

P47. TITLE: Circulating biomarkers for the diagnosis of Polycystic Ovarian Syndrome patients: A Meta-analysis

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OBJECTIVE:

To identify circulating biomarkers which are consistently present in polycystic ovarian syndrome patients in different regions of the world.

CONTEXT:

Despite the increase in prevalence in PCOS, the etiology of PCOS is still unknown. Most importantly, the diagnostic criteria are still highly disputed and different criteria have been in used in different regions of the world. Till date no specific diagnostic test or biomarker exist which are in clinical use to aid in the diagnosis of PCOS patients worldwide. The current study has been undertaken to evaluate the clinical utility of biomarkers in diagnosis of polycystic ovarian syndrome in diverse ethnicities and different regions of the world.

METHODOLOGY:

Literature search has been performed from 01/01/1980 to 30/06/2017 using different search engines (Pubmed, EMBASE, CDSR) using key words "Biomarker/ marker, polycystic ovarian syndrome/ PCOS, ELISA/ enzyme linked immunosorbent assay".

RESULTS:

This search yielded 65 unique articles out of which only 35 were relevant. We have identified 49 unique markers showing statistically significant difference between polycystic ovarian syndrome patients and normal control women. Among these testosterone, Dehydroepiandrosterone sulfate, sex hormone binding globulin, androstendione, antimullerian hormone, luteinizing hormone (LH), estradiol, free androgen index, follicle stimulating hormone (FSH), LH/ FSH Ratio, blood glucose, insulin, triglyceride, cholesterol, low density lipoproteins, high density lipoproteins, high sensitivity C reactive protein, adiponectin, betatrophin, leptin, cartonectin were consistently reported in different populations.

CONCLUSION:

We have identified markers which are showing statistically significant difference between PCOS and control and present target which could be further explored to be included as an aid in the diagnosis of PCOS.

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