

POLYCYSTIC OVARIAN DISEASE AND HYPERPROLACTINAEMIA

A Prospective Study Since 1980

By

MOHINI A. GARUD, VIMAL PARIKH AND ANGELA RODRIGUES

SUMMARY

One hundred patients of suspected anovulation attending our Gynaecological Out-patient Department have been selected for study with a view to finding out the incidence of anovulation. Of these, 30 patients had clinical and laparoscopic evidence of Polycystic Ovarian Disease (P.C.O.). The menstrual pattern of these patients have been studied in detail. We wanted to see the incidence of raised prolactin levels in patients of polycystic ovarian diseases. Galactorrhoea was present in 9 out of 30 patients—the incidence of galactorrhoea in polycystic Ovarian Disease is 30%. These patients were primarily treated with Parlodel (Bromocriptine) as a first choice of treatment. Laparoscopy was performed on all the patients. The incidence of silent tuberculosis in 100 patients of anovulation was 34%. Galactorrhoea and hyperprolactinaemia was present in 34% patients. 10/30 patients convieved of whom 6 were primarily treated with Bromocriptine. Details of results will be discussed.

We have undertaken a prospective study of 100 patients of menstrual irregularity since January 1980 with or without hirsutiam, obesity or oligomenorrhoea in the last 3½ years, i.e. January 1980 to June 1983.

Of these 10 patients with menstrual irregularities, 30 patients had clinical and laparoscopic evidence of Polycystic Ovarian Disease (P.C.O.) or Stein-Leventhal Syndrome.

These cases have been further analysed:

TABLE I
Menstrual Pattern in Patients With P.C.O.—30 Cases

	cases
1. Irregular periods with infertility	15
2. Secondary amenorrhoea with infertility	3
3. Patients with regular menstruation but either early cycles or severe dysmenorrhoea	10
4. Irregular periods with desire to restore normal menstruation	2

Of the 30 patients, 26 had infertility in addition to menstrual irregularities. Of these, 18 were cases of primary inferti-

From: Jaslok Hospital and Research Centre, Cama and Albless Hospital and Sandoz (India) Ltd., Bombay.

Accepted for publication on 24-2-87.

lity and 8 were cases of secondary infertility. 4 patients were not desirous of children, but came to restore normal menstruation.

Galactorrhoea was present in 9 out of 30 patients. The incidence is approximately 30% of patients with P.C.O. This incidence corresponds to that of other workers who have found clinical + RIA levels of raised prolactin with P.C.O. These cases were primarily treated with Parlodel (Bromocriptine) as a first choice of treatment.

Other Radio-Immuno-Assays were performed. Prolactin levels were very slightly elevated i.e. 20-40 ng/ml. in majority of patients with galactorrhoea.

Findings at Laparoscopy in Patients with P.C.O.

In all cases laparoscopy was performed in the pre-menstrual phase. Detailed study of the uterus, fallopian tubes and ovaries was carried out. If necessary, a 2nd puncture probe was used. Each ovary was carefully examined for signs of ovulation. The presence of stigma on the graffian follicle was looked for. Multiple cysts were often encountered. The ovarian size varied from small to large cystic ovaries of 3-4 cms. The extent of thick and sclerotic capsules—was varied some had very thick capsules—others of variable consistency.

Four unmarried patients who had no laparoscopy but ultrasonography revealed the presence of enlarged ovaries as seen in the films.

We have observed in a separate group of 5 patients that although the laparoscopy appearances were suggestive of Polycystic Ovarian Diseases (Borderline Ovaries), the histology of the endometrium showed secretory phase i.e. in that particular cycle the patient had

ovulated. These patients were merely kept under observation and have not been included in the above series. The prolactin and L.H. levels were raised in 3 of them suggesting a functional disorder of the ovary although histological studies of endometrium showed secretory phase.

Management of Polycystic Ovarian Disease

There are several treatment schedules devised and since successful results are reported by all methods of management we conclude that P.C.O. is a disorder of the ovary which is extremely amenable to treatment.

Workers have reported success with treatment of stressful conditions. We know the emotional factors raise prolactin levels and high levels may interfere with normal ovulation.

Our treatment is as follows: In a developing country like India, we have tried to minimize the practice of doing liberal Radio-Immuno-Assays on patients, to keep the expenses within reason. Where necessary (i.e. in patients with galactorrhoea, hirsutism or acne), hormonal levels i.e. serum prolactin, FSH/LH, or serum testosterone were measured.

If patients were unmarried or did not desire a family (4 out of 30 patients), we did an initial clinical examination along with pelvic sonography to measure the size of the ovaries. R.I. Assays were done to get baseline data. Two of these patients were given cyclic progesterone to regularize the menstrual cycle and to treat dysmenorrhoea. The other 2 patients needed parlodel to minimize breast pain and discomfort which was the main complaint.

In patients with infertility, pelvic

pain along with menstrual disorders, we performed a premenstrual dilatation and curettage and laparoscopy and saw the state of the ovaries and tubes. Pelvic chromopertubation was carried out to confirm the tubal patency so that subsequent hormonal therapy could be started. Male factor was also carefully examined in all patients.

Two out of five patients conceived within 3 months of laparoscopy in the group where ovaries were found to be cystic but endometrium was secretory and Prolactin + L.H. levels were raised.

Total pregnancies—33.33%—9 full-term, 1 abortion.

TABLE II

Results of Management in P.C.O.—30 Patients

- 4 patients Unmarried
- 2 patients on Parlodel
- 1 patient on Cyclic Progesterone alone
- 1 patient on Dexamethasone

Conceptions—10 out of 30 patients i.e. 33.33%

Treatment	Number	Conception
1. Clomiphene Citrate	3	
2. Parlodel (raised prolactin levels)	6	3—pregnancies 2—under treatment 1—abortion
3. Parlodel + Clomiphene Citrate	1	1
4. Cyclic Progesterone	2	—
5. Cortisone + Clomiphene Citrate	1	1
6. Surgical Management	4-2 tubal adhesions	1
7. Patients under treatment	12	2—male factor 1—breast pain-Parlodel 9—under treatment for less than 3 months

The histology of the endometrium in the first follow-up visit was studied. If it showed anovulation i.e. proliferative endometrium in the pre-menstrual part of the cycle, anovulation was confirmed. Treatment was started with clomiphene citrate or directly with parlodel depending on serum prolactin levels, especially in patients who had galactorrhoea. In 9 such patients, parlodel was preferred as an initial treatment.

Acknowledgements

We are thankful to Superintendent Cama and Albless Hospitals, Bombay and Medical Director, Jaslok Hospital in permitting us to utilize the hospital data.

We are also thankful to Dr. Angela Rodrigues of Sandoz (India) Limited, for her kind co-operation and courtesy in not only the supply of Parlodel but also general encouragement and enthusiasm.