

Abdominal Myomectomy For The Treatment Of Symptomatic Uterine Fibroids

Tahreem Malik¹, Taiba Zulfiqar,² Abid Ali³

¹⁻² University Institute of Radiological Sciences and Medical Imaging Technology, The University of Lahore, Gujrat Campus, Pakistan.

³ Department of Allied Health Sciences, The University of Lahore, Gujrat Campus, Pakistan.

* Corresponding Author e-mail: 70058188@student.uol.edu.pk , Taibazulfiqar1@gmail.com, Abid.Ali@ahs.uol.edu.pk.

ABSTRACT

Background: Fibroids are common problem for women in elderly reproductive age. Aim: The present study aimed at assessing abdominal myomectomy for the treatment of symptomatic uterine fibroids. Methodology: The present retrospective study was conducted from 22 June 2020 to 23 July 2021 at Mayo Hospital, Lahore. Females undergone abdominal myomectomy with age 30 to 50 years were included. The primary and secondary outcomes were defined and assessed to evaluate the procedure. Results: The findings indicate that 32 (62.74%) of the patients showed successful outcome for menorrhagia. On the other hand, 27 (50.94%) patients showed successful outcome for pain and 30 (60%) showed for mass effect.

Conclusion: Abdominal myomectomy is an ideally applicable procedure for the removal of fibroids.

Keywords: Abdominal Myomectomy, Fibroids, Symptomatic Fibroids.

Article Information

Received: October 15, 2022; Revised: November 20 , 2022; Online: December, 2022

INTRODUCTION

Fibroids has emerged as a common tumor among women of reproductive age with incidence of 20-25%. With tendency of delay in family planning, an obvious change in childbirth trend is eminent from the past man years (Aarts et al 2015). Many women tend to have children at third or fourth decade of their lives, which make them more prone towards pregnancy related diseases and infections. Consequently, the issue of fibroids is associated with pregnancy in elderly age (Luketic et al 2017). The delay in pregnancy is related with higher prevalence and symptomatic appearance of the disease (Drayer and Catherino, 2015).

The symptomatic uterine fibroids are usually resolved by hysterectomy. Other traditional uterus-sparing alternatives include hormonal therapy and myomectomies by laparoscopy and laparotomy. However, modern women demand more fertility preserving treatments for the disease. Recent technique of uterine fibroid embolization has emerged with a success rate of 81-96% (Bogani et al 2015). This technique has been documented as an alternative to hysterectomy and myomectomy. Another important technique introduced recently is Magnetic resonance-guided focused ultrasound (MRgFUS). However, owing to high infrastructure costs of setting and its limitation in treatment of enormous fibroids, the

technique has remained limited in terms of applicability (Donnez et al 2016).

Many pharmaceutical agents have been developed in order to cope up with the disease. Ulipristal acetate has recently obtained license of being utilized as a stand-alone treatment of fibroids. It has attained the position of first in class medical therapy for the disease (Singh and Belland, 2015). Despite tireless efforts of devising new approaches towards the treatment of the disease, myomectomy remains the treatment of choice for many gynecologists when it actually comes to preservation of uterus (Vilos et al 2015). Thus, the present study is focused towards assessing the abdominal myomectomy in order to treat symptomatic uterine fibroids.

METHODOLOGY

The present retrospective study was conducted from 22 June 2020 to 23 July 2021 at Mayo Hospital, Lahore. The medical records of 100 patients who underwent abdominal myomectomy in past 30 months were viewed. The identification of the patients were done through search of procedure records of gynecology departments for abdominal myomectomy. The inclusion criteria was the female patients with age 30 to 50 years and history of myomectomy. The exclusion criteria of patients was the reason of having surgery due to infertility with no other symptoms. The indications for treatment included pressure and pelvic discomfort, pain, menorrhagia, urinary tract symptoms such as mass effect causing abdominal distention.

The questionnaires were designed to collect data regarding change in symptoms such as bleeding, pain and mass effect. These symptoms were rated on 6 point scale (6, completely resolved; 5, significantly improved; 4, moderately improved; 3, no change; 2, moderately worse and 1, significantly worse). The myomectomies were conducted through a Pfannenstiel's incision and maximum fibroids were removed. In case of excessive blood loss, pedunculated and small subserosal myomas were spared.

The outcome of the procedure was assessed in terms of change in patient's symptoms. Primary end points were considered as complete control of symptoms expressed

through 5 or 6 score in questionnaire. Other important information that was gathered included major adverse events causing death, other procedures, bleeding complications, delayed hospital stay, and procedure related undesirable outcomes resulting in revisit within one month. Secondary end points included days of stay at hospital, days on narcotic medicines after the procedure, number of secondary interventions during follow up period and days before recommencement of daily life activities.

The statistical analysis was performed on SPSS. Categorical variables were presented through mean and standard deviations, whereas continuous variables were depicted as frequencies and percentages.

RESULTS

The patient characteristics at the time of study are shown in the Table 1. The mean age of the patients was 38.7 years (range, 31-49 years). The mean follow-up was 14.7 months. Menorrhagia was reported in 51 (51%) patients, pain in 53 (53%) patients and mass effect in 50 (50%) patients.

Table 1: Patient characteristics before procedure.

Characteristics	Abdominal Myomectomy
Age (yr)	38.7 (range: 31-49)
Menorrhagia n(%)	51
Pain n(%)	53
Mass effect n(%)	50
Hematocrit (mg/dL)	35 (range: 28-45)
Mean follow up (mo)	14.7

The Table 2 shows outcomes of primary end points. The successful outcome was indicated if the response was from 5 or 6 category. Consequently, 32 (62.74%) of the patients showed successful outcome for menorrhagia. On the other hand, 27 (50.94%) patients showed successful outcome for pain and 30 (60%) showed for mass effect.

The adverse events were observed in 23 (23%) patients. This included nanonautologous blood transfusion (n=5), wound infection (n=3), adhesion (n=6), readmission for ileus (n=2),

chronic pelvic pain (n=2) and chronic incisional pain (n=2).

Table 2: Outcomes of primary end points

Response category	Menorrhagia n(%)	Pain n(%)	Mass effect n(%)
6, completely resolved	20 (39.21)	15 (28.30)	20 (40)
5, significantly improved	12 (23.52)	12 (22.64)	10 (20)
4, moderately improved	9 (17.64)	8 (15.09)	11 (22)
3, no change	6 (11.7)	11 (20.75)	9 (18)
2, moderately worse	4 (7.84)	7 (13.20)	0
1, significantly worse	0	0	0
Total Successful outcome (score 5 and 6)	51 32 (62.74)	53 27 (50.94)	50 30 (60)

The Table 3 shows results for secondary end points. The inpatient hospital days was 3.1 days (range, 2-8 days). The days taking pain medication was estimated to be 8.9 days (range, 3-50 days), days until normal activity were 37 days (range, 8-120 days). The repeated treatment procedure for fibroids was performed for 5 (5%) patients in follow-up time.

Table 3: Outcomes of secondary end points

End points	Frequency/mean (range/percentage)
Inpatient hospital days	3.1 (2-8)
Days taking pain medication	8.9 (3-50)
Days until normal activity	37 (8-120)
Secondary interventions (no.)	5 (5%)
Estimated blood loss (mL)	378 (50-2000)

REFERENCES

1. Aarts JW, Nieboer TE, Johnson N, et al. Surgical approach to hysterectomy for benign gynaecological disease. *Cochrane Database Syst Rev*. 2015;(8):CD003677.

DISCUSSION

The present study was aimed to assess abdominal myomectomy for the treatment of symptomatic uterine fibroids. Bleeding was resolved for 70% of the patients, which is a good indicative of applicability of the procedure. However, the 30% failure in controlling bleeding can be apprehended to the fact that targeted fibroid may not have properly been removed.

It is observed that patients with complain of mass effect have best outcome with myomectomy. This fact can be justified under the finding that 60% of success was achieved in resolving mass effect related symptoms. The immediate reduction in uterine size after myomectomy is responsible for this finding (Carranza-Mamane et al 2015). Consequently, the patients seeking treatment of fibroids for cosmetic reasons have better results with myomectomy. The relief of pain was evident for 50% of the patients.

Though some complications appeared as a result of the procedure, it can still be regarded as applicably safe owing to the benefits it impart. However, probability of recurrence of fibroids after myomectomy increases with time at 27-51% (Sancho et al 2016). The same was true in present study, where 5% of the patients required re-treatment during follow-up time.

CONCLUSION: Abdominal myomectomy is an ideally applicable procedure for the removal of fibroids.

2. Bogani G, Cliby WA, Aletti GD. Impact of morcellation on survival outcomes of patients with unexpected uterine leiomyosarcoma. *Gynecol Oncol*. 2015;137(1):167-172.
3. Carranza-Mamane B, Havelock J, Hemmings R, et al. The management of uterine fibroids in

- women with otherwise unexplained infertility. *J Obstet Gynaecol Can.* 2015;37(3):277-288.
4. Donnez J, Donnez O, Matule D, Ahrendt HJ, Hudecek R, Zatik J et al (2016) Long-term medical management of uterine fibroids with ulipristal acetate. *Fertil Steril* 105(1):165–173, e4
5. Drayer SM, Catherino WH. Prevalence, morbidity, and current medical management of uterine leiomyomas. *Int J Gynaecol Obstet.* 2015;131(2):117-122.
6. Luketic L, Shirreff L, Kives S, Liu G, El Sugy R, Leyland N, Solnik MJ, Murji AJ (2017) Does Ulipristal Acetate Affect Surgical Experience at Laparoscopic Myomectomy? *Minim Invasive Gynecol* (17):30227–3
7. Sancho JM, Delgado VS, Valero MJ, Soteras MG, Amate VP, Carrascosa AA (2016) Hysteroscopic myomectomy outcomes after 3-month treatment with either Ulipristal Acetate or GnRH analogues: a retrospective comparative study. *Eur J Obstet Gynecol Reprod Biol* 198:127–30
8. Singh SS, Belland L. Contemporary management of uterine fibroids: focus on emerging medical treatments [published correction appears in *Curr Med Res Opin.* 2016;32(4):797]. *Curr Med Res Opin.* 2015;31(1):1-12.
9. Vilos GA, Allaire C, Laberge PY, et al. The management of uterine leiomyomas. *J Obstet Gynaecol Can.* 2015;37(2):157-181.