

## ROLE OF MIFE PRISTONE IN TREATMENT OF UTERINE FIBROIDS IN PERIMENOPAUSAL WOMEN

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**Article History:** Received 28<sup>th</sup> February, 2018; Received in revised form 17<sup>th</sup> March, 2018; Accepted 27<sup>th</sup> April, 2018; Published online 31<sup>st</sup> May, 2018

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**Citation: Dr. Sandhya Rani, B. 2018.** "Role of mife pristone in treatment of uterine fibroids in perimenopausal women", *International Journal of Development Research*, 8, (05), 20544-20546.

### INTRODUCTION

Menorrhagia is an important cause of anaemia in reproductive and perimenopausal age group. Uterine leiomyomas are widely prevalent and frequently cause menorrhagia. The major therapeutic option today is hysterectomy. With recent advancements, medical options are of highest interest of which mifepristone is preferred due to its efficacy, less side effects, low cost & oral administration.

### Aims & objectives

- To study the role of 25mg mifepristone in uterine fibroids in perimenopausal women
- Done by determining the effect of 25mg mifepristone in decreasing the size of fibroids, in improving the severity of symptoms & hb %.

### MATERIALS AND METHODS

Prospective study for 12mths done at laxmi narasimha hospital. Total around 167 pts recruited of which 110 pts gave consent were randomized in to 2 groups each containing 54 pts to receive either 25 mg (low dose) mifepristone or placebo daily during 3 months and results are compared after 6mths. Blood loss using PBAC score, pain using vas score and leiomyoma volume  $V=0.523(D1XD2XD3)$  were evaluated once a month for 6mths. Endometrial biopsies were obtained prior to and at end of treatment. volume and blood loss are compared prior to and after treatment. Hemoglobin values are evaluated before and after treatment. Ultrasonography was done for size, no, volume, type of fibroids, endometrial thickness.

### Inclusion criteria

- Symptomatic fibroids between 2.5-5cm
- Perimenopausal age group
- With or without h/o previous treatment

### Exclusion criteria

- Preceding hormonal treatment in past 3 mths
- Genital Malignancies, h/o breast cancer
- Current genital infections
- Pregnancy
- Endometrial hyperplasia with atypia were excluded

### Dosage schedule

- Group a : 54pts in this group are treated with placebo
- Group b: 54pts are given low dose mifepristone 25 mg for 3mths and followed for 6mths for recurrence of symptoms or regrowth of fibroid after 3mths of stoppage of therapy

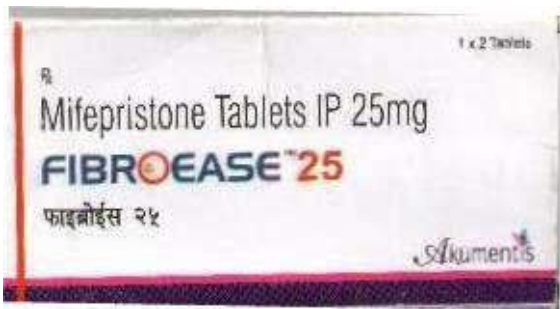
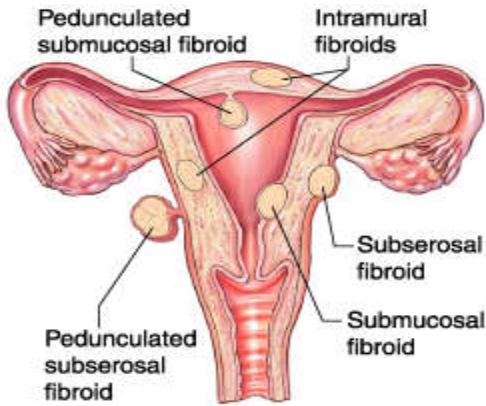
### RESULTS

- A total of 54 pts in both groups have completed the study.
- Age groups ranged between 35-50yrs.
- Menorrhagia, pelvic pain, dysmenorrhoea were the common presentations
- Treatment resulted in marked reduction in bleeding as seen by pbac scores (30) at the end of 6mths in mifepristone group
- Increase in hb values 11.2 g/dl at the end in mifepristone group. 32 pts became amenorrhoeic at the end of treatment
- Symptoms relieved in upto 80% of the patients completely

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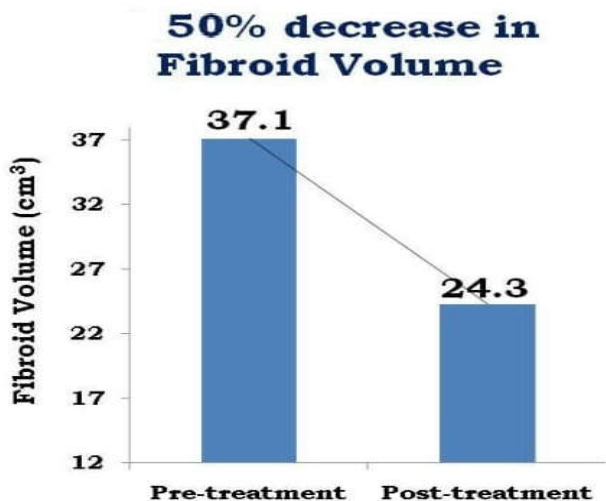
- Volume of fibroid decreased by an avg of 46% by the end of treatment.



**Outcomes:** Decrease in size of fibroids, Uterine volume, Improvement in severity of symptoms, Pain using VAS, Reduction in blood loss using PBAC, Hb%, Endometrial biopsy.

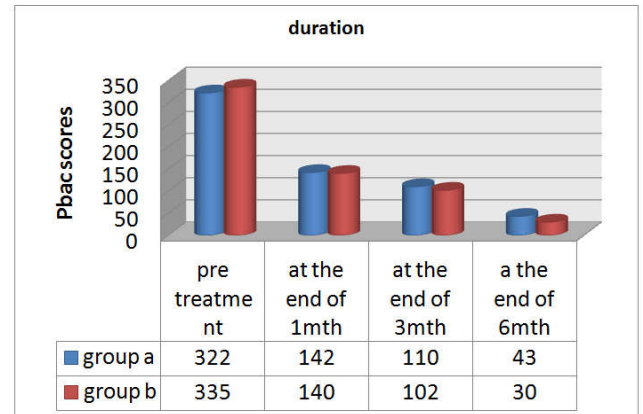
**RESULTS**

- 80% of patients showed symptomatic improvement.
- Menorrhagia, Dysmenorrhea, Abdominal Pain
- 50% decreased in mean Fibroid volume (from 37.1cm<sup>3</sup> to 24.3cm<sup>3</sup>)
- 20% decreased in mean Uterine volume (from 164.4cm<sup>3</sup> to 146.8cm<sup>3</sup>)
- 20% increased in mean Hb (from 10.3gm/dl to 13gm/dl)

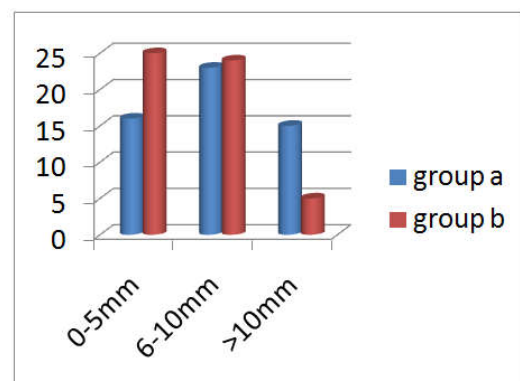
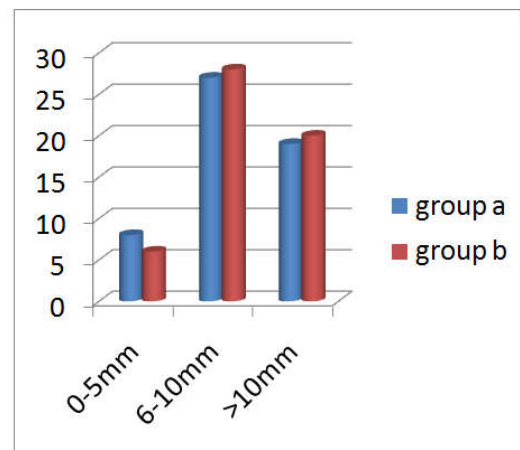


- None of the Patient showed atypia on endometrial biopsy.

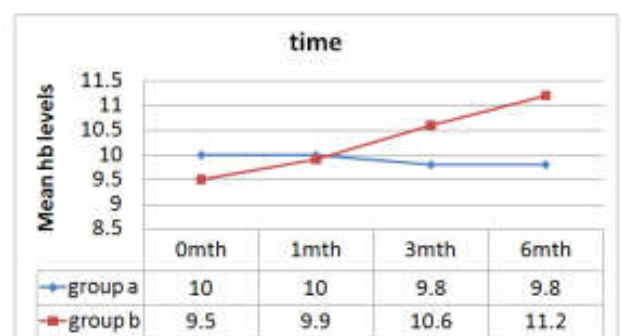
**Pbac Scores**



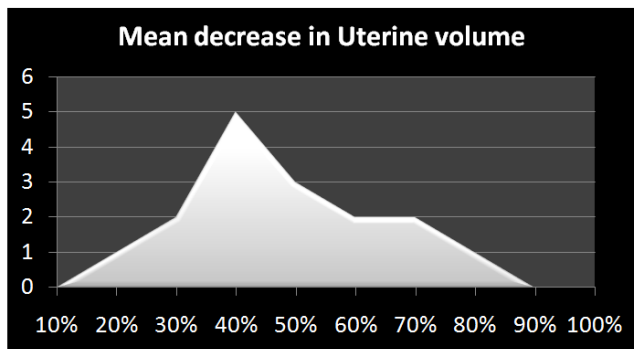
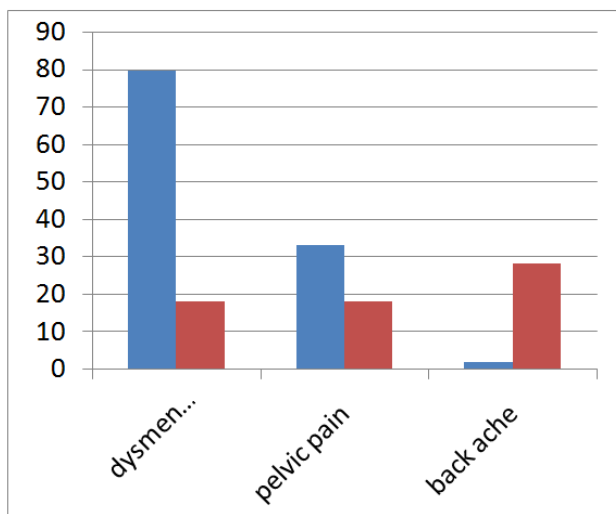
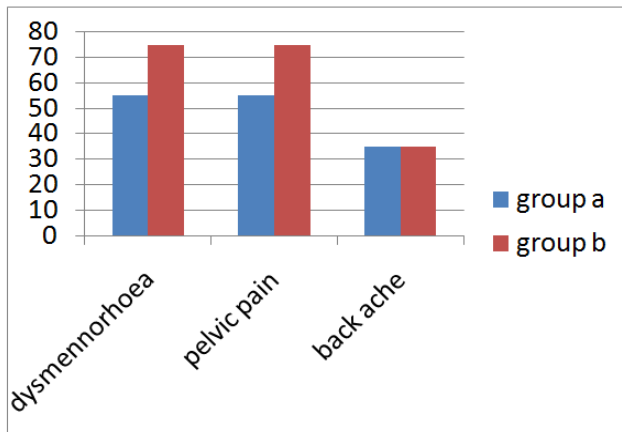
**Pretreatment & post treatment ET VALUES**



**Haemoglobin values at different times**



Resolution of symptoms in percentage before & after treatment



DISCUSSION

- MIFEPRISTONE RU 486 is a progesterone receptor modulator with primary antagonistic properties binds strongly to endometrial progesterone receptors
- Reduction in size may be due to direct effect in reducing number of progesterone receptors
- Mifepristone inhibits ovulation which may produce amenorrhoea, direct suppressive effect on endometrial vasculature as well as on reducing stromal VEGF has also been suggested for reduced blood loss.
- The effect of mifepristone in uterine leiomyoma have been studied worldwide in several trials
- Dosage used ranged from 5-50 mg and were used solely to manage leiomyoma or prior to surgery to decrease size
- In our study we observed that treatment with mifepristone 25 mg daily for 3mths substantially decreased bleeding, uterine volume & size of fibroid.
- The drug was well tolerated and no side effects too.

Conclusion

Treatment of women with symptomatic leiomyomata using low dose mifepristone for 3mths results in decrease in leiomyoma size and bleeding, improves quality of life for these women.

**Conclusion:** Mifepristone effectively relieves the symptoms related to fibroid & decreases the size thereby avoiding unnecessary surgery in perimenopausal women.

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