P.C.O.D. TREATED BY PELVISCOPIC ENDOCOAGULATION OF THE OVARIES

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SUMMARY

P.C.O.D. has always been an enigmatic disease which has withstood several attempts at understanding and effective and permanent treatment. This paper deals with the role of pelviscopic endocoagulation of the ovaries in patients who do not respond to clomephene citrate. This study involved 32 patients and their patient profiles, the method of the procedure and the follow up are presented in this study.

INTRODUCTION

P.C.O.D. was described as an anatomical entity in 1900. For Stien and Levanthal the impetus to biopsy such ovaries resulted from the observation that amenorrhea classically considered to be associated with small and atrophic ovaries was being encountered with increasing frequency in patients exhibiting much larger polycystic ovaries (Stein and Levanthal 1935). This prompted them to undertake an investigation via tissue sampling of the gonads and as Futterwiet cites "from a biopsy a syndrome was born". (Futterwiet 1984). That was in 1935 and with changing times and trends the eponym Stein and Levanthal syndrome has fallen into disuse and P.C.O.D. has been adopted as a generic description for a broad spectrum of endocrine dysfunction in women with polycystic ovaries.

A different well tried modality which is also highly effective, simple, convenient, relatively, inexpensive and quick is presented here.

MATERIALS AND METHODS

A total of 32 patients were included in this study. The predominant symptoms and signs noted were infertility, oligomenorrhea, obesity, hirsuitism and

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Accepted for Publication on29.5.95

secondary amenorrhea, all the patients desired conception. L.H. and F.S.H. ratios were done in all the patients on the second day of the menses. All patients underwent diagnostic sonography. All patients before being included in the study were given therapy for a period of 6 months by way of clomephene and planned relations.

General anaesthesia was used for all the patients undergoing this procedure. After confirming the diagnosis at laparoscopy two additional skin incisions were made and an atraumatic grasping forceps and a unipolar cautery needle were inserted into the abdomen. The ovary was fixed at the uteroovarian ligament with the grasping forceps and endocoagulated at six to ten points for 5-10 seconds at the depth of 1-2 mm. just below the tunica albuginea with the unipolar cautery needle. Each operation lasted for 10-15 minutes. Almost all the patients were discharged on the same day.

RESULTS

The symptoms and signs in our series were distributed as shown in Table I

L.H. and F.S.H. ratios were altered in all the patients

There were no complications in our series.

The rate of restoration of ovulation was 80% as shown in Table II.

The pregnancy rate was 50% as shown in Table III.

Post operatively the L.H.levels were reduced in all the patients.

Table I
Distribution of Symptoms and Signs

Symptoms and Signs	Number of cases	Percentage of cases
Infertility	32	100%
Oligomenorrhea	26	81%
Obesity	22	68%
Hirsuitism	20	62.5%
Secondary amenorrhea	6	18.7%

Table II
Restoration of Ovulation

Total Number of Patients	32
Number of Patients who ovulated	24
Percentage of Patients who Ovulated	80%

Table III
Pregnancy Rate

Total Number of Patients	32
Number of Patients Who Achieved Pregnancy	16
Percentage of Patients who Achieved Pregnancy	50%

DISCUSSION

In 1969 Kistner and in 1975 Buttram observed the formation of significant post operative adhesions in patients treated by wedge resection of the ovaries. By the early 1970's ascension of the medical line of treatment rendered this procedure obsolete. Clomephene in the treatment of P.C.O.D. is established firmly as the first line of treatment and success rates as high of as high as 93% ovulation rates and 43% pregnancy rates have been reported with conceptions occurring most commonly in the first 3-6 treatment cycles. (Gindoff & Jewelsicz 1987). In the group of patients resistant to clomephene the results obtained with either exogenous gonadotrophins or with GnRH analogues are at the considerable risk of ovarian hyperstimulation, luteal insufficiency, pregnancy wastage and multiple pregnancies. (Burger et al 1991). As many authors like Gjoanness (1984), Daniells (1989), Abdel Gadir et al (1990) and others have; we also have found this technique to be extremely useful.

This method does not appear to result in frequent adhesion formation. (Naether & Fischer 1993). The mechanism of action for the restoration of cyclical ovulation is not clearly understood. The hormonal changes associated with this procedure are just as poorly understood. There is consensus that there is lowering temporarily of ovarian steroid production with a persistent decrease in testosterone. (Greenblatt & Gasper 1987).

Conroversies though still abound in the technicalities of this procedure and the major ones are; whether to hyperstimulate the ovaries and then make the punctures, regarding the ideal depth of penetration and the total number of punctures to be made, and to make the effect last longer than the 11-12 months that it normally does.

The many benefits of this new procedure are immediately obvious. As enumerated earlier this procedure is simple, quick, with no major risks if done correctly, highly effective, produces minimal trauma, and is perhaps the answer in the treatments of patients with P.C.O.D. who are resistant to clomephene.

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