

CLINICAL EXPERIENCE WITH MENSTRUAL REGULATION (100 CASES)

by

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Menstrual Regulation is the most modern termination of very early pregnancy. It is known by several names, e.g. endometrial aspiration, menstrual induction, pre-emptive abortion and menstrual planning.

This method in principle involves vacuum extraction of the uterine contents within few weeks after a delayed period. At the L. T. M. G. Hospital, we have studied 100 cases of Menstrual Regulation. This study was conducted through the auspices of India Fertility Research Programme.

Selection of Patients

The criteria on which the patients were selected were as follows:

(a) The duration of missed period must not be more than 15 days i.e. 45 days after the last menstrual period.

(b) Uterus should not be unduly enlarged as compared with the period of amenorrhoea.

Material and Methods

This is an outdoor procedure. Once the patient was selected, following examinations were carried out:

(1) a thorough general examination

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to rule out any major diseases.

(2) a bimanual vaginal examination to rule out an advanced pregnancy as the dates given by our patients are not always reliable.

(3) a pregnancy test—an immunological two minute test known as Dri-dot test is conducted prior to menstrual regulation (MR) and at follow-up visit after 2 weeks.

(4) all the extracted material is sent for histopathological examination.

Materials

4 mm and 5 mm plastic catheters with the Karamm syringe are used as the vacuum and collection course. They have been found very convenient as collection is easy, measurement of blood loss accurate.

Procedure

There is no premedication required. Patient is put into lithotomy position, painted and draped. Sim's speculum is inserted, cervix exposed and caught with a volsellum or tenaculum. There is no need for dilatation for a 4 mm. cannula. The uterus is sounded and cannula passed. The syringe is attached and vacuum is created and the contents are aspirated out. The completion of the procedure is indicated by the grating of the uterine wall as in D & C. The whole procedure takes about 5 minutes and average blood loss is 7-10 ccs.

Post-operative Management and Counselling

Every patient is made to accept some kind of Family Planning procedure. They are given an antispasmodic and analgesic postoperatively and asked to report immediately in the event of, (1) pain in abdomen, (2) fever, (3) excessive bleeding. These patients after menstrual regulation bleed for 3-4 days like a regular period or the bleeding of a regularised period may start after 48 hours or so.

Follow-up

All the patients are asked to come for follow-up after 2 weeks for check up and repeat pregnancy test. They have to come once later and observe their cycles.

Results

One hundred women studied at the L. T. M. G. Hospital were analysed as follows:

Age

The majority i.e. 77% of the patients fall into the age group of 20-30 years.

Parity

Sixty-four per cent patients had one or two living children and they used this method for spacing their family. As many as 15% were nulliparous who because of "Pregnancy Scare" came forward for Menstrual Regulation.

Education

The educational level was varied as patients came from all walks of life but it was surprising to find that 72% had secondary or high education and 34% had college education. The impact of education on awareness of Family Planning and small family norm is clearly seen here.

TABLE I
Delay of No. of Days

No. of days:	1	2	3	4	5	6	7	8	9	10
Cases:	1	3	3	8	7	10	7	10	12	17
No. of days:	11	12	13	14	15	Total				
Cases:	5	2	0	5	10	100				

Almost 70% of the patients came for menstrual regulation after waiting for one week to allow for a physiological variation of the menstrual period. 27% of the patients came after 10 and 15 days delay in period.

TABLE II
Use of Contraceptives prior and Post-MR

Before	Contraceptive	After
54	None	7
13	Pill	26
3	I.U.D.	46
19	Condom	6
7	Conventional	4
1	Vasectomy	1
3	Tubectomy	10
100	Total	100

We analysed the contraceptive acceptance before and after the procedure. As many as 54% had used no contraceptives, whereas 26% were on conventional contraceptives. One was a post-vasectomy pregnancy and out of the 3 post-tubectomy patients 2 were found to have irregular periods and 1 was a case of failed sterilisation with early pregnancy. It is worth noting that only 16% of these educated patients had used the more efficient pill and I.U.D. After menstrual regulation, however, the picture changes. As many as 72% accepted the more effective pill and I.U.D., I.U.D. insertion being done at the same time as menstrual regulation. The number of tubectomy also rose to 10% whereas the acceptance of conventionals dropped to 10%. The non-acceptors have the following reasons—

One was a case of oligomenorrhoea, one T.B. endometritis, one was a paramenopausal woman, one was posttubectomy irregular period, one patient refused any contraceptives.

TABLE III
Complications

Vomiting	4	Headache	1
Nausea	4	Cervical laceration	1
Spotting	3	Incomplete removal	2
Fever	2	Continued pregnancy	1
Vasovagal reaction	1		

We have had no patients with severe haemorrhage and the average blood loss was 7-10 ccs. We had one patient with mild pelvic infection which settled down with antibiotics. One patient had fever, and headache due to spinal anaesthesia. Vomiting and nausea were associated sometimes with the uterine contractions as its contents are being aspirated and are not encountered after the procedure. Spotting was seen in 3 cases but this may be because of simultaneous I.U.D. insertion. We had one continued pregnancy which had to be terminated at a later date and two were incomplete removal which needed a curettage. For cervical laceration the voiseullum was to blame and tenaculum would be better. Specific complications attributable to menstrual regulation are incomplete evacuation and infection and continuation of pregnancy due to faulty technique.

The complications encountered are compared with experiences in different methods—curettage and suction—on two series, one in Yugoslavia (Bernard Roger) another in U.S.A. (Brenner). The complications in the D & C and suction group were defined as perfora-

TABLE IV
Evaluation of Complications with D & C and Suction in Three Countries

	India	Yugoslavia	U.S.A.
D & C	21.4%	12.1%	8.2%
Suction	6.3%	7.2%	6.1%
Menstrual Regulation	15% (15% women with complications)	—	9.6% (gross)
Attributed to MR.	4%	—	1.4%

tion, cervical laceration, excessive bleeding, bleeding requiring curettage, shock, complications of anaesthesia and fever. The complications in the menstrual regulation series of U.S. were defined as complications of anaesthesia. Bleeding and pain were not considered as complications unless requiring medical treatment. Thus breaking up their data it appears that 8.2% complications resulted due to anaesthesia and 1.4% were attributable to menstrual regulation. Similar breaking up of our series shows that 11% of our complications were due to sedatives like pethidine given to some patients, spotting not requiring treatment and complications of anaesthesia. 4% of the complications were attributable to menstrual regulation.

TABLE V
Histopathological Examination

Products	50
Secretory	28
Proliferative	14
Cervical tissue	1
Scanty material	2
T.B. endometritis	2
Report not available	3
Total	100

The aspirated material from all the patients was subjected to histopathological examination. The results show that 50% were pregnant. But 42% were non-

pregnant and suffered from some ovarian dysfunction. One patient showed cervical tissue only and it is this patient who continued pregnancy and had to be terminated at a later date. Those with scanty material were cases of oligomenorrhoea and we discovered one case of T.B. endometritis.

Discussion

Vacuum aspiration of the uterine cavity to terminate a pregnancy was used as early as 1927 by Bykov. Since the use of vacuum curettage and legalisation of abortion, it is just a step further to interrupt a pregnancy at a still earlier stage.

This procedure is simple, safe and effective. It is an outdoor procedure and consequently saves hospital beds. We have had no serious complication except mild pelvic inflammation which settled down with antibiotics. However, one pregnancy continued and it was due to a faulty technique, as the histopathological report showed only cervical tissue. One was an incomplete evacuation. These are technical faults and diminished with experience.

It is a well known fact that postconceptional contraceptive acceptance is much higher than preconceptional. This has been seen in our series where the percentage of nonusers dropping after menstrual regulation from 54% to 7%. Those patients who come early, are willing and well motivated. This also may be due to a high level of education and the "pregnancy scare" induced by amenorrhoea prompt them to come for menstrual regulation. One distinct advantage is that with menstrual regulation the psychological disturbances are none or minimal as compared to a termination of advanced pregnancy. The patients come for "regularisation of period" rather than

termination of pregnancy and consequently it is more acceptable to them. That menstrual regulation is more acceptable than induced abortion across residence (urban/rural), partner (male/female) and reproductive attainment (living children) has been found in an opinion survey of 800 persons conducted by Kanitkar *et al.*

It is important to note that we found a case of T.B. endometritis by menstrual regulation. Hence menstrual regulation is not only a method of fertility control but may also serve as a diagnostic tool. Bykov advocated an endometrial aspiration, 4-5 days premenstrually every cycle and carrying out "Menstrual Planning." This being a simple technique with few complications requiring simple apparatus can be used in the villages where facilities are minimum.

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