

# MENSTRUAL REGULATION—AN O.P.D. PROCEDURE

(A Study of 2110 Cases)

by

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## Introduction

Menstrual regulation (M.R.) is comparatively a recent procedure designed to treat a missed period in a woman of child-bearing age. Besides inducing menstruation, it also acts as a post-conceptive antifertility measure. On one side, it relieves the anxiety of the woman, caused by an unplanned pregnancy or by just a missed period and on the other side, it helps the physician not to wait for the diagnosis and confirmation of pregnancy either by clinical examination or currently available pregnancy tests.

This procedure being very simple, safe, less time consuming, and also no analgesia, anaesthesia nor hospitalisation is required it is utilised for indirect fertility control.

## Definition

Various self explanatory terminologies have been described for this procedure e.g. menstrual extraction, menstrual aspiration, menstrual induction, endometrial

—aspiration, Mini-abortion and so on. However, Kessel (1973) defined menstrual regulation as the "treatment of the delayed menstrual period within 14 days of the expected on-set of menses to ensure that a woman is not pregnant or does not remain pregnant."

## Material and Methods

Keeping in mind the positive points of the procedure menstrual regulation was undertaken at Urban Family Welfare Centre attached to Medical College, Aurangabad. Total period of study was of 39 months i.e. from 15th March, 1975 to 30th June, 1978. Total number of procedures done were 2110.

Women who presented with (i) missed period for not more than 14 days of the due date and anxious to have menstruation, (ii) lactational amenorrhoea with or without the doubt of conception and who desired to adopt contraceptive measures were subjected to this procedure. Every woman was interviewed about her menstrual history and obstetric career. A thorough general and pelvic examination was done prior to the procedure. No analgesia nor anaesthesia in any form was used.

The procedure was undertaken at the same visit. Karman Cannulae of 4 m.m.

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and 5 m.m. diameter and modified un-flexible plastic syringe of 50 c.c. capacity were used. The aspirated material was sent for histopathological examination. I.U.D. was inserted immediately at the same time in those who were counselled and given acceptance for it. Those who accepted sterilisation were treated in the inpatient and were hospitalised after the procedure, (this number is small).

All women were observed for half an hour after the procedure and sent home in good general condition with an advise to have antispasmodic and analgesic tablets if necessary and to report after one week and earlier if necessary.

#### Observations

Total procedures carried out were 2110. Their distribution in relation to various clinical parameters is as shown in the following tables:

In the present study 2110 women underwent M.R., 1972 (93.4%) were from urban area and 138 (6.6%) were from rural area. The demand for M.R. is increasing day by day as there were 417 MRs in 1975; 554 in 1976; 660 in 1977 and 479 MRs in 1978 upto 30th June. Maximum number of women (1795 or 75.5%) were in the age group of 20 years to 30 years. Mullick and Dawn (1975) have reported 70 patients (63.6%) in the age group of 17 to 30 years. This concludes that acceptance of M.R. is maximum in highly fertile age group. Eighteen Hundred and Fifteen (86.01%) women were Hindus, 116 (13.43%) were Muslims and 12 (0.56%) were Christians. Mullick and Dawn (1975) give a similar incidence of 98.2% for Hindus and 1.8% for Muslims. In the present series 2064 (97.82%) women were married and 46 (2.18%) were unmarried girls. Maximum acceptance for M.R. was in 1487

(70.47%) women with 1 or 2 living children and this was the group who accepted the postprocedure contraception.

Depending upon the period of amenorrhoea maximum women 1560 (73.93%) had amenorrhoea upto 42 days (6 weeks) and 322 (15.23%) had amenorrhoea upto 49 days (7 weeks). Women with lactational amenorrhoea of short duration were 10.84% (228 cases). The duration at which M.R. is done varies according to the choice and experience of particular surgeon. It varied from 29 to 63 days and almost all used Karman's syringe for the procedure. (Hals, Scotti and Stim (1974) and Rajan and Kaimal 1977).

Eleven hundred and seventy seven or 55.74% women were proved to be pregnant on histological examination. Others have observed that the incidence of pregnancy in women undergoing M.R. varies according to the number of days passed the due date. In a study of 1400 cases by I.F.R.P., the incidence of pregnancy have risen with days delayed after expected date of menses from 35% at 5 days to 65% at 14 days. The overall incidence of pregnancy was 28.2% i.e. 407 cases. The incidence varies from 17% to 59% upto 35 days and 42.5% to 84% from 36 to 45 days of amenorrhoea (Brenner *et al* 1975; Edleman *et al* 1974; Mullick and Dawn 1975). Rajan and Kaimal (1977) have extended the duration of M.R. upto 63 days of amenorrhoea and found a pregnancy rate of 68% in women with 33 to 49 days and 93.75% in women with 50 to 63 days.

Post procedure acceptance of the contraceptives was 91.05% in the present series. Analysing it, maximum acceptance for I.U.D. in 913 cases (43.40%); followed by condom (Nirodh) in 806 (37.90%), and oral pills in 182 women

(8.91%) and tubal ligation in 20 i.e. 0.94%.

Comparative figures of Khandwala, Rajan and the present series are given in Table I.

removed but was expelled spontaneously on the third day. This patient was informed about it and was asked to report accordingly. Uterine perforation occurred in 2 cases (0.08%). They were observed

TABLE I  
Post Procedure Contraceptive Acceptance

Author	I.U.D. Per cent	Nirodh (Con- dom) Per cent	Oral Pills Per cent	Sterili- sation Per cent	No con- tracep- tion
Khandwala (1975)	48	7	24	11.5	9.5
Rajan (1977)	76.08	—	5.4	18.9	—
Present series (1978)	43.40	37.99	8.81	0.94	8.95

The complications following this procedure are directly related to the duration of amenorrhoea, and the possibility of pregnancy. Brenner (1975) reported that the complications are more with pregnant uterus (2.5%) as compared to non-pregnant uterus (1.1%). Maximum overall complication rate reported to be 4.7% by Vlugt and Piotrow (1973). In this study complications have occurred in 49 cases giving an overall incidence of 2.18%. In 19 cases M.R. was repeated subsequently for bleeding. Out of which in 10 cases there was irregular spotting lasting for 7 days and in 9 cases it lasted for 14 days of the procedure. The bleeding stopped in all cases after the repeat M.R.

Pelvic infection occurred in 11 cases (0.52%) and 9 were treated as out patients and 2 required hospitalization. Incomplete abortion occurred in 4 cases (0.18%) and were treated by curettage under anaesthesia. In 5 cases (0.23%) the tip of the Karman Cannula was broken. In 4 cases it was removed at the same sitting as the tip was lying in the cervical canal. In 1 case it could no be

and treated conservatively. Cervical trauma and vasovagal attack did not occur in any case.

The pregnancy continued in 8 cases (0.37%). In 2 it was terminated with suction evacuation and spontaneous abortion occurred in 1 case. Remaining 5 continued upto term.

*Summary and Conclusion*

Menstrual regulation was carried out as an OP.D. procedure in 2110 women. Analysing the data the results were compared with other studies.

It is a safe, simple, less time consuming and effective procedure and can be used as an effective antifertility measure.

*Acknowledgement*

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TABLE I

For Postoperative Complications

Author	No. of cases	No. of complications	Percentage (%)
Sharma (1972)	48	7	14.58
Sharma (1973)	42	5	11.90
Present series (1977)	42	5	11.90

The complications following the procedure are directly related to the duration of anaesthesia and the technique of procedure. However (1972) reported that the complications are more with average anaesthesia (1973) as compared to non-organic anaesthesia (1977). Maximum overall complication rate reported to be 4.7% by Vaid and Potluri (1975) in the study complications have occurred in 48 cases giving an overall incidence of 11.9%. In 19 cases M.H. was reported subsequently for bleeding. Out of which 10 cases there was irregular bleeding for 2 days and in 9 cases it lasted for 11 days of the procedure. The blood clot stopped in all cases after the repeat surgery.

Pelvic infection occurred in 11 cases (26.19%) and 4 were treated as out-patients and 7 required hospitalization. Postoperative infection occurred in 4 cases (9.52%) and were treated by antibiotics under supervision. In 2 cases (4.76%) the top of the Karyon Catheter was broken. In 4 cases it was removed at the time of surgery as the top was found to be broken. In 1 case it could not be removed.

It is a safe simple low time consuming and effective procedure and can be used as an effective antihypertensive agent.

Analysing the data the results were compared with other studies.

My personal observation was carried out as an O.P. procedure in 1977.

Our thanks to the Dean, Medical College, Amalapuram for permitting to publish the hospital data and also the Professor of Pathology for his cooperation.

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