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Medicine

LNG-IUS -An Incredible Non Surgical Alternative for AUB

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Abstract Original Research Article

Aims and Objective: The aim of this study is to evaluate the efficacy and patient satisfaction among women who were treated with LNG -IUS as conservative management of AUB. Material and method: This was a prospective observational study conducted in 120 women over a period of 5 years who came to the OPD with various complaints like Menorrhagia, Polymenorrhagia, Menometrorrhagia, Dysmenorrhoea etc at Rajdeep Fertility Research Centre and Nursing Home, Kota. They were inserted LNG-IUS as either alone or with D&C, Hysteroscopy followed by insertion. Response was assessed monthly for 3 months then 6 monthly for 2 years by pelvic assessment (to see thread) and ultrasound at every visit. Results: A total of 120 women which were studied were in the age group of 35 to 55 years with the mean age of 42.1 years. Menorrhagia (71.66%) was the most common type of AUB with which the women came to us, followed by Menometrorrhagia, Polymenorrhagia, Dysmenorrhoea. The most common indication for which Mirena was inserted is AUB-O (30.8%) [1-4] followed by AUB-A (19.1%). About 35% women were with Hyperplastic endometrium [5] in whom D&C was done prior to insertion of MIRENA, AUB-L (6.6%), AUB-P(8.3%), AUB-O(25%). It proved to be a boon in women with Menorrhagia and who were Medically unfit (5.8%). There was decrease in menstrual blood loss in 73 % of the patients by 3 months and 97% of the patients by 6 months and 88.3% patients achieved amenorrhoea by 1 year [1-4].

Keywords: LNG-IUS, Menorrhagia, hysterectomy & endometrial resection, polymenorrhagia, menometrorrhagia, dysmenorrhoea, HPE, PID, fibroid, adenomyosis, endometrial polyps, D&C, hysteroscopy, TVS, MRI.

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INTRODUCTION

AUB constitutes a considerable problem for women resulting in discomfort, anxiety & disruption of life of sufferer. About 30% of the women in reproductive age group suffer with AUB. 60 % of this women will ultimately undergo hysterectomy. Surgical procedures such as hysterectomy & endometrial resection are often used to treat AUB, but these can be costly, traumatic, risky & sometimes unnecessary. The drugs used for treatment of AUB have a wide range of undesirable side effects, may have to be used for long periods & effectiveness of some drugs is uncertain. The Levonorgestrol releasing intrauterine system (LNG-IUS) provides an efficacious, satisfactory & cost effective choice in the treatment of AUB [1-4, 7], comparative to drug therapy and is associated with significant reduction in menstrual blood loss.

The aim of this study is to evaluate the efficacy and patient satisfaction among women who were treated with LNG - IUS as conservative management of AUB and Women who were not fit for Major Surgery like Hyestectomy.

MATERIAL AND METHOD

- Prospective observational study conducted in 120 women over a period of 5 years from July 2013 to July 2018.
- 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.

Aims & Objectives

Inclusion Criteria

- Uterine size<12 weeks,
- Age 30 to 55 yrs
- No cervical or vaginal pathology
- In women >40 yrs D&C and Hysteroscopy 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.
- Menorrhagia due to pregnancy complications.

Method of Insertion

- A detailed history, examination (general, sytemic, pelvic) was done.
- TVS was done and any obvious pathologies like fibroids, adenomyosis, endometrial polyps etc were diagnosed.
- LNG-IUS was inserted post menstrually on day [4-7].

- We inserted LNG-IUS as either an alone or D&C followed by LNG-IUS insertion. In some patients partial TCRE was done and then LNG-IUS was inserted. Those with endometrial polyp, hyteroscopic removal was done and then LNG-IUS was inserted.
- The efficacy of LNG-IUS 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 few patients.
- In 1 patient of Endrometriosis and Adenomysis 2 doses of Leupride depot was given.

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

- Response was assessed monthly for 3 months then 6 monthly for 5 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 LNG-IUS or changes in the original pelvic pathology.





Sonographic Evaluation

RESULT

Age Age Group Number Percentage 30-40 36 30 41-50 70 58 51-60 14 11.6

- The Mean age of the Patents was 42.1 Years
- Majority of the women belonged to the age group 41 to 50 Years

Parity

Parity	Number (n=92)	Percentage				
Nullipara	1	.83				
Primipara	18	15				
Multipara	101	84.16				

Maximum no of the patients were multipara (84.16 %)

Symptoms

Symptoms	Number of patients(n=92)	Percentage		
Menorrhagia	86	71.66		
Menometrorrhagia	20	16.6		
Polymenorrhagia	10	8.3		
Dysmenorrhoea	4	3.3		

- Majority of the patients came with the complain of menorrhagia (71.6 %) followed by menometrorrhagia (16.1 %)
- About 3.3% pt. were worry some of dysmenorrhoea.

Profile of uterine size

	Number (n=92)	percentage
Normal	48	40
Bulky uterus	30	25
6 to8 wks	30	25
8 to 10 wks	10	8.3
10 to 12 weeks	2	1.6

Indications (according to AUB classification)

indications (according to 1102 chassimeters)						
	Number (n=92)	Percentage (%)				
AUB-P (Polyp)	10	8.3				
AUB-A (Adenomyosis)	23	19.1				
AUB-L (leiomyoma)	8	6.6				
AUB-M (malignancy & Hyperplasia) [5]	42	35				
AUB-O (Ovulatory dysfunction)	30	25				
Medically Unfit	7	5.8				

Response in the form of MBL

Tresponde in the form of 1122										
	3	(n=116)	6	(n=116)	1 year	(n=116)	2 year	(n=116)	3 year	(n=116)
	month		month							
	Number	Percent								
		(%)		(%)		(%)		(%)		(%)
Heavy	31	26.7%	3	2.5	1	.86	-	-	-	
bleeding										
Moderate	30	25.8%	9	7.7%	6	5.1	4	3.4	-	
flow										
Spotting	55	47.4%	21	18.1%	12	10.3	10	8.6	4	3.4
Ameorrhoea	-		83	71.5%	97	80.83	102	87.93	112	96.5

- Out of 120 pts, 3 failed to respond to LNG-IUS in the first year.
- LNG-IUS was subsequently removed and they underwent hysterectomy.
- Heavy Bleeding persist in very few (.86%) with delayed cycle.
- One case of Severe Endometriosis LNG-IUS inserted for 1 year followed by treatment for Sec. Infertility.

DISCUSSION

- Excessive menstruation is often incapacitating and expensive to treat and can severely affect woman's quality of life.
- AUB can occur in any phase of life but it mostly occurs in peri menopausal age group.
- The mean age at which AUB occurred in our study was 42.1 yrs
- There was about 73.2% decrease in MBL in Pt. by 3 months [8, 10, 15].

- At 6 months 89.6% decrease in MBL [11].
- At 2 yrs 98% had achieved Amenorrhoea
- In our study all the patient were relieved of Dysmenorrhoea
- In our study Leiomyoma was found in 6.6% cases
- Adenomyosis 19.1 % [9]
- Polyp -8.3%
- Endometrial hyperplasia 35% [6, 12]
- Ovulatory dysfunction 25%
- One case of Post Menopausal Bleeding after H.P Report negative LNG-IUS inserted [13].
- A case of Hemiparasis with CVA with Menorrhagia LNG-IUS inserted 5 Years back which was removed and Reinserted 1 month back [14].
- A case of Renal transplant with AUB-A was advised Hysterectomyuterine uterine size 12

week as the pt. not fit for surgery. LNG-IUS inserted 5 Years back now 51 years old with Menopausal Levels of FSH, LH.

CONCLUSION

LNG IUS is an effective and well tolerated treatment modality for AUB.

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

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