e-ISSN: 0975-9506, p-ISSN:2961-6093

Available online on www.ijpqa.com doi: 10.25258/ijpqa.16.11.36

International Journal of Pharmaceutical Quality Assurance 2025; 16(11); 219-225

Original Research Article

Comparative Study Between Mifepristone and Ulipristal Acetate for Management of Uterine Fibriods in Symptomatic Patients of Reproductive Age Group

Julekha Nasrin[1], Soumya Mukherjee[2]

[1]Resident, MS, Department of Obstetrics and Gynaecology, KPC Medical College and Hospital, 1F Rajas C Mullick Road, Jadavpur, Kolkata 700032, India

[2]Assistant Professor, MS, Department of Obstetrics and Gynaecology, KPC Medical College and Hospital, 1F S C Mullick Road, Jadavpur, Kolkata 700032, India

Received: 01-08-2025 / Revised: 16-09-2025 / Accepted: 28-10-2025

Corresponding Author: Dr. Julekha Nasrin

Conflict of interest: Nil

Abstract

Introduction: Uterine fibroids are the most common benign tumors of the female reproductive system, often causing abnormal uterine bleeding, pelvic pain, pressure symptoms, and reduced quality of life. Medical management with agents such as Mifepristone and Ulipristal acetate provides a non-surgical option for symptom relief and fibroid size reduction.

Aims: To compare the efficacy, acceptability, compliance, and adverse effects of ulipristal acetate versus mifepristone in managing fibroids in symptomatic reproductive-age women.

Materials and Methods: The present study was an institution-based comparative descriptive study with a prospective design conducted in the Department of Obstetrics and Gynaecology at K.P.C. Medical College & Hospital. A total of 112 study subjects were enrolled using systematic random sampling, and data were collected over a 12-month period from 1st November 2023 to 30th October 2024.

Result: Both Mifepristone and Ulipristal significantly improved hemoglobin at six months (Mifepristone: 10.9 ± 0.2 g/dL; Ulipristal: 11.1 ± 0.4 g/dL; $p = 0.001$) and reduced PBAC scores (Mifepristone: 41.4 ± 4.5; Ulipristal: 74.2 ± 6.0; $p = 0.001$). Dysmenorrhea, polymenorrhea, pelvic pain, pelvic pressure, and bladder frequency improved in both groups ($p < 0.05$), with Mifepristone more effective for dysmenorrhea, metrorrhagia, polymenorrhea, and bladder frequency, and Ulipristal better for menorrhagia and pelvic pressure. Uterine and myoma volumes decreased significantly in both groups ($p = 0.001$).

Conclusion: Both Mifepristone and Ulipristal acetate are effective in managing symptomatic uterine fibroids. Treatment should be individualized based on patient symptom profiles, with Mifepristone offering better relief for bleeding and pain-related symptoms.

Keywords: Uterine fibroids, Mifepristone, Ulipristal acetate, PBAC, Hemoglobin, Symptom relief.

Introduction

Uterine fibroids (leiomyomas) are the most commonly occurring benign tumors among women of reproductive age with varying degree of presentation [1, 2]. These tumors originate from the smooth muscle of the myometrium and consist of large amounts of extracellular matrix that contain collagen, fibronectin, and proteoglycan [1, 3]. The prevalence of fibroids ranges from 4.5% – 68.6% depending upon study populations and diagnostic methods. Uterine fibroids may be asymptomatic, but they are also responsible for clinical morbidity in majority of the cases. In the reproductive age group, fibroids may become clinically apparent and associated with morbidity in approximately 25% of cases [4]. In India the prevalence of fibroids is reported to be 37.65% in rural populations and 24% in the urban populations [5]. Uterine fibroids commonly manifests as heavy menstrual bleeding, dysmenorrhea, noncyclic pain, urinary symptoms, fatigue.[6, 7]. Hysterectomy has been conventionally regarded the only curative solution for fibroids; however, substitute management approach that preserve fertility and avoid invasive surgery, with high efficacy, and a desirable side effect profile are now available [8] e.g., gonadotrophin-releasing hormone (GnRH) analogues, the levonorgestrel-releasing intrauterine system (LNG-IUS), selective progesterone receptor modulators (SPRMs), and aromatase inhibitors (AIs) [8-10]. These drugs carries its own safety and effectiveness profile, and the treatment of fibroids should be individualized and certain factors like the

patient's age, signs and symptoms, sustained reduction of fibroid size, and maintenance or improvement of fertility, while minimizing side effects are to be based upon. Symptomatic uterine fibroids cases may be managed medically, surgically, or with a combination of both [10].Since progesterone is essential for fibroid growth, progesterone antagonists and/or progesterone receptor modulators (PRMs) now effectively used in the management of fibroids cases. Selectiveprogesterone receptor modulators (SPRMs) are progesterone receptor ligands that have agonist, antagonist, partial, or mixed effects on progesterone target tissues [11, 12]. SPRMs such as ulipristal acetate (UPA), Antiprogesterone like mifepristone, asoprisnil, and telapristone acetate are reported to decrease leiomyoma size and reduce uterine bleeding in a dose dependent manner [11]. The data regarding the uses of ulipristal acetate and mifepristone in the management of fibroids cases in this part of the world is limited. In this context, the present study was to compare the efficacy of ulipristal & Mifepristone in Management of fibroid in symptomatic patient of reproductive age group in a tertiary level healthcare facility in Kolkata. Aims of the study to compare the efficacy, acceptability, compliance, and adverse effects of ulipristal acetate versus mifepristone in managing fibroids in symptomatic reproductive-age women.

Materials and Methods

Type of study: An institution-based comparative descriptive study with a prospective design.

Place of study: Department of Obstetrics and Gynaecology, K.P.C. Medical College & Hospital.

Study Duration: Data were collected over 12 months from 1st November 2023 to 30th October 2024.

Sample Size: A total of 112 study subjects were included using systematic random sampling.

Inclusion Criteria

- Women with single or multiple fibroids (3–5 cm)
- Presence of menstrual disorders, pelvic pain, or related symptoms
- Patients willing to provide informed consent

Exclusion Criteria

- Refusal to consent
- Hepatic or renal dysfunction
- Blood clotting disorders
- Concomitant pregnancy
- Suspected adnexal mass or carcinoma

Study parameter

- Demographic: Age (years)
- Clinical: Blood loss, hemoglobin (gm%), menorrhagia, polymenorrhea, dysmenorrhea, bladder frequency, pelvic pressure, pelvic pain
- Imaging: Uterine and myoma volume

Statistical Analysis

Data were entered into Excel and analyzed using SPSS and GraphPad Prism. Numerical variables were summarized using means and standard deviations, while categorical variables were described with counts and percentages.

Two-sample t-tests were used to compare independent groups, while paired t-tests accounted for correlations in paired data. Chi-square tests (including Fisher's exact test for small sample sizes) were used for categorical data comparisons. P-values ≤ 0.05 were considered statistically significant.

Ethical Clearance: Approval was obtained from the Institutional Ethics Committee of KPC Medical College and Hospital. Written informed consent was taken from all participants (or guardians) after explaining the study in their own language. Confidentiality and anonymity were ensured, and no additional interventions beyond routine management were performed.

Results

Table 1: Age Distribution of Study Subjects (n=112)

Age (years)	Mifepristone n (%)	Ulipristal n (%)	Total n (%)	p-value
30–34	6 (10.7)	5 (8.9)	11 (9.8)	0.164
35–39	43 (76.8)	36 (64.3)	79 (70.5)	
40–45	7 (12.5)	15 (26.8)	22 (19.6)	
Total	56 (100)	56 (100)	112 (100)	

Table 2: Distribution of study subjects according to parity (n=112)

Parity	Mifepristone n (%)	Ulipristal n (%)	Total n (%)	p-value
Nullipara	8 (14.3)	2 (3.6)	10 (8.9)	0.127
Primipara	15 (26.8)	19 (33.9)	34 (30.4)	
Multipara	33 (58.9)	35 (62.5)	68 (60.7)	
Total	56 (100)	56 (100)	112 (100)	

Table 3: Distribution of study subjects according to co-morbidity (n=112)

Co-morbidity	Mifepristone n (%)	Ulipristal n (%)	Total n (%)	p-value
Diabetes	0 (0)	2 (3.6)	2 (1.8)	0.302
Hypertension	13 (23.2)	11 (19.6)	24 (21.4)	
Hypothyroidism	14 (25.0)	9 (16.1)	23 (20.5)	
None	29 (51.8)	34 (60.7)	63 (56.2)	
Total	56 (100)	56 (100)	112 (100)	

Table 4: Distribution of Hemoglobin and PBAC Scores at Baseline, 3 Months, and 6 Months in Mifepristone and Ulipristal Groups

Parameter	Time point	Mifepristone mean (SD) / n (%)	Ulipristal mean (SD) / n (%)	Total mean (SD) / n (%)	p-value
Hemoglobin (gm%)	Baseline	8.1 (0.4)	8.5 (0.6)	8.2 (0.5)	0.001
	3 months	11.1 (0.3)	11.2 (0.4)	11.1 (0.3)	
	6 months	10.9 (0.2)	11.1 (0.4)	10.9 (0.3)	
PBAC	Baseline	282.5 (26.1)	369.3 (20.8)	325.9 (49.5)	0.001
	3 months	37.8 (4.9)	70.4 (6.7)	54.1 (17.3)	
	6 months	41.4 (4.5)	74.2 (6.0)	57.8 (17.3)	

Table 5: Distribution of Dysmenorrhea and Menorrhagia Severity in Mifepristone and Ulipristal Groups at Baseline, 3 Months, and 6 Months

Symptom	Time point	Severity	Mifepristone n (%)	Ulipristal n (%)	Total n (%)	p-value
Dysmenorrhea	Baseline	Mild	19 (33.9)	15 (26.8)	34 (30.4)	0.311
		Moderate	10 (17.9)	9 (16.1)	19 (17)	
		Severe	8 (14.3)	4 (7.1)	12 (10.7)	
		None	19 (33.9)	28 (50)	47 (42)	
	3 months	Mild	2 (3.6)	5 (8.9)	7 (6.2)	0.242
		None	54 (96.4)	51 (91.1)	105 (93.8)	
	6 months	Mild	6 (10.7)	4 (7.1)	10 (8.9)	0.508
		None	50 (89.3)	52 (92.9)	102 (91.1)	
Menorrhagia	Baseline	Mild	0	7 (12.5)	7 (6.2)	0.018
		Moderate	21 (37.5)	15 (26.8)	36 (32.1)	
		Heavy	35 (62.5)	34 (60.7)	69 (61.6)	
	3 months	Spotting	6 (10.7)	4 (7.1)	10 (8.9)	0.508
		None	50 (89.3)	52 (92.9)	102 (91.1)	
	6 months	Spotting	8 (14.3)	5 (8.9)	13 (11.6)	0.376
		None	48 (85.7)	51 (91.1)	99 (88.4)	

Table 6: Distribution of Polymenorrhea, Pelvic Pain, Pelvic Pressure, and Bladder Frequency in Mifepristone and Ulipristal Groups at Baseline, 3 Months, and 6 Months

Symptom	Time point	Status	Mifepristone n (%)	Ulipristal n (%)	Total n (%)	p-value
Polymenorrhea	Baseline	Absent	22 (39.3)	22 (39.3)	44 (39.3)	0.998
		Present	34 (60.7)	34 (60.7)	68 (60.7)	
	3 months	Absent	56 (100)	51 (91.1)	107 (95.5)	0.022
		Present	-	5 (8.9)	5 (4.5)	
	6 months	Absent	52 (92.9)	53 (94.6)	105 (93.8)	0.696
		Present	4 (7.1)	3 (5.4)	7 (6.2)	
Pelvic Pain	Baseline	Absent	14 (25)	20 (35.7)	34 (30.4)	0.218
		Present	42 (75)	36 (64.3)	78 (69.6)	
	3 months	Absent	51 (91.1)	44 (78.6)	95 (84.8)	0.065
		Present	5 (8.9)	12 (21.4)	17 (15.2)	
	6 months	Absent	41 (73.2)	42 (75)	83 (74.1)	0.829
		Present	15 (26.8)	14 (25)	29 (25.9)	
Pelvic Pressure	Baseline	Absent	32 (57.1)	49 (87.5)	81 (72.3)	0.001
		Present	24 (42.9)	7 (12.5)	31 (27.7)	

	3 months	Absent	44 (78.6)	53 (94.6)	97 (86.6)	0.013
		Present	12 (21.4)	3 (5.4)	15 (13.4)	
	6 months	Absent	42 (75)	56 (100)	98 (87.5)	0.001
		Present	14 (25)	-	14 (12.5)	
Bladder Frequency	Baseline	Absent	38 (67.9)	39 (69.6)	77 (68.8)	0.838
		Present	18 (32.1)	17 (30.4)	35 (31.2)	
	3 months	Absent	39 (69.6)	48 (85.7)	87 (77.7)	0.041
		Present	17 (30.4)	8 (14.3)	25 (22.3)	
	6 months	Absent	51 (91.1)	49 (87.5)	100 (89.3)	0.541
		Present	5 (8.9)	7 (12.5)	12 (10.7)	

Table 7: Distribution of Uterine and Myoma Volume in Mifepristone and Ulipristal Groups at Baseline, 3 Months, and 6 Months

Parameter	Time point	Mifepristone Mean (SD)	Ulipristal Mean (SD)	Total Mean (SD)	p-value
Uterine Volume (cm^3)	Baseline	261.6 (4.5)	309.5 (17.7)	285.5 (27.2)	0.001
	3 months	170.6 (6.1)	213.4 (5.9)	192.0 (22.3)	
	6 months	179.1 (6.8)	213.3 (5.4)	196.2 (18.2)	
Myoma Volume (cm^3)	Baseline	81.7 (3.4)	90.9 (4.0)	86.3 (5.9)	0.001
	3 months	57.8 (3.1)	59.0 (2.4)	58.4 (2.8)	
	6 months	68.2 (5.7)	57.1 (10.1)	62.7 (9.9)	

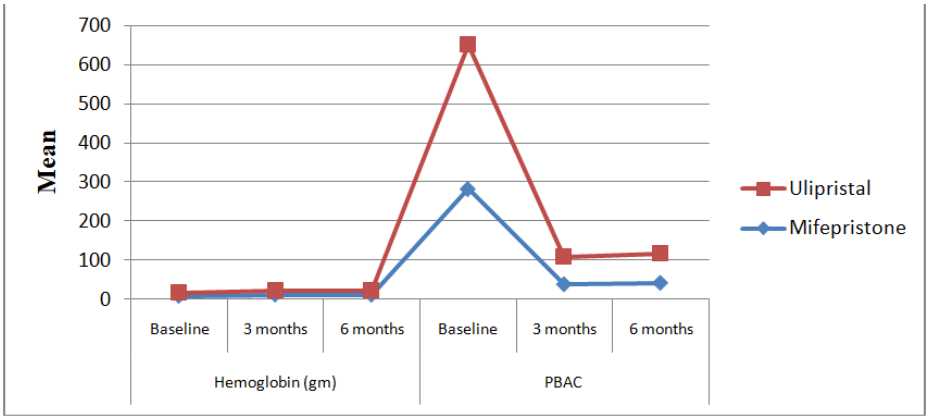

Figure 1: Distribution of Hemoglobin and PBAC Scores at Baseline, 3 Months, and 6 Months in Mifepristone and Ulipristal Groups

In this study, the majority of participants were aged 35–39 years, comprising 70.5% of the total cohort, with 76.8% in the Mifepristone group and 64.3% in the Ulipristal group. Participants aged 30–34 years represented 9.8% overall (10.7% in Mifepristone and 8.9% in Ulipristal), while those aged 40–45 years accounted for 19.6% of the total, with a higher proportion in the Ulipristal group (26.8%) compared to the Mifepristone group (12.5%). The difference in age distribution between the two groups was not statistically significant (p = 0.164).(Table 1)

In this study, most participants were multipara, accounting for 60.7% of the total population, with 58.9% in the Mifepristone group and 62.5% in the Ulipristal group. Primipara women comprised 30.4% overall, including 26.8% in the Mifepristone group and 33.9% in the Ulipristal group, while nullipara participants represented 8.9% of the total, with 14.3% in the Mifepristone group and 3.6% in the Ulipristal group. The difference in parity distribution between the two groups was not statistically significant (p = 0.127).(Table 2)

In this study, the majority of participants had no co-morbidities (56.2%), with 51.8% in the Mifepristone group and 60.7% in the Ulipristal group. Hypertension was present in 21.4% of the total participants (23.2% in Mifepristone and 19.6% in Ulipristal), while hypothyroidism was seen in 20.5% overall (25.0% in Mifepristone and 16.1% in Ulipristal). Diabetes was reported in 1.8% of participants, exclusively in the Ulipristal group (3.6%). The difference in co-morbidity distribution between the two groups was not statistically significant (p = 0.302).(Table 3)

In this study, the mean hemoglobin at baseline was significantly lower in the Mifepristone group (8.1 ± 0.4 g/dL) compared to the Ulipristal group (8.5 ± 0.6 g/dL), with an overall mean of 8.2 ± 0.5 g/dL (p = 0.001). At 3 months, hemoglobin improved in both groups to 11.1 ± 0.3 g/dL in Mifepristone and 11.2 ± 0.4 g/dL in Ulipristal, with a total mean of 11.1 ± 0.3 g/dL, and at 6 months, it was 10.9 ± 0.2 g/dL and 11.1 ± 0.4 g/dL, respectively, showing sustained improvement. PBAC scores showed a significant reduction in menstrual blood loss. At baseline, the mean PBAC score was 282.5 ± 26.1 in the Mifepristone group and 369.3 ± 20.8 in the Ulipristal group (total 325.9 ± 49.5; p = 0.001). At 3 months, scores decreased to 37.8 ± 4.9 in Mifepristone and 70.4 ± 6.7 in Ulipristal (total 54.1 ± 17.3), and at 6 months, they were 41.4 ± 4.5 and 74.2 ± 6.0, respectively (total 57.8 ± 17.3), indicating a marked improvement in both treatment arms. (Table 4)

In this study, dysmenorrhea at baseline was reported as mild in 30.4% of participants (33.9% in Mifepristone, 26.8% in Ulipristal), moderate in 17% (17.9% vs. 16.1%), severe in 10.7% (14.3% vs. 7.1%), and absent in 42% (33.9% vs. 50%), with no statistically significant difference between groups (p = 0.311). At 3 months, the majority (93.8%) experienced no dysmenorrhea, with mild symptoms in 6.2% (3.6% vs. 8.9%; p = 0.242). At 6 months, dysmenorrhea remained largely absent (91.1%), with 8.9% reporting mild symptoms (10.7% vs. 7.1%; p = 0.508).Menorrhagia at baseline was heavy in 61.6% of participants (62.5% in Mifepristone, 60.7% in Ulipristal), moderate in 32.1% (37.5% vs. 26.8%), and mild in 6.2% (0% vs. 12.5%), showing a statistically significant difference between groups (p = 0.018). At 3 months, 8.9% reported spotting (10.7% vs. 7.1%), while 91.1% had no menorrhagia (p = 0.508). By 6 months, 11.6% had spotting (14.3% vs. 8.9%) and 88.4% reported no menorrhagia (85.7% vs. 91.1%), indicating a marked improvement in menstrual bleeding over time. (Table 5)

In this study, polymenorrhea at baseline was present in 60.7% of participants in both the Mifepristone and Ulipristal groups, with 39.3% absent, showing no difference between groups (p = 0.998). At 3 months, polymenorrhea resolved in most participants (95.5% overall), though 4.5% in the Ulipristal group remained affected (p = 0.022). By 6 months, 93.8% were free of polymenorrhea, with 6.2% still affected, showing no significant difference between groups (p = 0.696).Pelvic pain was present in 69.6% of participants at baseline (75% in Mifepristone, 64.3% in Ulipristal; p = 0.218). At 3 months, pain reduced in most participants (84.8% absent), and at 6 months, 74.1% were pain-free, with no significant differences between groups (p = 0.065 and 0.829, respectively). Pelvic pressure was reported by 27.7% of participants at baseline (42.9% in Mifepristone, 12.5% in Ulipristal), with a significant difference between groups (p = 0.001). At 3 months, 86.6% were free of pressure (p = 0.013), and by 6 months, 87.5% had no symptoms, showing continued significant improvement (p = 0.001). Bladder frequency was present in 31.2% of participants at baseline (32.1% vs. 30.4%; p = 0.838). At 3 months, the symptom improved in most participants (77.7% absent; p = 0.041), and by 6 months, 89.3% were symptom-free, with no significant difference between groups (p = 0.541). Overall, all four symptoms—polymenorrhea, pelvic pain, pelvic pressure, and bladder frequency—showed marked improvement over the 6-month follow-up, with pelvic pressure demonstrating the most significant early difference between treatment groups.(Table 6)

In this study, uterine volume at baseline was significantly smaller in the Mifepristone group (261.6 ± 4.5 cm^3) compared to the Ulipristal group (309.5 ± 17.7 cm^3), with an overall mean of 285.5 ± 27.2 cm^3 (p = 0.001). At 3 months, uterine volume decreased to 170.6 ± 6.1 cm^3 in Mifepristone and 213.4 ± 5.9 cm^3 in Ulipristal, with a total mean of 192.0 ± 22.3 cm^3, and at 6 months, volumes were 179.1 ± 6.8 cm^3 and 213.3 ± 5.4 cm^3, respectively, indicating a reduction in both groups over time. Myoma volume at baseline was 81.7 ± 3.4 cm^3 in the Mifepristone group and 90.9 ± 4.0 cm^3 in the Ulipristal group, with a total mean of 86.3 ± 5.9 cm^3 (p = 0.001). At 3 months, myoma volume decreased in both groups (57.8 ± 3.1 cm^3 vs. 59.0 ± 2.4 cm^3; total 58.4 ± 2.8 cm^3), and at 6 months, the Mifepristone group showed a slight increase to 68.2 ± 5.7 cm^3 while the Ulipristal group decreased further to 57.1 ± 10.1 cm^3 (total 62.7 ± 9.9 cm^3), demonstrating a sustained reduction, particularly in the Ulipristal group.(Table7).

Discussion

The present study was an institution-based comparative descriptive study with a prospective design conducted in the Department of Obstetrics and Gynaecology at K.P.C. Medical College & Hospital. A total of 112 study subjects were enrolled using systematic random sampling, and data were collected over a 12-month period from 1st November 2023 to 30th October 2024. Uterine fibroids are common benign tumors affecting reproductive-aged women, with prevalence estimates ranging from 20% to 70%, depending on diagnostic methods and population characteristics (Cruz et al., 2017 [1]; Stewart et al., 2016 [2]; Khan et al., 2014 [3]; Stewart et al., 2017 [4]). They are associated with a range of clinical symptoms, including menorrhagia, dysmenorrhea, pelvic pain, pelvic pressure, and bladder dysfunction, which can significantly impair quality of life (Zimmermann et

al., 2012 [6]; Gupta et al., 2008 [7]; Mas et al., 2017 [9]; Vilos et al., 2015 [8]). Medical management with selective progesterone receptor modulators such as ulipristal acetate and antiprogestins like mifepristone has emerged as a non-surgical option, providing both symptom control and reduction in myoma and uterine volumes (Singh et al., 2018 [10]; Donnez et al., 2016 [11]).

In the present study, participants were predominantly aged 35–39 years (70.5%), consistent with prior studies showing that fibroid prevalence peaks in the late reproductive years (Naresh et al., 2020 [12]; Dahiya et al., 2019 [13]; Ghosh et al., 2022 [14]). The majority were multiparous (60.7%), similar to previous reports (Gupta et al., 2008 [7]; Vilos et al., 2015 [8]). There were no statistically significant differences between the Mifepristone and Ulipristal groups regarding age or parity, ensuring baseline comparability. Co-morbidities such as hypertension and hypothyroidism were observed but did not differ significantly between groups, in line with prior observations that common metabolic co-morbidities do not significantly affect medical management outcomes for fibroids (Munusamy et al., 2017 [5]; Naresh et al., 2020 [12]).

Hematological outcomes: Hemoglobin levels improved significantly in both groups over six months, reflecting the reduction in menstrual blood loss. Baseline hemoglobin was slightly lower in the Mifepristone group (8.1 ± 0.4 g/dL) compared to the Ulipristal group (8.5 ± 0.6 g/dL), possibly due to higher PBAC scores in the Ulipristal group (369.3 ± 20.8 vs. 282.5 ± 26.1). By three months, both groups showed marked improvement, sustained at six months. These findings align with previous studies demonstrating that SPRMs and mifepristone effectively reduce menstrual blood loss and improve anemia (Shen et al., 2013 [15]; Naresh et al., 2020 [12]; Dahiya et al., 2019 [13]).

Menstrual and symptom relief: Dysmenorrhea, menorrhagia, and polymenorrhea improved significantly in both groups. Although menorrhagia showed a statistically significant baseline difference favoring the Ulipristal group, both groups demonstrated comparable improvement over time.

Polymenorrhea resolved in over 93% of participants by six months. Pelvic pain and bladder frequency also improved significantly, consistent with previous reports highlighting symptom relief as a primary benefit of medical therapy (Naresh et al., 2020 [12]; Dahiya et al., 2019 [13]). Notably, pelvic pressure showed early and sustained improvement, with Ulipristal providing faster relief, suggesting potential superiority in managing mass-related symptoms.

Uterine and myoma volume reduction: Baseline uterine and myoma volumes were significantly larger in the Ulipristal group; however, both treatments achieved substantial reductions over six months. Uterine volume decreased by approximately 31% in the Mifepristone group and 31% in the Ulipristal group at three months, with sustained reductions at six months. Myoma volume demonstrated sustained reduction, particularly in the Ulipristal group, corroborating previous clinical trials reporting 30–50% shrinkage with SPRMs (Naresh et al., 2020 [12]; Ghosh et al., 2022 [14]). Mifepristone showed initial volume reduction with slight increase at six months, reflecting the need for ongoing therapy to maintain effects (Shen et al., 2013 [15]).

Comparative efficacy: Overall, both Mifepristone and Ulipristal acetate were effective in controlling symptoms, improving hemoglobin, and reducing uterine and myoma volumes. Ulipristal showed slightly better myoma volume reduction and earlier relief of pelvic pressure, suggesting a potential advantage in patients with larger or more symptomatic fibroids. These findings align with previous meta-analyses and observational studies comparing SPRMs and mifepristone (Naresh et al., 2020 [12]; Dahiya et al., 2019 [13]; Ghosh et al., 2022 [14]).

Conclusion

In the present study, both Mifepristone and Ulipristal acetate were found to be effective in the management of symptomatic uterine fibroids, demonstrating significant improvements in hemoglobin levels, reduction in blood loss as measured by PBAC scores, and alleviation of pelvic pain over a six-month follow-up period. Mifepristone showed greater efficacy in reducing dysmenorrhea, metrorrhagia, polymenorrhea, and bladder frequency, while Ulipristal was more effective in controlling menorrhagia and pelvic pressure. Both drugs were associated with a significant decrease in uterine and myoma volumes, with uterine volume reduction being slightly more pronounced in the Mifepristone group. Overall, both agents effectively reduced fibroid size, menstrual blood loss, and associated symptoms, with Mifepristone demonstrating superior outcomes for specific symptoms such as dysmenorrhea and abnormal uterine bleeding. Therefore, treatment of patients with uterine fibroids should be individualized, with the choice of therapy guided by the patient's symptom profile and clinical priorities.

Reference

1. Cruz MSDDL, Buchanan EM, et al. Uterine fibroids: diagnosis and treatment. Am Fam Physician. 2017;95(2):101–7.

2. Stewart EA, Laughlin-Tommaso SK, et al. Uterine fibroids. Nat Rev Dis Primers. 2016;2:16043.
3. Khan AT, Shehmar M, et al. Uterine fibroids: current perspectives. Int J Womens Health. 2014;6:95–114.
4. Stewart EA, Cookson CL, et al. Epidemiology of uterine fibroids: a systematic review. BJOG. 2017;124:1501–12.
5. Munusamy MM, Sheelaa WG, et al. [Title missing]. Int J Reprod Contracept Obstet Gynecol. 2017;6(12):5596–601.
6. Zimmermann A, Bernuit D, Gerlinger C, Schaefers M, Geppert K. Prevalence, symptoms and management of uterine fibroids: an international internet-based survey of 21,746 women. BMC Womens Health. 2012;12:6.
7. Gupta S, Jose J, Manyonda I. Clinical presentation of fibroids. Best Pract Res Clin Obstet Gynaecol. 2008;22:615–26.
8. Vilos GA, Allaire C, Laberge PY, et al. The management of uterine leiomyomas. J Obstet Gynaecol Can. 2015;37(2):157–78.
9. Mas A, Tarazona M, Dasí Carrasco J, et al. Updated approaches for management of uterine fibroids. Int J Womens Health. 2017;9:607–17.
10. Singh SS, Belland L, Leyland N, et al. The past, present, and future of selective progesterone receptor modulators in the management of uterine fibroids. Am J Obstet Gynecol. 2018;218(6):563–72.
11. Donnez J, Dolmans MM, et al. Uterine fibroid management: from the present to the future. Hum Reprod Update. 2016;22(6):665–86.
12. Naresh N, Mani P, Yadav L. Comparison of mifepristone and ulipristal acetate in the treatment of symptomatic uterine fibroids. Int J Med Health Res. 2020;6(6):84–6.
13. Dahiya P, Bansal I, Kansal R, Beniwal A, Beniwal A. To compare the efficacy of ulipristal acetate and mifepristone in management of uterine fibroids in symptomatic patients of reproductive age group. Int J Contemp Med Res. 2019;6(11):6–9.
14. Ghosh L, Rakshit A, De M. A comparative prospective observational study on the use of ulipristal acetate versus mifepristone in reduction of the size of uterine leiomyoma. Asian J Med Sci. 2022;13(1):129–35.
15. Shen Q, Hua Y, Jiang W, Zhang W, Chen M, Zhu X. Effects of mifepristone on uterine leiomyoma in premenopausal women: a meta-analysis. Fertil Steril. 2013;100(6):1722–6.