Evaluation Of Incidence And Risk Factors For Poly Cystic Ovarian Syndrome (Pcos) Among Adolescent School Girls

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Introduction

Polycystic ovarian syndrome is a multisystem endocrinopathy with ovarian expression of metabolic disturbances and a wide spectrum of clinical features. It is a multi-factorial and polygenic condition. The prevalence of PCOS in the age group of 15-25 years is 20-30%. The diagnosis of PCOS in adolescent girls is difficult, mainly due to similarities in the irregular bleeding patterns among adolescent girls with PCOS and normal postmenarchal girls. But an early detection helps in preventing long term complications and management can be, by lifestyle modifications (diet, exercise and stress management). With the early onset of menarche and increasing incidences of PCOS among urban adolescent girls, the need to imply methods of prevention and awareness at school level arises. This research addresses the issue and brings forward the need to adopt means of early, better and efficient management of PCOS.

Objectives

Screening of school going girls in the age group of 13-18 years for signs of irregular periods, hirsuitism and acne. Establishing the incidence of PCOS based on history and confirming with the help of ultrasound. Correlating the incidence of PCOS with obesity, family history of diabetes and hypertension.

Materials and Methods

An overview about PCOS and its clinical relevance was explained to the school girls. The girls signed a consent form confirming to undergo ultrasound if required. A pretested questionnaire was administered to the girls. Based on the responses, symptomatic girls underwent ultrasound for confirmation. Based on the responses and ultrasound findings, prevalence and risk factors predisposing to PCOS was established.

Power point presentation to provide an overview about PCOS. Informed consent form. A student proforma consisting of 16 questions. Chi-square test to establish association between presence of irregular menstrual cycle and various risk factors for PCOS.

Results

The survey was conducted among school girls between the ages of 13-18 years. 158 students were selected for the study. Out of 158 girls, 40 were found clinically symptomatic and underwent ultrasound. Of the 40 girls, 7 were confirmed of polycystic ovaries. Thus, the incidence of PCOS in the given study group was found to be 17.5%. In the study group, correlation between obesity and clinical symptoms of PCOS was established. Association between family history of diabetes and hypertension with clinical symptoms of PCOS was not established.

Conclusion

Based on the observations and results, it can be concluded that PCOS is on the rise among adolescent girls. Obesity is the most important predisposing factor for PCOS.With the changing lifestyle and increased levels of stress among young students, there are higher chances of acquiring PCOS at this age group. A strong family history of diabetes and hypertension also predisposes to PCOS. Hence, there is a need to be vigilant among young girls who are at risk. It is important to educate and aware girls about their reproductive health and rule out any cause which might lead to infertility or sub-fertility at a later stage.

Implications

At present there are no programmes for the management of PCOS at the school level. With the early onset of menarche and increasing incidences of PCOS among urban adolescent girls, the need to apply methods of prevention and awareness at school level arises. With the establishment of the factors pertaining to higher incidences of PCOS, dietary and life style changes can be suggested to the students to prevent the disease.