

Poly Cystic Ovarian Syndrome

ABSTRACT: For all those who were present for the Menstrual Disorder Workshop, by now know how to spot a PCOD female even in the crowd of hundred, thanks to Dr C H Asrani's presentation and through his observing lens! ...and for all those who are coming in late...here is the topic simplified for you all...something which is prevalent in 4-6% females (world wide) of reproductive age, in 75% of women with irregularity or infertility. We are sure by the end of the article all you homoeopaths who are 'good observers' and also 'the bad observers' would be able to spot a PCOD female without wearing your thinking cap!

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DEFINITION

- Stein and Levantahl (1935): Association of amenorrhea with polycystic ovaries and variably: hirsutism and/or obesity
- ACOG and NIH (1990): Hyperandrogenism and chronic anovulation excluding other causes
- Practically a combination of obesity, type 2 diabetes and anovulatory infertility should arise a suspicion of PCOS.

EPIDEMIOLOGY

- Prevalence: 4-6% females (world wide) in women of reproductive age.
- 75% of women w/ irregularity or infertility
- PCOS will mean increased morbidity at various stages throughout the woman's life.

GYNAECOLOGICAL PROBLEMS

- Patients usually present with menstrual irregularities (irregularly irregular cycles), hirsutism and infertility problems.
- Pregnancies appear to be associated with a higher risk of miscarriage, hypertension and diabetes. The increased risk is, however, likely to be associated with obesity rather than with PCOS.
- Long-term lack of luteal hormone activity is known to predispose the endometrium to hyperplasia and thus increase the risk of uterine cancer. It has been reported that the risk

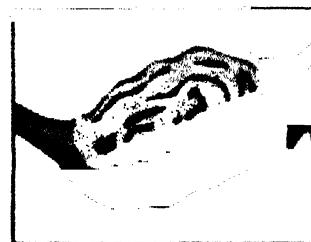
of uterine cancer is increased five-fold in women with PCOS as compared with the general population. However, it is difficult to distinguish between the increased risk caused by obesity and that by PCOS, and large-scale epidemiological studies are needed.

- There is no evidence of a link with breast cancer.

METABOLIC DISTURBANCES

- Women with PCOS often have reduced insulin sensitivity which is associated with

Normal ovary



Polycystic ovary





truncal obesity and disturbances in lipid metabolism.

50% women with PCOS are overweight. Insulin resistance with resulting compensatory increased concentration of insulin are more marked in overweight patients with PCOS than in otherwise overweight controls. Typical findings low serum HDL-cholesterol concentration and hypertriglyceridaemia. PCOS appears to increase the risk of developing type 2 diabetes at a considerably early age (the risk is 2-5-fold) and at a later age, hypertension (the risk is 2-3 fold).

Even though it has been suggested that women with PCOS have a many fold risk of developing ischaemic heart disease, no definite evidence exists to support the claim.

The risk of complications associated with cerebrovascular disease and diabetes is increased.

SIGNS AND SYMPTOMS

SYMPTOMS

- Menstrual irregularity
- Hirsutism, acne, etc
- Infertility
- Obesity

SIGNS

- Hirsutism, acne
- Ovarian enlargement
- Obesity
- Acanthosis nigricans

CASE 1

- J D, 31yr
- Menstrual irregularity, LMP 5 months prior
- Irregular since menarche
- Getting longer over time
- Sexually active and uses condoms
- 15 kg weight gain over past six months
- Previous U/S w/ovarian cysts
 - ❖ Hair growth on her chin and chest
 - ❖ Brother: DM type2
 - ❖ Father: male pattern baldness
 - ❖ PCOS: Case 1 - PE
 - ❖ BP 126/96, Weight 112 kg
 - ❖ SKIN: Dark hair on chin and chest, moderate to severe acne on face and back
 - ❖ No acanthosis nigricans

CASE 2

- RM, 27 yr
- Desires pregnancy w/o results X 2yrs
- LMP 2 wks ago/ 3 menses per yr
 - o 2 years irregularity,
 - o sometimes heavy bleeding
- Similar family history in mother & elder sister
- C/O facial hair which she waxes
- Weight 98 kg
- SKIN: Scanty facial hair on chin, no acne
- Abdomen: Obese
- Pelvic examination: Normal uterus, ovaries not palpated
- Labs: raised LH
- Pelvic USG - WNL

DIAGNOSIS

- Diagnosis is based on the history, clinical findings (menstrual irregularities, male pattern of hair distribution, acne) and, if necessary, on hormone studies.
- A gynaecological ultrasound examination is used to verify the diagnosis; polycystic morphology of the ovaries is evident.
- Two of the following criteria must be present for PCOS diagnosis:
 - o anovulation characterized by menstrual irregularities
 - o clinical (male pattern of hair distribution or acne) or biochemical (Serum Testosterone > 2.7 nmol/l) signs of hyperandrogenism
 - o polycystic morphology of the ovaries, verified by ultrasound examination (presence of 12 or more follicles in each ovary measuring 2 - 9 mm in diameter, and/or increased ovarian volume > 10 ml).
- Exclude thyroid disease, hyperprolactinaemia, androgen-secreting tumours and disturbances in adrenal function.
- o If the patient presents with menstrual irregularities, measure serum TSH and prolactin to exclude other causes.
- o If the patient presents with hirsutism



and/or acne, measure serum testosterone.

- o Serum FSH, LH and estradiol are not usually of diagnostic benefit.
- Due to the risk of metabolic disturbances the following screening is indicated, particularly in overweight patients:
 - o blood glucose, lipids and blood pressure at regular intervals (for example every two years)
 - o Glucose tolerance testing in conjunction with the first visit followed by regular testing (for example every two years).

RISK OF PREGNANCY

- Gestational Diabetes and risk of diabetes later in life
- Hypertension of pregnancy

ASSOCIATED DISORDERS

- Diabetes
- Hyperlipidemia (LDL, Triglycerides)
- Obesity
- Hypertension
- CAD
- Endometrial / ovarian CA
- +/- Breast CA
- NO increase in Osteoporosis
- Eating disorders
- Psychiatric disease

CONCLUSION

- Chronic anovulation/ hyperandrogenism
- Complete work up to rule out other causes
- Advise weight loss and exercise in all patients with PCOS

➤ Consider medical management.

MANAGEMENT

TREATMENT

- The most important treatment form is weight reduction down to the patient's normal weight. Weight reduction may
 - o regularize the menstrual cycle through restoring ovulation
 - o significantly reduce the risk of miscarriage during early pregnancy as well as other pregnancy-associated risks
 - o Enhance the safety and efficacy of ovulation induction treatments and reduce the risk of late complications associated with PCOS, such as type 2 diabetes and coronary heart disease.
- Exercise reduces insulin resistance.
- Smoking cessation is important due to the increased risk of vascular diseases.
- Hormone Treatment
- Treatment Of Anovulation

SPOT DIAGNOSIS OF PCOS

- Male pattern distribution of fat
- Breast development in excess of that corresponding to age and built
- Irregularly irregular menstrual cycles
- F/h or p/h of hyperglycaemia/ DM
- Male relative – male pattern baldness.

The 2 forms which are used for recording PMS (for actual recording see Dr Vishpala's Cases) are given here. Xerox and use or download from www.justeves.com. You can use in your name as long as you retain the name of the source.... Editor

☺☺☺ New family driver ☺☺☺

Martin had just received his brand new driver's license. The family troops out to the driveway, and climbs in the car, where he is going to take them for a ride for the first time. Dad immediately heads for the back seat, directly behind the newly minted driver.

"I'll bet you're back there to get a change of scenery after all those months of sitting in the front passenger seat teaching me how to drive," says the beaming boy to his father.

"Nope," comes dad's reply, "I'm gonna sit here and kick the back of your seat as you drive, just like you've been doing to me all these years."