

# LNG-IUS - An Incredible Non Surgical Alternative for Menorrhagia

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## 1. Introduction

Menorrhagia (Heavy blood loss during menses) constitutes a considerable problem for many women resulting in discomfort, anxiety & disruption of life of sufferer. About **30%** of the women in reproductive age group suffer with menorrhagia. **Sixty** percentage of this women will ultimately undergo hysterectomy. **Surgical procedures** such as hysterectomy & endometrial resection are often used to treat menorrhagia, but these can be costly, traumatic, risky & sometimes unnecessary. The **drugs** used for treatment of menorrhagia have a wide range of undesirable side effects, may have to be used for long periods & effectiveness of some drugs is uncertain. The Levonorgestrel releasing intrauterine system (LNG-IUS, trade name -MIRENA) provides an efficacious, satisfactory & cost effective choice in the treatment of menorrhagia, comparative to drug therapy and is associated with significant reduction in menstrual blood loss.

## 2. Aims & Objectives

- The aim of this study is to evaluate the efficacy and patient satisfaction among women who were treated with LNG - IUS (MIRENA) as conservative management of AUB.

## 3. Material and Method

- **Prospective** observational study conducted in **92** women over a period of 3 years from October 2014 to October 2017.
- The complaints with which patients came to OPD menorrhagia, polymenorrhagia, menometrorrhagia, dysmenorrhoea etc at **Rajdeep Fertility Research Center and Nursing Home, Kota Rajasthan, India** were included in the study.

### Inclusion Criteria

- Uterine size < 12 weeks,
- Age 30 to 55 yrs
- No cervical or vaginal pathology
- In women > 40 yrs D&C was done
- HPE report negative

### Exclusion criteria

- Contraceptive uses were excluded
- Women with acute PID
- uterine anomaly
- intramural and subserous fibroid > 3 cm
- submucous fibroid distorting the cavity shape

### Method of Insertion

- A detailed history, examination (general, systemic, pelvic) was done
- TVS was done and any obvious pathologies like fibroids, adenomyosis, endometrial polyps etc were diagnosed.
- Mirena was inserted post menstrually on day 4, 5, 6, 7..
- We inserted Mirena as either an opd procedure or D&C followed by Mirena insertion. In some patients partial TCRC was done and then MIRENA was inserted. Those with endometrial polyp, hysteroscopic removal was done and then mirena was inserted.
- The efficacy of Mirena was measured in the form of subjective symptomatic improvement and quality of life.
- For the first 3 months progesterone was given orally also for support.
- In 1 patient of Endometriosis and Adenomyosis 2 doses of Leupride depot was given .

**Post-insertion** - The pts. were asked to maintain a menstrual calendar.

- Response was assessed monthly for 3 months then 6 monthly for 2 years.
- A detailed general examination, pelvic assessment (to see thread) at every visit.
- Follow up - ultrasound done at every visit to see the location of MIRENA or changes in the original pelvic pathology.

Age

Age group	Number	Percentage(%)
30-40	17	18.5
41-50	56	60.9
51-60	14	15.2
> 60	5	5.4

- The mean age of the pts. was 42.1 years
- Majority of the women belonged to the age group 41 to 50 yrs.

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## 4. Result

### Parity

parity	Number (n=92)	percentage
nullipara	1	1.1
primipara	13	14.1
multipara	78	84.8

➤ Maximum no of the patients were multipara (84.8 %)

### Symptoms

Symptoms	Number of patients(n=92)	Percentage
Menorrhagia	71	77.1
Menometrorrhagia	12	13.1
Polymenorrhagia	5	5.4
Dysmenorrhoea	4	4.4

- Majority of the patients came with the complain of menorrhagia (77.1 %) followed by menometrorrhagia (13.1 %)
- About 4.4% pt. were worrisome of dysmenorrhoea.

### Profile of uterine size

	Number ( n=92)	percentage
normal	23	25.0
Bulky uterus	27	29.3
6 to8 wks	30	32.6
8 to 10 wks	10	10.9
10 to 12 weeks	2	

### Indications (according to AUB classification)

	Number (n=92)	Percentage (%)
AUB-P (Polyp)	12	13.1
AUB-A (Adenomyosis)	13	14.1
AUB-L (leiomyoma)	23	25.0
AUB-M (malignancy & Hyperplasia)	7	7.6
AUB-O (Ovulatory dysfunction )	37	40.2

### Response in the form of MBL

	3 month	(n=92	6 month	n=92	1 year	n=88	2 year	n=88
	number	Percent (%)	Number	Percent (%)	number	Percent (%)	Number	Percent (%)
Heavy bleeding	3	3.2%	3	3.2%	-	-	-	-
Moderate flow	5	5.4%	1	1.0%	-	-	-	-
spotting	58	63.0%	16	17.3%	2	-	-	-
Ameorrhoea	-		19	20.6%	42	-	88	100

- Out of 92 pts, 4 failed to respond to mirena in the first year.
- Mirena was subsequently removed and they underwent hysterectomy.

## 5. Discussion

- Excessive menstruation is often incapacitating and expensive to treat and can severely affect woman's quality of life.
- Menorrhagia can occur in any phase of life but it mostly occurs in peri menopausal age group.
- The mean age at which menorrhagia occurred in our study was 42.1 yrs
- There was about 75% decrease in MBL in about 90 % (84) of the patients by 3 months.
  - At 6 months 90% decrease in MBL
  - At 2 yrs 95% had achieved amenorrhoea
- In our study all the patients were relieved of dysmenorrhoea
- In our study leiomyoma was found in 25% cases
- Adenomyosis – 14.1 %,
- Polyp -13.1%
- Endometrial hyperplasia 7.6%
- Ovulatory dysfunction 40.2%

## 6. Conclusion

- LNG –IUS is easy to insert, has a sustained effect, cost effective and well tolerated.
- It is a novel therapeutic alternative to hysterectomy for menorrhagia.

## References

- [1] J Midlife Health, 2013 Jan-Mar; 4(1): 8–15, Levonorgestrel intrauterine system: Current role in management of heavy menstrual bleeding, Navneet Magon, Monica Chauhan.
- [2] Clin Med Insights Reprod Health. 2016; 10: 19–27. Published online 2016 Aug 9. doi: 10.4137/CMRH.S40087, Femilis® 60 Levonorgestrel-Releasing Intrauterine System—A Review of 10 Years of Clinical Experience, Dirk Wildemeersch, Amaury Andrade.
- [3] Int J Womens Health. 2009; 1: 45–58., Published online 2010 Aug 9, Safety, efficacy and patient acceptability of the contraceptive and non-contraceptive uses of the LNG-IUS, Paula H Bednarek and Jeffrey T Jensen
- [4] European journal of Obstetrics & Gynecology and Reproductive Biology, August 2008 Volume 139, Issue 2, Pages 169–175, Rajesh Varma, Hemi Soneja