. REI physicians regarding management of non-cavity distorting intramural fibroids in patients pursuing fertility treatment.

METHODS

- A national cross-sectional survey was distributed via REDCap to 407 REI physicians identified through the CDC's National ART Surveillance System and the Society for Assisted Reproductive Technology directory.
- The 23-item questionnaire addressed fibroid evaluation, counseling, and surgical decision-making.
- Responses were analyzed descriptively using SAS 9.4.

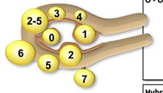
FIGO Classification System[3]

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

→ **Submucosal** / **Other**

Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not yet classified

Leiomyoma subclassification system



SM - Submucosal	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
O - Other	3	Contacts endometrium; 100% intramural
	4	Intramural
	5	Subserosal ≥50% intramural
	6	Subserosal <50% intramural
	7	Subserosal pedunculated
	8	Other (specify e.g. cervical, parasitic)
Hybrid leiomyomas (impact both endometrium and serosa)	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.	
	2-5	Submucosal and subserosal, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

RESULTS

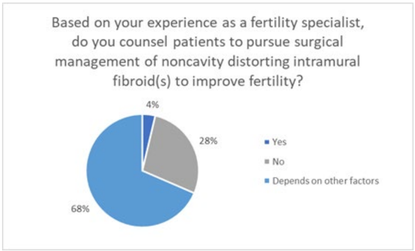
- A total of 112 REI physicians (28% response rate) completed the survey, representing diverse practice settings and geographic regions.
- Most respondents (72%) reported recommending or considering surgical removal of non-cavity distorting intramural fibroids prior to infertility treatment.
- Surgical management was most commonly advised for fibroids ≥ 4–6 cm, though FIGO classification[3], failed fertility treatments, abnormal imaging features, and miscarriage risk also influenced decision-making.
- Approximately 42% of REI respondents surgically remove non-cavity distorting intramural fibroids themselves, while 58% refer to other gynecologic surgeons, most often those with fellowship training in minimally invasive gynecologic surgery (MIGS).
- Among REI physicians who operate, the most common approaches included abdominal (78%), laparoscopic (56%), and robotic (50%) myomectomy.
- Seventy-four percent of respondents counseled differently when FIGO type 3 fibroids were present, reflecting concern for proximity to the endometrial junctional zone.
- The most frequently cited concerns about surgical management included risk of blood loss, postoperative adhesions, and potential delay in initiating fertility treatment.

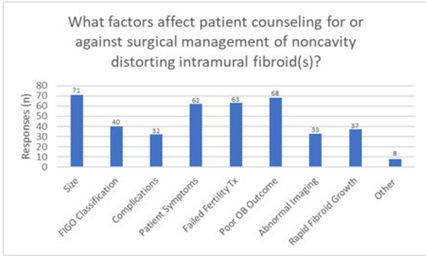
CONCLUSION

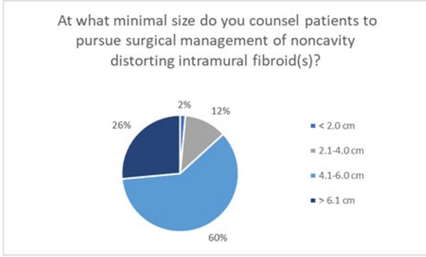
- Most U.S. REI physicians recommend removal of non-cavity distorting intramural fibroids, particularly lesions ≥ 4 cm or classified as FIGO type 3, before assisted reproduction.
- Nearly half perform surgery themselves, while the majority collaborate with MIGS trained surgeons for operative management.
- These findings highlight variability in counseling, surgical thresholds, and operative approach, underscoring the need for updated, evidence-based guidance to optimize fertility outcomes.
- Educational initiatives such as the Society of Reproductive Surgeons Surgical Scholars Track may help bridge this gap by strengthening surgical training within fertility-focused fellowships.

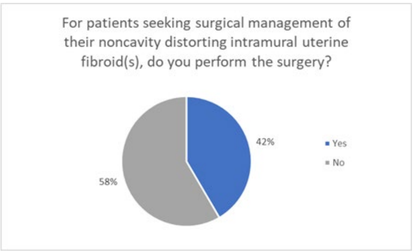
Characteristics of Clinic Respondents

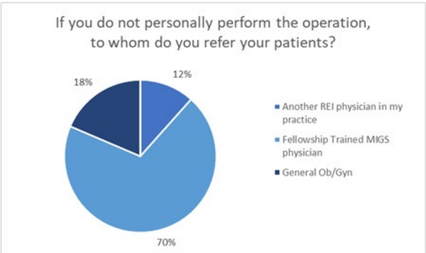
Variable		N	%
Clinic setting	Academic	16	14%
	Private	90	80%
	Hybrid	6	5%
Clinic location	Northeast	25	22%
	Midwest	22	20%
	Southeast	29	26%
	Southwest	11	10%
	West	25	22%
Number of REI physicians	1-2	25	24%
	3-4	46	43%
	5-6	17	16%
	> 8	18	17%
REI physician who specializes in surgery	Yes	55	51%
	No	53	49%
Number of oocyte retrievals per year	≤ 100	3	3%
	101-300	22	20%
	301-500	29	27%
	501-700	11	10%
	≥ 701	43	40%
Number of embryo transfers per year	≤ 100	2	2%
	101-300	30	28%
	301-500	26	24%
	501-700	15	14%
	≥ 701	35	32%
Number of patients diagnosed with uterine fibroids per month	< 10%	8	7%
	10-25%	68	63%
	25-50%	30	28%
	51-75%	2	2%
	> 75%	0	0%
Number of patients diagnosed with the non-cavity distorting intramural subtype per month	< 10%	3	3%
	10-25%	18	17%
	25-50%	35	32%
	51-75%	38	35%
	> 75%	14	13%











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