Indian Fertility Society

ADOLESCENT PCOS

PCOS is most common endocrine disorder in women associated with significant morbidity including impaired reproductive health , psycosocial dysfunction, metabolic syndrome , cardiovascular diease and increased cancer risk

The diagnosis of PCOS in adolescent presents a challenge to clinician ,as some of features that are weighed among diagnostic criteria in adults are commonly encountered features of normal adolescent.So the purpose of this writing is to simplify and practical understanding oa approach.

WHO SHOULD BE INVESTIGATED

Very irregular mens
Abnormal weight gain
Severe persistent acne
Hirsutism

According to ESHRE Guidelines,

Irregular menstrual cycle is defined as
-First year normal
-Upto 3 years from menarche if interval duration <21 and > 45 days
-more than 3 years from menarche <21 days > 35 days
At any time post menarche if interval is more than 90 days
Primary amenorrrhoea by age 15 years or > 3 years post thelarche

INVETIGATIONS PROPOSED

Pelvic scan- not recommended as presence of polycystic ovarian morphology is common finding in adolescent PCO, done sometimes to know phenotype, sometimes to see endometrium , liver ,fatty tissues.
Biochemical test for hyperandrogenemia- should be done in cases where
-high risk ethnic group
-obese
-Family history of diabetes
Limitations are- population based cutoff is not reliableand significant ethnic racial variation occurs.The test are notoriously unreliable inaccurate and inexpensive.
TEST includes-Total testosterone > 55 ng/dl
-Free testosterone /Free androgen index
-DHEAS level
-17 OH Progesterone> 200
ACTH stimulation test – to screen for NON classic adrenal hyprplasia

Test for insulin resistance - In research situation IR is seen in 60-65 % cases .clinically it is seen in 20-25 % obese and 5% lean PCO

LFT and test for dyslipedemia- practically should be done in high risk cases
Routine test-HB
-CBC
-Thyroid dysfunction
- S prolactin

MANAGEMENT-

The psychological impact of PCOS on tender age of adolescence should be addressed sensitively
-life style modification remains first line treatment especially the overweight& obese adolescent ,it improves menstrual irregularity& decrease cardiovascular risk
COC-1st choice of pharmacotherapy and 1st choice for menstrual irregularity of any any pattern.It works on HPO axis and increase sex hormone binding globulin.Improvement in menstrual irregularity is normally seen within 1st 2-3 months .Improvement in testosterone level can be seen after 3 months

How long to use OCP-Considering safety issue ,adverse impact on bone health, lipid , glucose metabolism, upto 1 year is quite safe but should be holistic and individualized approach

Metformin-It is recommended for women with PCO with impaired glucose intolerance.Metformin is as effective as COC for hirsutism and superior to COC for weight reduction and improved dysglycemia but COC is preferable for menstrual irregularity

OTHER OPTION for hirsutism includes-topical hair removal includes eflornithine

-Laser therapy/ Cosmetic hair removal