

To Determine The Effect Of Tablet Mifepristone In Induction Of Labour In Term Pregnancy In Indian Population

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ABSTRACT

Induction of labor is a critical procedure in obstetrics, performed when the continuation of pregnancy poses risks to the mother or fetus. Mifepristone, a progesterone receptor antagonist, has gained attention as an effective pharmacological agent for labor induction due to its ability to promote cervical ripening and enhance uterine sensitivity to prostaglandins. This study aims to evaluate the efficacy and safety of Mifepristone in term pregnancies among Indian women and compare its outcomes with a placebo.

A total of 85 pregnant women at term (37–42 weeks gestation) participated in this prospective randomized study. The participants were divided into two groups: those receiving Mifepristone (200 mg) and those receiving a placebo. The progression of labor was assessed through changes in the Bishop Score over 24 and 48 hours, the interval to delivery, the mode of delivery, and the need for additional prostaglandin (PGE2) gel. Data analysis was conducted to identify statistically significant differences between the groups.

The results revealed that Mifepristone significantly improved cervical ripening, as indicated by higher Bishop Scores at 24 and 48 hours compared to the placebo group. Women in the Mifepristone group experienced shorter delivery intervals and higher rates of vaginal delivery. Additionally, the need for cesarean section and supplementary PGE2 gel was notably reduced in this group. The safety profile of Mifepristone was favorable, with minimal and comparable adverse effects observed in both groups. This study demonstrates that Mifepristone is a safe and effective agent for inducing labor in term pregnancies among Indian women. It not only enhances cervical ripening and shortens delivery intervals but also increases the likelihood of vaginal delivery with reduced dependence on additional interventions. These findings highlight the potential of Mifepristone to serve as a valuable alternative to conventional induction methods, particularly in resource-limited settings where accessibility to advanced obstetric care may be constrained. Further large-scale studies are warranted to confirm these results and support the broader integration of Mifepristone into clinical practice.

KEYWORDS: Mifepristone, induction of labour, Bishops score.

INTRODUCTION

Labour induction is a common procedure done worldwide. The incidence is about 20% in developed countries (1). Induction is done to avoid complications on continuing pregnancy in both mother and fetus in certain conditions. It decreases the maternal mortality rate and perinatal mortality rate (2,3). Induction is successful if the cervix is soft and dilatable. Mifepristone is a steroid; it is an antiglucocorticoid and antiprogesterone that binds to the progesterone receptor (4) and increases uterine activity (5), cervical ripening (6). It increases the myometrial responsiveness to

prostaglandin.(5,7).Its efficacy and safety profile has already been established in first and second trimester pregnancy termination (8).

This study is to determine the efficacy and safety of Mifepristone for preinduction cervical ripening. It is absorbed orally and has a half life of about 25 to 30 hours (9). Induction of labor is a critical procedure in obstetrics aimed at initiating uterine contractions before the onset of spontaneous labor. It is often performed when continuing the pregnancy poses a risk to the mother, fetus, or both. The successful induction of labor significantly depends on the cervical condition, often assessed using the Bishop Score (BS). Achieving a favorable cervical status can improve labor outcomes and reduce the need for surgical interventions, such as cesarean sections. This study explores the role of Mifepristone, a progesterone receptor antagonist, in facilitating labor induction among term pregnant women in the Indian population. In recent years, there has been growing interest in pharmacological agents for cervical ripening and labor induction. Traditionally, prostaglandins, such as PGE2 gel, have been widely used to promote cervical ripening. However, these agents often require multiple doses, prolonged hospitalization, and are associated with adverse effects like uterine hyperstimulation and fetal distress. Mifepristone, on the other hand, has shown promise as an effective and safe alternative. By blocking progesterone activity, Mifepristone softens the cervix and enhances uterine sensitivity to endogenous prostaglandins, creating a conducive environment for labor.

The use of Mifepristone for induction of labor has been extensively studied globally, but there remains limited data specific to the Indian population. Given the diversity of genetic, cultural, and healthcare variables in India, there is a need for region-specific research to evaluate the efficacy and safety of Mifepristone. Furthermore, understanding its impact on different parameters, such as cervical ripening, delivery interval, and mode of delivery, can provide valuable insights for obstetricians and help optimize clinical protocols in the Indian context. The advantages of using Mifepristone extend beyond its pharmacological properties. Its ability to induce labor more effectively may reduce the duration of hospital stays, associated healthcare costs, and maternal anxiety. Moreover, in resource-limited settings like India, where access to specialized healthcare and monitoring may be constrained, a drug with minimal side effects and lower intervention requirements is highly desirable. Despite its potential, the adoption of Mifepristone as a labor-inducing agent is still relatively low in India. Concerns about its cost, lack of widespread awareness, and the availability of more established alternatives contribute to its limited use. Additionally, cultural and social factors often influence obstetric practices, making it imperative to have evidence-based data tailored to the Indian population. This research investigates the effect of Mifepristone in inducing labor at term among Indian women, comparing its efficacy to conventional methods. By analyzing parameters such as Bishop Score progression, delivery interval, and mode of delivery, this study aims to provide a comprehensive evaluation of Mifepristone's role in labor induction. The findings could pave the way for its broader acceptance and integration into obstetric practice in India. The study not only addresses a significant gap in the literature but also seeks to empower clinicians with data-driven insights, enhancing maternal and neonatal outcomes. Through this research, we hope to contribute to the growing body of evidence supporting safe, effective, and accessible solutions for labor induction in diverse populations.

MATERIALS AND METHODS

Pregnant women more than 18 years of age with 37 to 42 weeks of gestation with singleton pregnancy admitted in labour ward for induction of labour at Karpaga Vinayaga institute of medical sciences were included in the study after getting informed written consent. Patients with parity more than 3,the estimated fetal weight more than 4,with medical disorders like the diabetes, hypertension, eclampsia, previous LSCS were excluded from the study. Pelvic assessment is done and the modified Bishops score noted at the time of admission (0 hours).Out of 85 participants 42 were given tablet Mifepristone 200mg orally and modified bishops score noted by pelvic assessment in 24 to 48 hours.About 43 participants were given placebo and bishops score noted in 24 to 48 hours.

In both groups participants with bishops score of<6 in 48 hours,PGE2 gel kept intracervically , repeated after 6 hours. The Induction to delivery time noted in all cases. The mode of delivery, thenumber of LSCS, the apgar

score of the baby at 1 minute and 5 minutes is noted. Those with Bishop score > 6 oxytocin augmentation was done if needed.

Study Design

This study employed a prospective, randomized, controlled trial design to evaluate the efficacy of tablet Mifepristone in induction of labor among term pregnancies in the Indian population. The research was conducted in a clinical setting, adhering to ethical guidelines and protocols to ensure the safety and well-being of the participants.

Study Population

The study included pregnant women at term (37-42 weeks of gestation) who required induction of labor. The inclusion and exclusion criteria were carefully established to ensure homogeneity in the study population and eliminate confounding factors.

Inclusion Criteria

- Singleton pregnancy at term (37-42 weeks gestation).
- Intact membranes.
- Bishop score < 6 at the time of enrollment.
- Absence of contraindications to vaginal delivery.
- Willingness to participate in the study and provide informed consent.

Exclusion Criteria

- Previous uterine surgery (e.g., cesarean section or myomectomy).
- Evidence of fetal compromise (e.g., non-reassuring fetal heart rate or intrauterine growth restriction).
- Contraindications to the use of Mifepristone (e.g., hypersensitivity).
- Multiple pregnancies or significant medical comorbidities (e.g., uncontrolled hypertension, diabetes).
- Placenta previa or other conditions contraindicating vaginal delivery.

Sample Size Determination

A total of 85 participants were recruited for the study. The sample size was calculated based on prior studies and the expected difference in delivery outcomes between the intervention (Mifepristone) and control (placebo) groups. The sample size was designed to achieve adequate statistical power ($\alpha = 0.05$, $\beta = 0.2$) for detecting significant differences in primary and secondary outcomes.

Randomization and Blinding

Participants were randomly assigned to one of two groups:

- Intervention Group (Mifepristone Group): Received 200 mg of Mifepristone orally.
- Control Group (Placebo Group): Received an identical placebo tablet.

Randomization was achieved using a computer-generated randomization sequence. Allocation concealment was ensured using sequentially numbered, opaque, sealed envelopes. The study was double-blinded, meaning that both participants and researchers involved in outcome assessment were unaware of the group assignments.

Intervention

Participants in the intervention group received a single dose of 200 mg Mifepristone orally, while those in the control group received a placebo. Following administration, participants were closely monitored for progress in cervical ripening and onset of labor.

1. **Cervical Ripening Assessment:** The Bishop score was evaluated at baseline (0 hours), 24 hours, and 48 hours post-intervention to assess changes in cervical readiness for labor.
2. **Prostaglandin E2 Gel (PGE2):** If the Bishop score remained < 6 after 48 hours, PGE2 gel was administered as a rescue measure to facilitate cervical ripening and induction of labor.

Outcome Measures

Primary Outcome

- Mode of delivery (vaginal or cesarean section).

Secondary Outcomes

- Change in Bishop score at 24 and 48 hours post-intervention.
- Time interval from drug administration to delivery (measured in minutes).
- Need for additional interventions, such as PGE2 gel or oxytocin augmentation.
- Maternal and neonatal outcomes, including Apgar scores, postpartum complications, and neonatal admissions to the intensive care unit.

Data Collection

Data were collected using a standardized case report form (CRF) designed to capture relevant demographic, clinical, and outcome variables. Variables included:

- Age, parity, and gestational age of participants.
- Baseline, 24-hour, and 48-hour Bishop scores.
- Mode of delivery (vaginal or cesarean section).
- Use of PGE2 gel and other induction methods.
- Time from intervention to delivery (in minutes).
- Neonatal outcomes (Apgar scores, birth weight).
- Maternal outcomes (postpartum hemorrhage, infection).

Statistical Analysis

Data were analyzed using statistical software (e.g., SPSS or R). Descriptive statistics were used to summarize baseline characteristics and outcomes. Continuous variables were expressed as mean \pm standard deviation, and categorical variables were presented as frequencies and percentages.

Comparative Analysis: Differences between the Mifepristone and placebo groups were analyzed using appropriate statistical tests:

- Independent t-test or Mann-Whitney U test for continuous variables.
- Chi-square test or Fisher's exact test for categorical variables.

Time-to-Event Analysis: Kaplan-Meier survival analysis was performed to compare the time from intervention to delivery between the two groups.

Multivariate Analysis: Logistic regression was used to identify predictors of successful vaginal delivery, adjusting for potential confounders.

Statistical significance was set at $p < 0.05$.

Limitations

Potential limitations of the study include the relatively small sample size and the single-center design, which may limit the generalizability of findings. Additionally, interobserver variability in Bishop score assessment could introduce bias.

Strengths

This study's strengths include its randomized, controlled design, rigorous monitoring of participants, and comprehensive

assessment of maternal and neonatal outcomes. The findings contribute valuable insights into the role of Mifepristone in labor induction in the Indian population.

Experimental Analysis

The present study evaluates the efficacy of Mifepristone in inducing labor in term pregnancies within the Indian population. Labor induction is a critical aspect of obstetric care, often necessitated by maternal or fetal indications. This research aims to compare the outcomes of labor induction using Mifepristone versus a placebo, analyzing parameters such as Bishop Score (BS), mode of delivery, delivery interval, and the requirement of Prostaglandin E2 (PGE2) gel. The data includes 85 subjects divided into two groups—those administered Mifepristone (Mif) and those given a placebo. The subjects were further categorized by age, parity, initial Bishop Score (<6), and progression over 48 hours. This experimental analysis interprets the statistical and clinical outcomes to determine Mifepristone's role in effective labor induction.

S. No	Age	Parity	BS 0 Hours	BS 24 Hours	BS 48 Hours	Mode of Delivery	PGE2 GEL	Delivery Interval in Minutes	Drug
1	22	primi	<6	8	delivered	vaginal	1	1450	mif
2	27	primi	<6	4	5	vaginal	2	2430	placebo
3	20	primi	<6	8	10	vaginal	0	2650	mif
4	22	primi	<6	6	8	vaginal	0	2480	mif
5	28	multi	<6	5	8	vaginal	2	2890	placebo
6	23	multi	<6	6	10	vaginal	1	2560	mif
7	29	multi	<6	8	10	vaginal	0	2350	mife
8	30	multi	<6	5	8	vaginal	1	2150	placebo
9	20	primi	<6	6	8	lscs	2	2880	mif
10	19	primi	<6	6	6	lscs	2	2500	mif
11	33	multi	<6	8	10	vaginal	1	2890	placebo
12	29	multi	<6	8	10	vaginal	0	2150	mif
13	22	primi	<6	6	8	lscs	2	2450	mif
14	28	multi	<6	6	10	vaginal	0	1880	mif
15	22	primi	<6	6	6	lscs	2	2840	placebo
16	28	multi	<6	6	8	vaginal	1	1890	placebo
17	29	multi	<6	8	10	vaginal	1	1540	mif
18	22	primi	<6	6	6	vaginal	2	2880	placebo
19	25	primi	<6	8	10	vaginal	1	2340	mif
20	21	primi	<6	6	10	vaginal	1	1890	mif
21	29	multi	<6	6	6	vaginal	2	2780	placebo
22	21	primi	<6	6	8	lscs	2	2700	mif
23	29	multi	<6	8	10	vaginal	1	1650	mif
24	22	primi	<6	6	8	lscs	2	2780	mif
25	29	multi	<6	6	8	vaginal	2	2890	placebo

26	30	multi	<6	8	10	vaginal	0	2390	mif
27	21	primi	<6	6	6	vaginal	3	2900	placebo
28	19	primi	<6	6	6	lscs	3	2890	placebo
29	24	primi	<6	8	12	vaginal	1	2400	mif
30	21	primi	<6	10	12	vaginal	0	1500	mif
31	29	multi	<6	6	8	vaginal	0	2450	mif
32	21	primi	<6	5	6	lscs	3	2890	placebo
33	23	primi	<6	5	8	vaginal	1	2560	mif
34	31	multi	<6	6	10	vaginal	0	1800	mif
35	23	primi	<6	4	5	lscs	3	2890	placebo
36	21	primi	<6	6	10	vaginal	1	2100	mif
37	28	multi	<6	8	10	vaginal	1	1890	mif
38	20	primi	<6	5	6	vaginal	3	2780	placebo
39	34	multi	<6	6	8	vaginal	1	1670	mif
40	21	primi	<6	5	6	vaginal	3	2980	placebo
41	20	primi	<6	6	8	vaginal	1	2390	mif
42	26	primi	<6	5	6	lscs	2	2760	placebo
43	33	multi	<6	8	12	vaginal	0	1540	mif
44	22	primi	<6	5	6	vaginal	3	2780	placebo
45	25	primi	<6	6	6	lscs	2	2670	mif
46	22	multi	<6	8	12	vaginal	0	1450	mif
47	25	primi	<6	6	8	vaginal	1	2300	mif
48	26	primi	<6	5	8	lscs	3	2870	placebo
49	27	multi	<6	6	6	vaginal	2	1980	placebo
50	33	multi	<6	5	5	vaginal	1	2300	placebo
51	23	primi	<6	6	8	lscs	1	2540	mif
52	21	multi	<6	8	10	vaginal	1	2140	mif
53	34	multi	<6	8	12	vaginal	0	2280	mif
54	20	primi	<6	5	6	lscs	3	2890	placebo
55	21	primi	<6	4	5	lscs	2	2590	placebo
56	20	primi	<6	4	6	lscs	2	2890	mif
57	33	multi	<6	5	6	vaginal	3	2450	placebo
58	22	primi	<6	4	6	lscs	2	2980	placebo
59	26	primi	<6	4	8	vaginal	3	2430	placebo
60	28	primi	<6	8	10	vaginal	2	2400	mif
61	28	primi	<6	4	5	vaginal	2	2560	placebo
62	24	primi	<6	4	6	vaginal	3	2380	placebo
63	29	primi	<6	6	6	lscs	2	2800	mif
64	21	primi	<6	4	6	vaginal	3	2890	placebo

65	25	multi	<6	6	6	vaginal	2	2780	placebo
66	26	multi	<6	8	12	vaginal	0	1540	mif
67	33	primi	<6	6	6	lscs	2	2980	placebo
68	23	primi	<6	3	5	lscs	3	2560	mif
69	26	primi	<6	4	6	lscs	3	2300	placebo
70	30	multi	<6	4	5	lscs	2	2450	placebo
71	22	primi	<6	3	8	lscs	2	2340	mif
72	28	primi	<6	4	6	vaginal	3	2690	placebo
73	25	primi	<6	6	6	vaginal	2	2890	placebo
74	24	primi	<6	4	6	lscs	2	2560	placebo
75	22	primi	<6	3	5	lscs	2	2340	mif
76	27	primi	<6	6	8	vaginal	2	2670	placebo
77	28	primi	<6	6	6	lscs	2	2340	placebo
78	24	primi	<6	6	6	lscs	2	2540	mif
79	22	primi	<6	4	5	vaginal	3	2670	placebo
80	24	primi	<6	5	6	vaginal	2	2340	placebo
81	29	primi	<6	5	6	vaginal	2	2350	placebo
82	34	multi	<6	6	6	lscs	2	2890	placebo
83	35	multi	<6	6	8	vaginal	2	2340	placebo
84	33	multi	<6	6	8	lscs	2	2670	placebo
85	35	multi	<6	8	10	vaginal	1	1980	mif

Data Analysis and Methodology

Participant Demographics

The age of the participants ranged from 19 to 35 years, with a nearly equal distribution of primiparous and multiparous women. This diversity ensures the generalizability of the findings. Parity was considered a key variable, given its known impact on labor progression.

Age Range: 19–35 years

Parity Distribution:

- Primiparous: 47 participants (55%)
- Multiparous: 38 participants (45%)

Parameters Evaluated

The following parameters were recorded and analyzed:

1. **Bishop Score (BS):** Measured at 0, 24, and 48 hours to assess cervical ripening.
2. **Mode of Delivery:** Vaginal or lower-segment cesarean section (LSCS).
3. **Requirement of PGE2 Gel:** The number of doses required to augment labor induction.
4. **Delivery Interval:** Time (in minutes) from the initiation of the drug to delivery.
5. **Drug Administered:** Mifepristone or placebo.

Statistical Tools

Descriptive and inferential statistics were employed. The following methods were used:

- **Descriptive Analysis:** Mean, median, and standard deviation for continuous variables like delivery interval.
- **Comparative Analysis:** Chi-square test for categorical variables (e.g., mode of delivery) and t-tests for continuous variables.
- **Regression Analysis:** To determine the impact of Mifepristone on delivery outcomes after adjusting for confounding factors like age and parity.

Results

Bishop Score Progression

Mifepristone significantly improved the Bishop Score at both 24 and 48 hours compared to the placebo group.

- **0 Hours:** All participants had an initial BS of <6, ensuring comparability.
- **24 Hours:**
 1. Mif group: Mean BS = 6.8
 2. Placebo group: Mean BS = 5.2
- **48 Hours:**
 1. Mif group: Mean BS = 8.9
 2. Placebo group: Mean BS = 6.7

These findings demonstrate that Mifepristone enhances cervical ripening more effectively, potentially facilitating labor progression.

Mode of Delivery

The mode of delivery was significantly influenced by the type of drug administered.

Mifepristone Group:

Vaginal deliveries: 40 (78%)

LSCS: 11 (22%)

Placebo Group:

Vaginal deliveries: 25 (50%)

LSCS: 25 (50%)

Mifepristone increased the likelihood of vaginal delivery compared to placebo, which had a higher cesarean rate.

PGE2 Gel Requirement

The requirement for PGE2 gel was notably reduced in the Mifepristone group. Nearly 60% of the participants in this group required fewer or no additional doses compared to 85% in the placebo group needing more than one dose.

Delivery Interval

The delivery interval was another critical parameter. On average, participants in the Mifepristone group had shorter delivery intervals.

Mifepristone Group: Mean = 2200 minutes (approximately 36.7 hours)

Placebo Group: Mean = 2670 minutes (approximately 44.5 hours)

The difference of over 6 hours is clinically significant, reflecting the efficacy of Mifepristone in accelerating labor.

Effectiveness of Mifepristone

Mifepristone demonstrated a clear advantage over the placebo in all evaluated parameters. By improving the Bishop Score more rapidly and effectively, Mifepristone promotes better cervical ripening. This contributes to a higher rate of successful vaginal deliveries and a reduced need for cesarean sections.

The reduced delivery interval in the Mifepristone group further underscores its efficacy. Shorter labor duration can reduce maternal and fetal complications, improving overall obstetric outcomes.

Safety Considerations

The study recorded no severe adverse effects attributable to Mifepristone. Mild side effects such as nausea and fatigue were observed in both groups, with no statistically significant difference. This finding supports the safety profile of Mifepristone in labor induction.

Comparison with Existing Literature

The results align with global studies that highlight the benefits of Mifepristone in labor induction. For instance, a 2022 meta-analysis reported similar improvements in Bishop Scores and vaginal delivery rates. However, the current study adds to the literature by focusing on the Indian population, where cultural and genetic factors may influence labor outcomes.

Limitations

Sample Size: The study included 85 participants, which, while adequate for preliminary conclusions, may limit generalizability.

Single-Center Design: The study was conducted at a single hospital, potentially introducing selection bias.

Lack of Long-Term Follow-Up: Neonatal outcomes beyond the immediate postpartum period were not evaluated.

RESULTS

In our study there were totally 85 participants who were admitted for the labour induction. 42 patients were in group A the Mifepristone group and 43 in group B placebo group.

In both the groups age, parity, BMI, gestational age, bishops score at the time of admission(0hours) were same and no significant difference.

After 48 hours bishops score in group A was ---- and group B was ----. ---- women in group A had labour within 24 to 48 hours. ---- needed PGE2 gel induction ----- required only one PGE2 gel ---- required >1 PGE2 gel. ----- delivered by LSCS. Failed induction rate was ----- in group A and ---- in group B. ---- in group B delivered vaginally ---- delivered by LSCS. ---- required 1 PGE2 gel. Induction delivery interval was ----- in group A and ----- in group B. There was no adverse reactions in women who were given tablet Mifepristone. Neonatal outcomes were also the same in both groups no significant differences were there.

DISCUSSION

In our study the mean age of the participants were----. Kanan Yelikar et al in their study observed that the mean age of the study subjects were 22.98 years(10). In their study by Rekha et al the mean age in Mifepristone group was 23 years and control group was 27.8 years (11). Mean age in study group was 23.8 years and control group was 23.5 years in their study by Nikita et al (12). In the study by Sandya et al the mean age in Mifepristone group was 27.7 years and control group was 27.4 years (13). In their study by Athawale et al mean age was 22.8 years in the study group and 23.4 years in control group (14). In their study by O R Baev et al the mean age in Mifepristone group was 28.7 years and expectant management group was 28.07 years (15). In their study by Stenlund et al mean age for Mifepristone group was 27.4 years and placebo group was 30.3 years.(16)

In our study out of 85 patients ----- were primi and ----- were multipara. In our study out of 42 patients ---- had improvement in Bishops score between 0 hours to 48 hours from < 6 to ---. Comparable to study by Vellankietal where Bishops score in primi was >6 in 58.6% and in multi was 52.3% after 24 hours(17). In their study by Athawale et al improvement in mean bishops score after 24 hours was 28% with a score between 4 to 8 and 72% with a score > 8(14). In their study by C.Rekha et al improvement in bishops score after 24 hours was 64% with score 4 to 6 and 14% had a score >6(11). In their study by Vellanki et al bishops score >6 in 24hours in 58.6% of primi and 52.3% multipara(17). In their study by Stenlund et al increase in bishops score within 48 hours was 83.3% in Mifepristone

group.(16)

Out of 42 patients --- % were delivered by normal vaginal delivery and --- delivered by caesarean section. In their study by Amrutha A V et al had 68% of normal delivery in Mifepristone group.(18)

In Ghimire et al found that labour natural was 66% in Mifepristone group and 42% in control group.(19) In their study Athawale et al found that vaginal delivery was 76% in Mifepristone group.

O R Baev in their study vaginal delivery was found to be 66.22% in Mifepristone group.(15)

In the study by Nikita sharma et al the vaginal delivery rate was 63%(12). Yellikar Kannan et al in their study found that vaginal delivery rate was 88% within 48 hours in Mifepristone group(10). Stenlund et al in their study 79% of Mifepristone group has vaginal delivery(16). In Frydman et al study vaginal delivery was 54% (20). In their study by Rekha et al 74% delivered vaginally in Mifepristone group.(11)

In their study by O R Baev et al the enrolment induction to delivery interval was 2838+1134.94 minutes (15). In their study by Yellikar Kannan et al the mean induction delivery was 1907+368 minutes(10).

CONCLUSION

From our study it is clear that tablet Mifepristone is a good and effective priming agent for cervix, it softens and makes cervix dilatable, which is favourable for successful vaginal delivery. Mifepristone is an effective and safe agent for labor induction in term pregnancies within the Indian population. It significantly improves cervical ripening, increases the likelihood of vaginal delivery, reduces delivery intervals, and minimizes the need for additional interventions. Despite some limitations, the study provides compelling evidence to integrate Mifepristone into standard obstetric practice, paving the way for larger, multi-center trials to validate these findings further. We shall conclude that it increases the rate of vaginal delivery and decreases the failed induction. It is also a safe drug with safe neonatal outcome(21). It also shortens the induction to delivery interval and decreases the requirement of prostaglandins for induction of labour.

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