

ABSTRACT

Background:

Polycystic ovarian syndrome (PCOS) is one of the commonest endocrine disorders in women, with a prevalence ranging from 2.2% to 26% in India and 9.13% in South India. The present prospective pre post experimental controlled study was aimed to evaluate and compare the efficacy of Naturopathy and Yoga (N & Y) interventions on morphological changes in the ovaries in PCOS patients in 12 weeks duration.

Settings and Design:

The study was conducted at Government Yoga and Naturopathy Medical College and Hospital, Chennai, India. The study was a single blinded prospective, pre post experimental controlled trial.

Methodology:

A total of ninety PCOS patients, of age between 18 and 35 years were recruited and allocated to three groups as per convenient sampling, control group (n=30), Yoga intervention group (n=30) and N & Y intervention group (n=30). After satisfying the inclusion criteria of the study and according to their immediate participation, they were allocated to either of the interventions group or in the wait listed control group. The three groups were assessed at baseline and after 12 weeks for changes in polycystic ovarian morphology, and were assessed at baseline, after every 4 weeks and after 12 weeks for anthropometry and menstrual frequency. During these 12 weeks, the N & Y intervention

group was exposed to the intervention, the Yoga intervention group was exposed to Yoga practice of the intervention protocol for 6 days per week and the control group was wait listed.

Results:

Significant improvement was observed in the ovarian morphology ($P<0.05$), except for ovarian thickness ($P=0.27$), anthropometry ($P<0.001$), except for waist hip ratio ($P=0.23$) and menstrual frequency - in the interval of days between the second and third consecutive menstrual cycle ($P<0.001$), except for the interval of days between LMP and first consecutive menstrual cycle ($P=0.66$) and between first and second consecutive menstrual cycle ($P=0.76$), between the three groups.

Conclusion:

The findings of the study indicate that N & Y interventions are efficient in bringing about beneficial changes in polycystic ovarian morphology and anthropometry. Longer duration of intervention might be required to regulate the frequency of menstrual cycle. Hormonal assessment can be performed in future study for further validation.

Keywords: *Anthropometry, body mass index, polycystic ovarian syndrome, Naturopathy and Yoga interventions, insulin resistance.*