INTRODUCTION
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Inability to conceive after regular cohabitation without contraceptive protection for at least a period of one year is labelled as infertility. About 10-15% couples encountered this problem. In many cases an attributable causes like (1) male subfertility, (2) cervical, (3) uterine, (4) tubal, (5) ovarian, (6) endocrinologic or (7) immunologic factors can be identified.

In this study we are taking the problem of anovulation. The incidence of anovulation in cases of infertility is 12%.

The adult ovary goes through a cycle of activity which occupies approximately 28 days. It is not necessary that in every menstrual cycle in the life of woman ovulation has occurred, but it is generally accepted that in a woman with regular menstruation, the cycles are ovulatory. If the menstrual cycles are regular the possibility of anovulation is said to be 1 in 1000 (Vorys et al, 1975). However, each woman tends to have her own menstrual rhythm.

The menstrual cycle commences on the first day of menstruation and has 2 phases (1) the ripening of an ovum which occupies that first 14 days follicular phase. During this period endometrial proliferation occurs and is the direct result of oestrogen influence. (2) The formation, function and early degeneration of the corpus luteum which occupies the
second 14 days - the luteal phase. Secretary activity and
decidual reaction of the endometrium and manifestations of
the luteal phase in the ovary are brought about by the
progesterone acting in the presence of oestrogen. The two
phases are separated by ovulation which makes the change over
from the proliferative to the secretory phase in the endo-
metrium. The duration of the luteal phase is more constant
than that of the follicular phase and is generally reckoned
as 14+2 days. Nevertheless it is subject to variation.

The shrinkage of the endometrium premenstrually
coincides with commencing failure of corpus luteum activity
and is the direct result of the withdrawal of the supporting
effect of oestrogen and progesterone.

Ovulation is a very important phenomenon in the
reproductive life of a woman. It is the process by which an
ovum in the form of secondary oocyte is discharged from the
ovary to become a gamete. The ovary probably first sheds an
ovum about the time of menarche but ovulation not usually
stabilised as a regular occurrence with the age of 16-17
years. It then continues until the age of 45-50 years.
Ovulation precedes the establishment of menstruation and some-
times occurs after the cessation of menstrual period.

A patient is considered anovulatory if after
2-3 months of observation no indices of ovulation have
been identified or period of secondary amenorrhoea is
6 months or longer.
Ovulation can be detected by different parameters such as changes in cervical mucus, properties and its constituents, basal body temperature, serial vaginal smears, endometrial biopsy, essay of serum progesterone or urinary pregnenolone and other hormonal measurements.

Recently ultrasonography and various other modern techniques have been developed.

Daily vaginal smears, basal body temperature charting and cervical mucus requires careful monitoring of the patients over a long period of time. One can arrive at a definitive conclusion by the estimation of a rapid LH assay, but from a practical point of view these are expensive and not available in most clinics. Thus practical, easy and inexpensive procedures for judging ovulation need to be evaluated.

The aims and objectives of the present study are:

1. To study the incidence of anovulation in infertile woman.
2. To find out etiological factors responsible for anovulation.
3. To find out the effect of treatment on anovulation.
4. To economise the detection of ovulation.
5. To find out the accuracy of the clinical and biochemical methods for detection of ovulation.

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