

## MENSTRUAL REGULATION

by

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The term menstrual regulation (MR) is used by Brenner *et al*, (1973) for suction curettage when a short period of amenorrhoea is the only criterion for suspected pregnancy. At this stage, diagnosis of pregnancy cannot be made with accuracy since the pregnancy tests are not usually consistently accurate until 40 days of amenorrhoea (Hibbard, 1971). In this communication, effectiveness, procedural operability and complication rate of menstrual regulation are reported in a random sample of women seeking relief for amenorrhoea when there was fear of pregnancy but before reliable confirmation of pregnancy.

### Material and Method

One hundred and ten women aged between 17 to 40 years having regular menstruation reported with missing of a mens varying from 3 days till 49 days (5-7 weeks amenorrhoea) since they were worried for unwanted pregnancy and wished to have 'mens cleared off'. The age, parity, educational level, use of contraceptions were recorded. Forty-five of them had pregnosticon Dri Dot test for diagnosis of pregnancy. They were subjected to MR as clinic procedure without admission into the hospital.

*Procedure:* The woman was placed in

the lithotomy position after she emptied her bladder. She was neither premedicated nor with empty stomach. Vulva and vagina were swabbed with dettol solution. Under aseptic care, vaginal examination was performed, posterior vaginal speculum was introduced and the anterior lip of the cervix was steadied by volsellum. Uterine sound was passed. Flexible plastic cannula 4 mm. (Davis cannula) cold sterilised by dettol solution was introduced inside the uterine cavity till the tip of the cannula could be pushed upto the uterine fundus. No cervical dilatation was necessary in any of the cases. A plastic vaccum pump syringe was fitted to the cannula. The volsellum was handed over to the nurse, while the operator created vaccum inside the syringe by withdrawing the piston. The uterine contents while, sucked out became visible in the plastic cannula and collected in the syringe. The syringe was rotated and the cannula tip was moved up and down inside the uterine cavity. The suction was repeated twice or thrice after emptying the cannula of the sucked out material on pulling out its end out of the cervical canal. The end point of suction was taken when, (1) no further material was found coming out and (2) the uterine wall tightly gripped over the cannula end and a gritty sensation was felt. The cannula and instruments were finally removed. A few cases had curettage by a very thin bladed curettage to ascertain the complete emptiness of the

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uterus. The woman was allowed to go home.

inform in case of any difficulty as excess bleeding, pain, fever and discharge. The sucked out contents of the syringe was collected on a strainer and the solid particles therefrom were sent in preservative for histological examination.

**Follow-up** The woman was advised to return to the clinic after her first mens or after 4 weeks whichever was earlier. In case menstruation did not occur by 4 weeks she was instructed to return after another 4 weeks. Thirty-one women had follow-up urinary pregnancy tests performed after first menstruation or after eight weeks where menstruation did not occur till then. A few of the cases were followed up by home visits. Fifty-four women had complete follow-up for eight weeks following MR. However, information about continuance of pregnancy following MR could be obtained by contacts for all the cases. The women were also instructed to return to the clinic or

**Results**

**Women characteristics:-** Women who wished to have 'mens' cleared off by MR were predominantly Hindus (98.2 per cent), almost all married housewives (99.1 per cent), predominantly illiterate or primary school educated (65.4 per cent). All types of residents (urban, slum or rural) were keen to have the procedure. They were highly parous women from 4-13 parity in 53.7 per cent and 0-3 parity in the rest. Age groups were 63.6 per cent in 17-30 years, while the rest in 31-40 years.

**TABLE I**  
*Showing Various Data of Women Having MR.*

	No.	Per cent		No.	Per cent
<i>Religion</i>			<i>Age (Yrs.)</i>		
Hindus	108	98.2	17-30	70	63.6
Muslims	2	1.8	31-40	40	36.4
<i>Residence</i>			<i>Parity</i>		
Urban	69	62.7	0-3	51	46.3
Slum	23	21	4-13	59	53.7
Rural	18	16.3	<i>Education</i>		
<i>Marital status</i>			0-4	72	65.4
Unmarried	1	0.9	5-14	38	34.6
Married (Housewives)	109	99.1	<i>Contraception</i>		
			Oral	1	0.9
			Nil	109	99.1

**Days of Amenorrhoea**

**TABLE II**  
*Showing Days of Amenorrhoea Where MR was Performed*

Days of amenorrhoea	Upto 35	36-42	43-49
No. of cases	49	55	6
Percentage	44.5	50	5.5

**Pregnancy Rate:** Out of 110 women having MR, in 46 (41.8 per cent) pregnancy was confirmed by histological evidence of villi, in 2, pregnancy was possibly present, in 1, sucked out material was decomposed while in the rest no villi were found on histological examination.

pregnancy is continuing since they refused abortion later on.

**Complication Rate:** Table V shows the complication rate of MR performed as clinic procedure.

Three women had prolonged scanty bleeding upto 10 days which could be con-

TABLE III  
Showing Pregnancy Rate from Histology

	Preg- nancy villi present	Preg- nancy possible	Secretory endo- metrium	Non- secretory endo- metrium	Result not known
No. of cases (110)	46	2	57	4	1
Per cent	41.8	1.8	51.8	3.6	0.9

#### Evaluation of Pregnancy Test

Table IV shows that 5 (23 per cent) women showed false negative result on urinary pregnancy test; while 2 (10 per cent) women showed false positive result. Therefore, urinary pregnancy tests cannot provide equivocal result for diagnosis of early pregnancy within 7 weeks of amenorrhoea.

trolled by giving oral ergot; however they did not require curettage. The rest of the women had very scanty reddish discharge for a day or two following MR. One woman fainted due to vasovagal attack immediately after getting out of bed. She recovered on rest without treatment. There was no case of incomplete abortion requiring dilatation and curettage or sep-

TABLE IV  
Showing Results on Urinary Pregnancy Test.

Pregnancy tests	No pregnancy on histology	Pregnancy present on histology
Negative 22	17 (77%)	5 (23%)
Positive 21	2 (10%)	19 (90%)
Indefinite 2	2	—

**Effectiveness:** Menstrual regulation was effective in removing early pregnancy in 46 (41.8 per cent) women, while in 2, there was method failure, a rate of 1.8 per cent. These two women had MR on day 6 and day 9 of missing their mens. They had MR towards the beginning of this programme; and, therefore, failure was due to lack of experience. In them

TABLE V  
Showing Complication Rate of MR

Complications	No. 110	Per cent
Prolonged slight bleeding not requiring D & C	3	2.7
Vasovagal attack	1	0.9

sis. Therefore, the complication rate following MR was 3.6 per cent.

*Appearance of First Mens Following MR*

TABLE VI  
Showing Appearance of First Mens Following MR

Days after MR	7	14	21	28	35	42	49	60
Pregnancy group		1	1	5	5	7	1	
Non-pregnancy group	4	4	1	8	10	4	1	2

Following MR, the pregnancy group started the first menstruation varying from 11 to 44 adys with a mean 31 days, while non-pregnant group had variability of 2 to 60 days with a mean 27.5 days. The difference is not statistically significant. Moreover, menstruation coming after about a month following the procedure shows that the method does not cause damage to the uterine mucosa in both the groups.

*Repeat MR:* Since women under this programme were not given any contraceptive method, two women, both para, 5 had repeat MR within 3 months. They had their first menstruation 21 days and 24 days after the first MR. For both MR, there were positive pregnancies on histology. Repeat MR procedures were also without any complication.

*Procedural Operability*

The procedure performed was technically simple without any difficulty in introducing the cannula inside the uterus. The procedure of vaccum suction was also simple. The operative time taken for the procedure was average 8.94 minutes (4 20 minutes). The woman felt discomfort to mild pain for the procedure since no premedication or anaesthesia was employed. The procedure was very convenient to the women since this was performed as clinic procedure without any stay in hospital.

*Discussion*

Effectiveness of menstrual regulation by mini-suction curettage with a thin cannula was satisfactory since the procedure could suck out early pregnancy in 43.6 per cent (possibly pregnant cases being included) and the method failure rate was 1.8 per cent. The comparable figures in the Brenner's series was 58 per cent and 0.25 per cent, respectively. The histological pregnancy estimate in this series appears lower because there might be missing of villi in sections prepared. The procedure may appear unnecessary in those wherein there was delayed menstruation without pregnancy. However, in them the procedure being simple was effective in bringing psychological relief to women. Safety of the procedure could be documented from the low minor complication rate as 3.6 per cent, since there was neither uterine perforation nor excess haemorrhage. The procedure is safer than suction curettage for first trimester pregnancy where there were 6.6 per cent complication rate in Tietze series (1971) and 5 per cent in Dawn series (1973).

*Procedural operability:* MR appears simple and any doctor, even para-medical staff could be easily trained in the procedure. In this programme, no contraceptive service was provided following menstrual regulation. The object was to test the usefulness of MR in fertility control in a sample of women.

### Conclusion

The method of menstrual regulation by suction curettage has been tested in a series of women who missed their menstruation for 3-39 days. However, these women desired to have the 'mens' cleared off before reliable confirmation of pregnancy. The procedure described was found safe, technically simple and effective in emptying the uterus since there was 43.6 per cent early pregnancy proved by histological examination.

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