ORIGINAL ARTICLE

Presentations of Polycystic Ovarian Disease- Study at Tertiary Care Hospital

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ABSTRACT

Objective: To identify the different clinical and biochemical presentations of patients having polycystic ovarian syndrome.

Study Design: A descriptive observational study.

Place and Duration of Study: This study was carried out at Obstetrics and Gynaecology department of CMH Rawalpindi, from October 2010 to Sept 2011.

Materials and Methods: This observational study was conducted to identify the different presentation of patients suffering from polycystic ovarian syndrome. Seventy five cases of polycystic ovarian syndrome who reported in OPD were selected for the study.

Results: The patients mostly presented between 20-30 years of age with symptoms of oligomenorrhea, infertility and hirsutism. Ultrasonography showed the morphology of polycystic ovary and deranged FSH, LH and testosterone levels.

Keywords: *Polycystic ovarian syndrome, Oligomenorrhea, Infertility, Hirsutism.*

Introduction

Polycystic ovarian syndrome (PCOS) is associated with reproductive, metabolic and psychological dysfunction and affects 4-18% of women in reproductive age group.[1] It is the most common endocrinopathy affecting women of reproductive age.[2] There is an increased risk of diabetes, hypertension, metabolic syndrome, and endometrial carcinoma. [3] PCOS adversely affects the female reproductive health leading to infertility and miscarriages.

Diagnosis of PCOS is a challenge for the clinicians and with availability of more advanced diagnostic tools the prevalence has seen to be increased because most of the cases remain undiagnosed clinically.[4] PCOS is a frequent condition in women of reproductive ageand has associated metabolic dysfunction.[5] This condition also has serious psychological implication as well.[6] The usual manifestations include irregular menses, androgen excess and obesity.[7] The aim of the present study is to highlight the different symptoms and signs with which the patients reported in the gynaecology and obstetrics department of Combined Military Hospital, Rawalpindi over a period of one year.

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Materials and Methods

This descriptive study was carried out at Obstetrics and Gynecology department CMH Rawalpindi. Seventy five cases of polycystic ovarian syndrome were selected for the study. Detailed menstrual history of the patient was taken. Pelvic examination of all the married patients was carried out in all the patients. Ultrasonography pelvis was carried out in all the patients. Hormonal levels (FSH, LH, Prolactin, Testosterone, Estradiol) were also carried out. Baseline blood chemistry was done in all cases.

Patients who presented with complaints of menstrual irregularities, infertility, hirsutism and obesity were included in the study. Patients having menstrual irregularities due to other causes, like menorrhagia, and other causes of infertility, like male causes, tubal occlusion, were excluded from the study.

Results

Out of the 75 women selected for the study

51 (68%) had raised LH and FSH ratio while testosterone was mildly raised in 20 patients (Table II). On ultrasonography polycystic ovaries were found in 49 (65%) patients (Table II). Most common presenting symptom wasoligomenorrhoea which was present in 75% cases (56 patients) (Table I). Fifty six perecent (42 patients) patients had infertility while hirsutism was present in 53% (39 patients) cases (Table I). Most of the patients presented in 20-30 years age group. 30 patients (40%) were found to be obese (Table I).

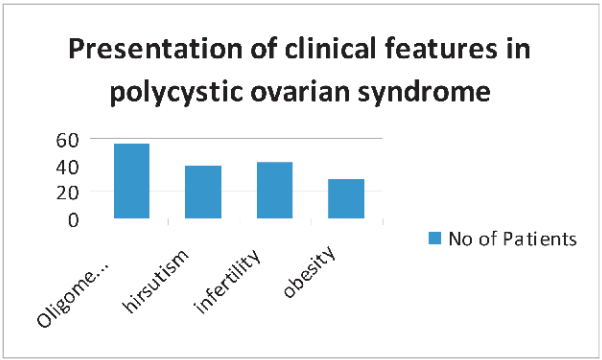
Table I: Presenting features of patients with PCOS

Presenting feature	Number of patients	PERCENTAGE (%)
Oligomenorrhea	56	75
Hirsutism	39	52
Primary Infertility	42	56
Obesity	30	40

Table II: Investigations of patients with PCOS

Investigations	Number of patients	Percentage (%)
Polycystic ovary on USG	49	65
Raised LH/FSH	51	68
Raised Testosterone	20	27

Figure 1:



Discussion

It was in 1935 that Stein and Leventhal originally described the polycystic ovarian syndrome. PCOS is diagnosed using the Rotterdam criteria,[8] which declares that when at least two of the following three features are present the patient can be labeled as having PCOS:

- oligomenorrhea/ anovulation
- hyperandrogenism
- Polycystic ovaries

In the study Rotterdam criteria was used for diagnosing the patients of PCOS. The studyshows that the most common presenting symptom was oligomenorrhoea, this finding is similar to other studies carried out and was of almost similar level to the one reported in US study.[9,10] Similarly infertility was a very common symptom being present in 65% of our patients. This shows that married women tend to report for their concern for infertility and are subsequently diagnosed as having PCOS. The worldwide incidence of patients with infertility having PCOS is about 75%.[11] Hirsutism is again a very common symptom in patients of PCOS, it being present in 35% patients in Chinese population.[12] Obesity is more commonly present in women with PCOS of Hispanic, black and white origin while its incidence is lower in women of Mediterranean descent.13Hyperandrogenism was exhibited by the deranged levels of FSH, LH and testosterone as in other studies these levels play an important role in diagnosis of

PCOS.[14]Transvaginal ultrasonography carried out showed the presence of 12 or more follicles measuring 2-9 mm in diameter and increased ovarian volume (more than 10cm3) in 65% patients, which is one of the features of PCOS according to Rotterdam criteria. The patients typically presented in 3rd decade of life.

Conclusion

It can be concluded from this study that patients present with menstrual cyclical disturbances, infertility with and without menstrual disturbances, associated hirsutism and obesity, ultrasonographicfeaturesandhormone level estimation play pivotal role in diagnosis of PCOS.

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