

## INTRODUCTION

- Uterine fibroids are common in both the general and female infertility population
- Myomectomy is considered the gold-standard fertility preservation treatment with the highest live birth rates (LBR)<sup>1</sup>
- Submucosal fibroids with endometrial impingement have been shown to have a negative impact on reproductive outcomes<sup>2</sup> but controversy surrounding intramural fibroids exists.<sup>3</sup>
- The primary objective of this study was to investigate reproductive outcomes using a retrospective institutional dataset of patients who underwent myomectomy for type 3-5 fibroids, without any concomitant type 0-2 fibroids.

## MATERIALS AND METHODS

- Retrospective chart review and phone interview on reproductive age patients who had myomectomy from a specialized fibroid and fertility center between January 1, 2011- December 31, 2021.
- Fibroids were classified according to the 2011 FIGO classification.<sup>4</sup> Patients with type 3-5 fibroids, without concomitant type 0-2 fibroids were included in this analysis.
- Independent t-tests and Mann-Whitney U tests were used for continuous variables, chi-square tests of independence and Fisher Exact tests were used for categorical variables. An alpha level of p = 0.05 was set as the cut-off for significance. SPSS version 29 (IBM, Inc., Chicago) was used for all analyses.

## REFERENCES

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## RESULTS

**Table 1. Patients that attempted to conceive with Type 3-5 fibroids, without concomitant type 0-2 (submucosal) N=41**

	Positive Pregnancy n = 26	Negative Pregnancy n = 15	Miscarriage Rate n = 5	Live Birth Rate n = 20	Pre-Term (< 37 wks) n = 5	Full-Term (≥ 37 wks) n = 13
<b>Age</b>	37.0 (5.0)	38.3 (4.4)	36.6 (5.5)	37.1 (5.1)	40.2 (6.3)	36.6 (4.3)
<b>Gravidity</b>						
0	38.5% (10)	28.6% (4)	40.0% (2)	40.0% (8)	0.0% (0)*	53.8% (7)*
1+	61.5% (16)	71.4% (10)	60.0% (3)	60.0% (12)	100.0% (5)*	46.2% (6)*
<b>Para (Living Child)</b>	11.5% (3)*	42.9% (6)*	20.0% (1)	10.0% (2)	20.0% (1)	7.7% (1)
<b>Reason for Myomectomy+</b>						
Infertility (not tubal factor)	n = 25 72.0% (18)	n = 12 50.0% (6)	60.0% (3)	75.0% (15)	100.0% (5)	69.2% (9)
AUB	20.0% (5)*	58.3% (7)*	20.0% (1)	20.0% (4)	0.0% (0)	23.1% (3)
Pain	4.0% (1)*	33.3% (4)*	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)
Bulk Symptoms	16.0% (4)	16.7% (2)	20.0% (1)	15.0% (3)	20.0% (1)	15.4% (2)
Other	4.0% (1)	0.0% (0)	20.0% (1)	0.0% (0)	0.0% (0)	0.0% (0)
<b>Endometrial Involvement</b>	15.4% (4)	13.3% (2)	0.0% (0)	20.0% (4)	0.0% (0)	23.1% (3)
<b>Estimated Blood Loss (ml)</b>	108.7 (81)	183.0 (149)	140.0 (119)	101.3 (72)	104.0 (88)	108.1 (72)
<b>Months Attempted Pregnancy</b>	13.5 (13.5)	18.2 (26.8)	3.0 (0)	14.3 (14.0)	5.6 (4.1)*	17.8 (15.6)*
<b>Method Achieving Pregnancy+</b>						
Natural	46.2% (12)	26.7% (4)	20.0% (1)	50.0% (10)	60.0% (3)	46.2% (6)
Timed Intercourse	0.0% (0)*	20.0% (3)*	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
IUI	0.0% (0)	13.3% (2)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
IVF	53.8% (14)	26.7% (4)	40.0% (2)	60.0% (12)	80.0% (4)	53.8% (7)
Not Specified	7.7% (2)	20.0% (3)	40.0% (2)*	0.0% (0)*	0.0% (0)	0.0% (0)

Significant differences are shown with \* p < .05 and \*\* p < .001; + indicates the categories are not mutually exclusive

## CONCLUSIONS

Of the 84 patients who underwent myomectomy for intramural fibroids (type 3-5) at this specialized fibroid center, 41 patients attempted pregnancy and achieved a 63.4% CPR with subsequent 19.2% MR. 48.8% of those that attempted pregnancy or 76.9% of the pregnancies resulted in livebirth. Although this study was limited by its retrospective nature and small sample size, it may serve as a potential counseling tool for patients seeking fertility-sparing fibroid surgery.