# "CLINICAL TRIAL WITH MEGESTROL ACETATE AS AN ORAL CONTRACEPTIVE"

### (Volidan)

by

NINA DEHEJIA, M.B.B.S. N. S. PARDANANI, M.D., D.G.O. RAMA VAIDYA, M.D., D.G.O.

and

B. N. PURANDARE, M.D., F.C.P.S., F.I.C.S., F.R.C.O.G., F.R.C.S., F.A.M.S.

of birth control pills is one of the continued the therapy with a view to most widely discussed medical sub- complete their families; others have which has utmost importance to our and so in this paper we would like to country to-day as we face, amongst discuss the first eighteen months' exother things, the problem of population explosion which if left alone when it was prescribed through the would shake the foundations of counattack is hence necessary to control the ever increasing population. Progestational agents are worth considering for countrywide use to-day. Hence it was decided to have a small pilot programme. Birth control pills, which act well when used for conception control, have thus an important place for pilot programme. Amongst other drugs on trial we have been using Megestrol Acetate 4 mgm. n combination with 0.05 mgm. of Ethinyl Oestradiol for conception ontrol. The total number of women vho have visited this clinic reaches

Paper read at 13th All-India Obstetric Gynaecological Congress held at Patna January 1966.

Family planning through the use nearly 2000. Many of them have disjects. Family planning is a problem restarted after a planned pregnancy, perience with Megestrol Acetate Oral Contraceptive Clinic of Dr. N. A. try's economy. A multi-channeled Purandare Gynaecological and Obstetric Research Centre, K. E. M. Hospital, Bombay.

> It has been a very rewarding experience, as the women have come regularly to our clinic and have been very satisfied with the method adopted for family planning.

> The survey will also review the clinical use of the drug with sideeffects and drop-outs. The trial was commenced in June 1964 and is still going on.

### Material and Methods

This includes 341 women studied over a period of 24 months with an accumulation of 2223 cycles: 138 women have given us regular follow up for 1414 cycles.

Women taken for trial were those atypical cells. seeking family planning and those who were motivated by doctors and tablets on the 5th day of the period social workers from postnatal and paediatric outpatients departments of at bedtime, the object being to form a K.E.M. Hospital.

married women of proved fertility. ed. In case she forgot to take the We had 12 nulliparas, of which 4 tablet at night she was asked to take have conceived after stopping the it early next morning. tablets while 6 are still continuing with the tablets. Most of the subjects case records most of the women were belonged to parity 2 to 6 and age seen at 4 weekly intervals at the Oral group between 20 and 35 years.

routine was followed the response weight and duration of menstrual was not good. Hence each patient flow were noted and a fresh month's was interviewed in detail by a train- stock given. ed social worker of the centre. All the necessary details were recorded in a special proforma and a card with a serial number was given to the with regular medication became pregwoman to take home with her. She nant. A total of 7 subjects conceived was then interviewed by the doctor on stopping the medication for variand a complete gynaecological exami- ous reasons. Of these, 3 were unnation with blood pressure, weight wanted pregnancies and 4 were planand haemoglobin, urine and general ned pregancies after wilful disconexamination was carried out. This tiinuation. The unwanted pregnanhelped in maintaining the general cies occurred in subjects who failed health of a patient and acted as a wel- to report for further supply of their fare centre. It encouraged them to quota of pills. come to the centre and we were able to detect and treat other conditions like vaginitis, cervicitis, cervical erosion and fibroids or fibroid polyps. Women with fibroids or varicose bleeding remained fairly constant: veins were excluded from this study. Of the total cycles in the maximum The study of exfoliative vaginal cells number, cycle length was 27 and 28 was done by obtaining smears at days which is comparable to other yearly intervals to detect early cases oral pills. Dysfunctional menstrual of cervical malignancy. The smears bleeding and pain, from slight diswere stained by Papanicolau modifi- comfort to severe dysmenorrhoea ed by Pastakia technique and the were cured in the majority of th slides were examined by a trained cases. Patients who had scanty flo

Women were told to start the and take them regularly for 20 days conditional reflex - with the result The criterion for selection was that the patient failure was minimis-

In order to obtain a continuity of Contraceptive Clinic. At each visit It was found that unless a proper the duration of cycles, side effects.

#### Results

Not a single subject on the trial

# Characteristics of withdrawal bleeding

The interval between withdrawal cytologist to rule out malignant or previously had a heavier withdraway oleeding. On taking detailed history t was noted that women expressed a sense of relief resulting from predictable regularity and duration of flow of menstrual period. This is a very mportant factor for our group of women who are still bound down by a number of social customs and religious taboos.

# ntermenstrual bleeding

It was noted that the incidence of intermenstrual bleeding was higher with this compound as opposed to others. It occurred in 7.06 per cent of total cycles; 3.77 per cent of these cycles were those where patients had missed tablets. The analysis showed that tablets were missed in the first 2 cycles. The other 3.29 per cent were n those women who had not missed ne tablets but they were usually heavy bleeders; 13 women showed spotting. In spite of this, only 2 women discontinued because of intermenstrual bleeding, the others have continued. When the intermenstrual bleeding was profuse they were asked to start the tablets after a gap of 7 days after the last tablet. A quiet of toilet facilities. Three women who reassuring talk did more to diminish intermenstrual flow and ensured it out because of side-effects. regularity.

# Side-effects

Only 93 (27.28%) patients had side-effects like nausea, vomiting or giddiness and unfortunately 7 of these left off the trial. But the others who have continued told us that the sideeffects disappeared after a couple of months of trial. It was noted that sickness were the ones who had sideeffects.

### Endometrial biopsies

Endometrial biopsies were taken on various days of the cycle and in various successive treated cycles. At no time did the endometrium resemble that of a normal menstrual cycle, but as compared to the 19-Nor-testosterone group it was found that the glands were quite well developed. Subnuclear vacuolation was found in a fair number, the stroma was moderately loose and oedematous with some decidual response near the surface.

### Previous use of contraceptives and motivation

Of the women who had come on their own or were motivated by other patients, 46 per cent have continued, while those who were motivated by social workers only 30 per cent have continued. Of the 341 women on trial, 272 had never used contraceptives; 37 had used condoms, 5 foam tablets, 13 diaphragms and 1 had used jelly. They had found the methods cumbersome and were unable to follow them properly because of lack had the I.U.C.D. inserted, had to get

### Drop outs

Drop out rate seems fairly high, but we would like to say that this is an apparent drop-out rate, comprising those who desired pregnancy and those who lived far out and cannot be really counted as drop-out cases. If some of these women were given 3 months' quota or a centre was openthose who had suffered from morning ed near their homes they would have definitely continued.

Most of these who have dropped

• :

out did so after the first cycle. This is because they found that the distance was long and that some of them had severe side-effects.

#### Reasons for Discontinuation

One hundred and three individuals discontinued the pills for the following reasons:

1. Majority of the subjects discontinued because they had left town.

2. Important cause of drop-out was inconvenience for visiting the centre every month either due to distance or other domestic causes. It could be stressed here that, if the pills were available at other centres and in abundance, the subjects could have been given a quota for more than one month and then there would have been less number of drop-outs.

3. Side-effects like nausea, vomiting giddiness, break through bleeding etc. were also responsible for drop-out, and most of these subjects discontinued in the first cycle.

4. Some of the subjects discontinued as they underwent sterilization or their husbands underwent vasectomy.

5. Certain individuals also discontinued the pills because of the difficulty of language and inability to take the tablets regularly.

Thus it is evident that most of the subjects discontinued due to reasons not related to the pill except those due to side-effects.

Home visits were attempted for each patient who came to us and left us. It was also found that when parity distribution was studied there was no relationship between parity distribution in continued and discontinued series. Women found this method equally acceptable for spacing

or limiting family. Our women are not educated but they are intelligent. If well motivated they realise the need for family planning but in their hearts they are not convinced about the safety of operative measures. They also feel that in case an accident takes place they should be left with a choice to expand their families later on; so they prefer a reversiblmethod. We had 60 per cent of our women who used the method for spacing, while 40 per cent used it for limiting the family.

#### Conclusion

In conclusion, we would like to say that there is a great scope for oral contraceptives in the Family Planning Campaign. It is necessary that we have many more pilot trials to rule out the various doubts that lie in ou minds. Oral contraceptives should not be allowed to be used without proper medical supervision. In the hands of trained family planning worker they are simple, effecient and aesthetic (it permits a complete natural intercourse).

#### Acknowledgement

Our thanks are due to Dr. S. V. Joglekar, Dean, Seth G. S. Medical College and K. E. M. Hospital, for allowing us to carry out the clinical trials in this Institution. We would like to thank (Mrs.) Kamal Gadgil for her help in collection and analysis of the data. We are also thankful to other social workers of the centre for their kind co-operation in carrying out the follow up.

We would like to thank Messrs. British Drug Houses, for giving us their drug for clinical trial and cooperation.

• 1