

# 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.

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