

AEPCOS QUARTERLY PUBLICATION LIST

JANUARY—MARCH 2014

The new AEPCOS Publication Committee chaired by Kathleen Hoeger (Rochester, USA) and formed also by Franca Fruzzetti (Pisa, Italy) and Carlos Moran (Mexico City, Mexico) has prepared the new AEPCOS Quarterly Publication list. The publication list restarts from January-March 2014 papers and will be published regularly at the end of the following month (next issue at the end of July 2014)

As in past, the published papers have been grouped according their main focus. In addition, the Committee has selected three papers from this list that seemed particularly interesting and worthy to be commented.



Kauai, Kalapaki Beach

AEPCOS QUARTERLY PUBLICATION LIST

HIGHLIGHTED PAPERS

- **Barry JA, Azizia MM, Hardiman PJ. Risk of endometrial, ovarian and breast cancer in women with polycystic ovary syndrome: a systematic review and meta-analysis. Hum Reprod Update. 2014 Mar 30. [Epub ahead of print]**
- **Cai X, Liu C, Mou S. Association between fat mass- and obesity-associated (FTO) gene polymorphism and polycystic ovary syndrome: a meta-analysis. PLoS One. 2014 Jan 22;9(1):e86972.**
- **Christ JP, Willis AD, Brooks ED, Vanden Brink H, Jarrett BY, Pierson RA, Chizen DR, Lujan ME. Follicle number, not assessments of the ovarian stroma, represents the best ultrasonographic marker of polycystic ovary syndrome. Fertil Steril. 2014 Jan;101(1):280-287.**

Kauai Marriott Beach and Resort at Kalapaki Beach



AEPCOS QUARTERLY PUBLICATION LIST

HIGHLIGHTED PAPERS

- Barry JA, Azizia MM, Hardiman PJ. Risk of endometrial, ovarian and breast cancer in women with polycystic ovary syndrome: a systematic review and meta-analysis. Hum Reprod Update. 2014 Mar 30. [Epub ahead of print]

There is some controversy over the risk of cancer with a diagnosis of PCOS. This study attempts to quantify cancer risk, specifically ovarian, endometrial and breast cancer, in women with PCOS compared to controls. They also separately quantified the risk in women who were premenopausal and by age. The authors completed a systematic review and meta-analysis. They found that women with PCOS were at a significantly increased risk for endometrial cancer with an odds ratio (OR) of 2.79, 95% confidence interval (CI) of 1.31-5.95, $p < 0.008$. However in the general pool of studies there was no increased risk of either breast or ovarian cancer seen (OR 1.41, 95%CI 0.93-2.15; OR 0.95, 95%CI 0.64-1.39). The authors then analysed the studies including only women under the age of 54. The risk of endometrial cancer increased in PCOS women to OR 4.05, 95%CI 2.42-6.76, $p < 0.00001$; and became significantly increased for ovarian cancer, OR 2.52, 95%CI 1.08-5.89, $p < 0.03$. Breast cancer in both analyses was not significantly increased. These data suggest that women with PCOS are at increased risk for endometrial cancer at younger ages, as well as overall, and may be more at risk for ovarian cancer at younger ages but not overall. The available data however are not robust and include several varying diagnoses of PCOS. In addition there are difficulties with confounders, such as obesity, that may result in biases in the studies which may exaggerate the increased risk. Overall the general risk of gynecologic cancers is relatively low, particularly in younger ages so absolute risk remains low (KH).

Photo Caption

AEPCOS QUARTERLY PUBLICATION LIST

HIGHLIGHTED PAPERS

Cai X, Liu C, Mou S. Association between fat mass- and obesity-associated (FTO) gene polymorphism and polycystic ovary syndrome: a meta-analysis. PLoS One. 2014 Jan 22;9(1):e86972.

The topic of this study is important to analyze in view of the fact that more than 50% of polycystic ovary syndrome (PCOS) patients are overweight or obese. Given the high prevalence of obesity in PCOS, the hypothesis is that PCOS and obesity may share a similar genetic background.

Some studies reported that the fat mass and obese (FTO) gene is associated with PCOS risk, while others did not show any significant association.

The present study deals with the relationship between the polymorphism of FTO gene and the risk to present PCOS. The FTO gene is located in 16q12.2 chromosome and it is expressed in adipose tissue, brain and muscles. The FTO gene is associated with body mass index (BMI) and obesity.

The authors performed a meta-analysis taking into account the literature published in different databases. Only five studies (4778 cases and 4272 controls) were included from 38 selected initially.

The results found that the FTO gene polymorphism was only marginally associated with PCOS risk after adjusting for BMI; however, it was not stable since in the analysis of ethnicity the association was significant in East Asians but not in Caucasians. One important limitation is that underlying genetics may be different in the different phenotypes of PCOS. The reported studies did not provide data concerning different phenotypes of PCOS.

The conclusion of the meta-analysis is that the FTO gene polymorphism is not associated with PCOS risk after adjustment for BMI in all populations. However, in the East Asian population there is an association with PCOS risk independent of BMI. So, the controversy about this topic continues. (CM)

AEPCOS QUARTERLY PUBLICATION LIST

HIGHLIGHTED PAPERS

Christ JP, Willis AD, Brooks ED, Vanden Brink H, Jarrett BY, Pierson RA, Chizen DR, Lujan ME. Follicle number, not assessments of the ovarian stroma, represents the best ultrasonographic marker of polycystic ovary syndrome. Fertil Steril. 2014 Jan;101(1): 280-287.

The significance of ovarian morphology to PCOS diagnosis continued to be matter of debate. The diagnostic criteria proposed by the American Society of Reproductive Medicine and European Society of Human Reproduction and Embryology in 2003, as well as by the Androgen Excess and PCOS Society in 2006, included the quantitative measures of follicle number per ovary (FNPO) and ovarian volume (OV) as diagnostic criteria for PCOS. Increased FNPO and OV continue to be favored vs. other morphological characteristics of PCO (for example the measurement of the stromal-to-total area ratio (S:A) as proposed by Fulghesu and colleagues). Multiple reports have indicated that the threshold for FNPO supported by the ASRM/ESHRE Rotterdam consensus (≥ 12 follicles) has contributed to an increased prevalence of PCO among healthy women of reproductive age. In addition, significant intra-observer and inter-observer variability exists when counting follicles throughout the entire ovary. Another critical point is that there is also no uniform consensus on whether follicles should be counted throughout the entire ovary or in a single cross-sectional view of the ovary. In this study the authors compare, in 82 women with PCOS and in 60 healthy female volunteers, the diagnostic potential of ultrasonographic markers of ovarian morphology, used alone or in combination, to predict PCOS. The ultrasonographic markers considered were: FNPO, OV, follicle number per single cross-section (FNPS), follicle distribution pattern, stromal area, ovarian area, S:A, and stromal index (SI). The Authors observed that FNPO best predicted PCOS ($R^2 = 67\%$) with 85% sensitivity and 98% specificity, followed by OV ($R^2 = 44\%$), and FNPS ($R^2 = 36\%$). Neither S:A nor SI had predictive power for PCOS. In combination, FNPO+S:A and FNPO+SI most significantly predicted PCOS ($R^2 = 74\%$ vs. 73%, respectively). The diagnostic potentials of OV and FNPS were substantially improved when used in combination (OV+FNPO, $R^2 = 55\%$). On the basis of the above results the Authors concluded that FNPO best predicted PCOS. Although the addition of S:A or SI improved the predictive power of FNPO, gains were marginal, suggesting limited use in clinical practice. When image quality precludes a reliable estimation of FNPO, measurements of OV+FNPS provide the next closest level of diagnostic potential (FF).

AEPCOS QUARTERLY PUBLICATION LIST

CONGENITAL ADRENAL HYPERPLASIA/ STEROIDOGENESIS

- de Silva KS, de Zoysa P, Dilanka WM, Dissanayake BS. Psychological impact on parents of children with congenital adrenal hyperplasia: a study from Sri Lanka. J Pediatr Endocrinol Metab. 2014 Jan 27:1-4.
- Falhammar H. Non-functioning adrenal incidentalomas caused by 21-hydroxylase deficiency or carrier status? Endocrine. 2014 Jan 23.
- Kundel A, Thompson GB, Richards ML, Qiu LX, Cai Y, Schwenk FW, Lteif AN, Pittock ST, Kumar S, Tebben PJ, Hay ID, Grant CS. Pediatric endocrine surgery: a 20-year experience at the Mayo Clinic. J Clin Endocrinol Metab. 2014 Feb;99(2):399-406.
- Marsh CA, Auchus RJ. Fertility in patients with genetic deficiencies of cytochrome P450c17 (CYP17A1): combined 17-hydroxylase/17,20-lyase deficiency and isolated 17,20-lyase deficiency. Fertil Steril. 2014 Feb;101(2):317-22. Review.
- Mouritsen A, Johansen ML, Wohlfahrt-Veje C, Hagen CP, Tinggaard J, Mieritz MG, Tefre de Renzy-Martin K, Soeborg T, Fallentin E, Juul A, Main KM. Determination of adrenal volume by MRI in healthy children: associations with age, body size, pubertal stage and serum levels of adrenal androgens. Clin Endocrinol (Oxf). 2014 Jan 24.
- New MI, Tong YK, Yuen T, Jiang P, Pina C, Chan KC, Khattab A, Liao GJ, Yau M, Kim SM, Chiu RW, Sun L, Zaidi M, Lo YM. Noninvasive Prenatal Diagnosis of Congenital Adrenal Hyperplasia Using Cell-Free Fetal DNA in Maternal Plasma. J Clin Endocrinol Metab. 2014 Feb 28.
- Piaggio LA. Congenital Adrenal Hyperplasia: Review from a Surgeon's Perspective in the Beginning of the Twenty-First Century. Front Pediatr. 2014 Jan 2;1:50. Review.
- Reichman DE, White PC, New MI, Rosenwaks Z. Fertility in patients with congenital adrenal hyperplasia. Fertil Steril. 2014 Feb;101(2):301-9. Review.

AEPCOS QUARTERLY PUBLICATION LIST

- Rivas MP, Moreira LM, Santo LD, Marques AC, El-Hani CN, Toralles MB. New studies of second and fourth digit ratio as a morphogenetic trait in subjects with congenital adrenal hyperplasia. *Am J Hum Biol.* 2014 Mar 25.
- Sarafoglou K, Addo OY, Turcotte L, Otten N, Wickremasinghe A, Pittock S, Kylo J, Lteif AN, Himes JH, Miller BS. Impact of hydrocortisone on adult height in congenital adrenal hyperplasia-the Minnesota cohort. *J Pediatr.* 2014 May;164(5):1141-1146.
- Stanczyk FZ, Saxena T, Lobo RA. Dexamethasone suppressibility and adrenal and ovarian venous effluents of 5 α -reduced C19 conjugates in hyperandrogenic women. *J Steroid Biochem Mol Biol.* 2014 Jan;139:73-7.
- Taboas M, Gómez Acuña L, Scaia MF, Bruque CD, Buzzalino N, Stivel M, Ceballos NR, Dain L. Functional Studies of p.R132C, p.R149C, p.M283V, p.E431K, and a Novel c.652-2A>G Mutations of the CYP21A2 Gene. *PLoS One.* 2014 Mar 25;9(3):e92181.
- Yau M, Rao N, Nimkarn S, Vogiatzi M. Effect of ethosuximide on cortisol metabolism in the treatment of congenital adrenal hyperplasia. *J Pediatr Endocrinol Metab.* 2014 Jan 27:1-6.

PCOS: ADOLESCENCE

- Chin V, Censani M, Lerner S, Conroy R, Oberfield S, McMahon D, Zitsman J, Fennoy I. Gonadal dysfunction in morbidly obese adolescent girls. *Fertil Steril.* 2014 Apr;101(4):1142-8.
- Chung JP, Yiu AK, Chung TK, Chan SS. A Randomized Crossover Study of Medroxyprogesterone Acetate and Diane-35 in Adolescent Girls with Polycystic Ovarian Syndrome. *J Pediatr Adolesc Gynecol.* 2014 Mar 18.
- de Melo AS, Bettiol H, da Silva AA, Rosa-E-Silva AC, Cardoso VC, Dos Reis RM, Ferriani RA, Barbieri MA, Vieira CS. Small for gestational age babies are not related to changes in markers of adipose tissue dysfunction during reproductive age. *Early Hum Dev.* 2014 May;90(5):231-5.

AEPCOS QUARTERLY PUBLICATION LIST

- Esmaeilzadeh S, Delavar MA, Amiri M, Khafri S, Pasha NG. Polycystic ovary syndrome in Iranian adolescents. *Int J Adolesc Med Health*. 2014 Jan 22;1-7.
- Gooding HC, Milliren C, St Paul M, Mansfield MJ, Divasta A. Diagnosing Dysglycemia in Adolescents With Polycystic Ovary Syndrome *J Adolesc Health*. 2014 Feb 19.
- Hoeger KM, Legro RS, Welt CK. A patient's guide: polycystic ovary syndrome (PCOS). *J Clin Endocrinol Metab*. 2014 Jan;99(1):35A-36A.
- Kelsey MM, Zaepfel A, Bjornstad P, Nadeau KJ. Age-related consequences of childhood obesity. *Gerontology*. 2014;60(3):222-8.
- Malin SK, Kirwan JP, Sia CL, González F. Glucose-stimulated oxidative stress in mononuclear cells is related to pancreatic β -cell dysfunction in polycystic ovary syndrome. *J Clin Endocrinol Metab*. 2014 Jan;99(1):322-9.
- Oh JY, Sung YA, Lee HJ. Clinical implications of menstrual cycle length in oligomenorrhoeic young women. *Clin Endocrinol (Oxf)*. 2014 Jan;80(1):115-21.
- Sanchez N. A life course perspective on polycystic ovary syndrome. *Int J Womens Health*. 2014 Jan 22;6:115-122.
- Shayeb AG, Harrild K, Bhattacharya S. Birth weight and ovulatory dysfunction. *BJOG*. 2014 Feb;121(3):281-9.



One of the many Kauai beaches

AEPCOS QUARTERLY PUBLICATION LIST

PCOS: DERMATOLOGY

- Hong JS, Kwon HH, Park SY, Jung JY, Yoon JY, Min S, Choi YM, Suh DH. Cutaneous manifestations of the subtypes of polycystic ovary syndrome in Korean patients. *J Eur Acad Dermatol Venereol*. 2014 Mar 14.
- Kahraman K, Sükür YE, Atabekoğlu CS, Ateş C, Taşkın S, Cetinkaya SE, Tolunay HE, Ozmen B, Sönmezer M, Berker B. Comparison of two oral contraceptive forms containing cyproterone acetate and drospirenone in the treatment of patients with polycystic ovary syndrome: a randomized clinical trial. *Arch Gynecol Obstet*. 2014 Mar 28.
- Kim JJ, Hwang KR, Choi YM, Moon SY, Chae SJ, Park CW, Kim HO, Choi DS, Chan Kwon H, Kang BM, Lee BS, Cho SH, Kim TJ, Kim T, Kim MJ, Park HY. Complete phenotypic and metabolic profiles of a large consecutive cohort of untreated Korean women with polycystic ovary syndrome. *Fertil Steril*. 101, 5: 1424–1430.
- Pasquali R, Gambineri A. Therapy in endocrine disease: treatment of hirsutism in the polycystic ovary syndrome. *Eur J Endocrinol*. 2013 Dec 21;170(2):R75-90.
- Quinn M, Shinkai K, Pasch L, Kuzmich L, Cedars M, Huddleston H. Prevalence of androgenic alopecia in patients with polycystic ovary syndrome and characterization of associated clinical and biochemical features. *Fertil Steril*. 2014 Apr;101(4):1129-34.
- Rall K, Conzelmann G, Schäffeler N, Henes M, Wallwiener D, Möhrle M, Brucker SY. Acne and PCOS are less frequent in women with Mayer-Rokitansky-Küster-Hauser syndrome despite a high rate of hyperandrogenemia: a cross-sectional study. *Reprod Biol Endocrinol*. 2014 Mar 18;12:23.
- Ramezani Tehrani F, Minooee S, Azizi F. Validation of a simplified method to assess hirsutism in the Iranian population. *Eur J Obstet Gynecol Reprod Biol*. 2014 Mar;174:91-
- Sahmay S, Aydın Y, Atakul N, Aydoğan B, Kaleli S. Relation of antimüllerian hormone with the clinical signs of hyperandrogenism and polycystic ovary morphology. *Gynecol Endocrinol*. 2014 Feb;30(2):130-4.

AEPCOS QUARTERLY PUBLICATION LIST

- Tartagni MV, Alrasheed H, Damiani GR, Montagnani M, De Salvia MA, De Pergola G, Tartagni M, Loverro G. Intermittent Low-Dose Finasteride Administration Is Effective for Treatment of Hirsutism in Adolescent Girls: A Pilot Study. J Pediatr Adolesc Gynecol. 2014 Feb 19.

PCOS: ENDOCRINE DISRUPTER

- Jungbauer A, Medjakovic S. Phytoestrogens and the metabolic syndrome. J Steroid Biochem Mol Biol. 2014 Jan;139:277-89.
- Rutkowska A, Rachoń D. Bisphenol A (BPA) and its potential role in the pathogenesis of the polycystic ovary syndrome (PCOS). Gynecol Endocrinol. 2014 Apr;30(4):260-5.



Kauai, falls along Na Pali Coast trail

AEPCOS QUARTERLY PUBLICATION LIST

PCOS: ETIOLOGY AND ANIMAL MODELS

- Dăneasă A, Cucolaş C, Furcea M, Bolfa P, Dudea S, Olteanu D, Alupeî MC, Mureşan A, Filip GA. Spironolactone and dimethylsulfoxide effect on glucose metabolism and oxidative stress markers in polycystic ovarian syndrome rat model. *Exp Clin Endocrinol Diabetes*. 2014 Mar;122(3):154-62.
- Jang M, Lee MJ, Lee JM, Bae CS, Kim SH, Ryu JH, Cho IH. Oriental medicine Kyung-Ok-Ko prevents and alleviates dehydroepiandrosterone-induced polycystic ovarian syndrome in rats. *PLoS One*. 2014 Feb 10;9(2):e87623.
- Li Q, Du J, Feng R, Xu Y, Wang H, Sang Q, Xing Q, Zhao X, Jin L, He L, Wang L. A possible new mechanism in the pathophysiology of polycystic ovary syndrome (PCOS): the discovery that leukocyte telomere length is strongly associated with PCOS. *J Clin Endocrinol Metab*. 2014 Feb;99(2):E234-40.
- Maurya VK, Sangappa C, Kumar V, Mahfooz S, Singh A, Rajender S, Jha RK. Expression and activity of Rac1 is negatively affected in the dehydroepiandrosterone induced polycystic ovary of mouse. *J Ovarian Res*. 2014 Mar 14;7(1):32.
- Mauvais-Jarvis F. Developmental androgenization programs metabolic dysfunction in adult mice: Clinical implications *Adipocyte*. 2014 Apr 1;3(2):151-4. doi: 10.4161/adip.27746. Epub 2014 Jan 21.
- Ouladsahebmadarek E, Khaki A, Khanahmadi S, Ahmadi Ashtiani H, Paknejad P, Ayubi MR. Hormonal and metabolic effects of polyunsaturated fatty acid (omega-3) on polycystic ovary syndrome induced rats under diet. *Iran J Basic Med Sci*. 2014 Feb;17(2):123-7.
- Ramezani Tehrani F, Noroozzadeh M, Zahediasl S, Piryaee A, Azizi F. Introducing a rat model of prenatally androgen-induced polycystic ovary syndrome in adulthood. *Exp Physiol*. 2014 Mar 28
- Ressler IB, Grayson BE, Seeley RJ. Metabolic, Behavioral, and Reproductive Effects of Vertical Sleeve Gastrectomy in an Obese Rat Model of Polycystic Ovary Syndrome. *Obes Surg*. 2014 Jan 10
- Rezvanfar MA, Shojaei Saadi HA, Gooshe M, Abdolghaffari AH, Baeri M, Abdollahi M. Ovarian aging-like phenotype in the hyperandrogenism-induced murine model of polycystic ovary. *Oxid Med Cell Longev*. 2014;2014:948951.

AEPCOS QUARTERLY PUBLICATION LIST

- Tepavčević S, Vojnović Milutinović D, Macut D, Zakula Z, Nikolić M, Božić-Antić I, Romić S, Bjekić-Macut J, Matic G, Korićanac G. Dihydrotestosterone deteriorates cardiac insulin signaling and glucose transport in the rat model of polycystic ovary syndrome. *J Steroid Biochem Mol Biol*. 2014 May;141:71-6.
- van Houten EL, Visser JA. Mouse models to study polycystic ovary syndrome: a possible link between metabolism and ovarian function? *Reprod Biol*. 2014 Mar;14(1):32-43.
- Wang YX, Zhu WJ, Xie BG. Expression of PPAR-γ in adipose tissue of rats with polycystic ovary syndrome induced by DHEA. *Mol Med Rep*. 2014 Mar;9(3):889-93.

PCOS: GENERAL HEALTH

- Berberoglu Z, Aktas A, Fidan Y, Yazici AC, Aral Y. Association of plasma GDF-9 or GDF-15 levels with bone parameters in polycystic ovary syndrome *J Bone Miner Metab*. 2014 Jan 16.
- Dokras A, Witchel SF. Are Young Adult Women with Polycystic Ovary Syndrome Slipping through the Healthcare Cracks? *J Clin Endocrinol Metab*. 2014 Feb 25
- Kao YH, Chiu WC, Hsu MI, Chen YJ. Endothelial Progenitor Cell Dysfunction in Polycystic Ovary Syndrome: Implications for The Genesis of Cardiovascular Diseases. *Int J Fertil Steril*. 2013 Jan;6(4):208-213.
- Morotti E, Battaglia B, Fabbri R, Paradisi R, Venturoli S, Battaglia C. Cigarette smoking and cardiovascular risk in young women with polycystic ovary syndrome. *Int J Fertil Steril*. 2014 Jan;7(4):301-12.
- Pourteymour Fard Tabrizi F, Alipoor B, Mehrzad Sadaghiani M, Ostadrahimi A, Malek Mahdavi A. Metabolic Syndrome and Its Characteristics among Reproductive-Aged Women with Polycystic Ovary Syndrome: A Cross-sectional Study in Northwest Iran. *Int J Fertil Steril*. 2013 Jan;6(4):244-9.
- Rodrigues AM, Martins LB, Franklin AM, Candido AL, Santos LC, Ferreira AV. Poor quality diet is associated with overweight status and obesity in patients with polycystic ovary syndrome. *J Hum Nutr Diet*. 2014 Jan 31.
- Roe A, Hillman J, Butts S, Smith M, Rader D, Playford M, Mehta NN, Dokras A. Decreased cholesterol efflux capacity and atherogenic lipid profile in young women with PCOS. *J Clin Endocrinol Metab*. 2014 Feb 10

AEPCOS QUARTERLY PUBLICATION LIST

PCOS: GENETICS

- Baldani DP, Skrgatic L, Cerne JZ, Ferk P, Simunic V, Gersak K. Association of PPARG Pro12Ala polymorphism with insulin sensitivity and body mass index in patients with polycystic ovary syndrome. *Biomed Rep.* 2014 Mar;2(2):199-206.
- Ben-Salem A, Ajina M, Suissi M, Daher HS, Almawi WY, Mahjoub T. Polymorphisms of transcription factor-7-like 2 (TCF7L2) gene in Tunisian women with polycystic ovary syndrome (PCOS). *Gene.* 2014 Jan 10; 533(2):554-7.
- Cai X, Liu C, Mou S. Association between fat mass- and obesity-associated (FTO) gene polymorphism and polycystic ovary syndrome: a meta-analysis. *PLoS One.* 2014 Jan 22; 9(1):e86972.
- Ferk P, Gersak K. Association of -108 C>T *PON1* polymorphism with polycystic ovary syndrome. *Biomed Rep.* 2014 Mar; 2(2):255-259.
- Fu LY, Dai LM, Li XG, Zhang K, Bai Y. Association of methylenetetrahydrofolate reductase gene C677T polymorphism with polycystic ovary syndrome risk: a systematic review and meta-analysis update. *Eur J Obstet Gynecol Reprod Biol.* 2014 Jan;172:56-61.
- Gao H, Meng J, Xing H, Nie S, Xu M, Zhang S, Jin Y, Sun T, Huang H, Zhang H, Wang D, Liu L. Association of heme oxygenase-1 with the risk of polycystic ovary syndrome in non-obese women. *Hum Reprod.* 2014 May;29(5):1058-66.
- Kohan L, Zarei A, Fallahi S, Tabiee O. Association between vaspin rs2236242 gene polymorphism and polycystic ovary syndrome risk. *Gene.* 2014 Apr 15;539(2):209-12.
- Lam UD, Lerchbaum E, Schweighofer N, Trummer O, Eberhard K, Genser B, Pieber TR, Obermayer-Pietsch B. Association of MEP1A gene variants with insulin metabolism in central European women with polycystic ovary syndrome. *Gene.* 2014 Mar 10;537(2):245-52.
- Lee YH, Song GG. Plasminogen activator inhibitor-1 4G/5G and the MTHFR 677C/T polymorphisms and susceptibility to polycystic ovary syndrome: a meta-analysis. *Eur J Obstet Gynecol Reprod Biol.* 2014 Apr;175C:8-14.

AEPCOS QUARTERLY PUBLICATION LIST

- Liu Y, Sun MG, Jiang R, Ding R, Che Z, Chen YY, Yao CJ, Zhu XX, Cao JY. Plasminogen activator inhibitor-1 - 675 4G/5G polymorphism and polycystic ovary syndrome risk: a meta analysis. *J Assist Reprod Genet.* 2014 Mar;31(3):363-70.
- Louwers YV, Rayner NW, Herrera BM, Stolk L, Groves CJ, Barber TM, Uitterlinden AG, Franks S, Laven JS, McCarthy MI. BMI-associated alleles do not constitute risk alleles for polycystic ovary syndrome independently of BMI: a case-control study. *PLoS One.* 2014 Jan 31;9(1):e87335.
- McAllister JM, Modi B, Miller BA, Biegler J, Bruggeman R, Legro RS, Strauss JF 3rd. Overexpression of a DENND1A isoform produces a polycystic ovary syndrome theca phenotype. *Proc Natl Acad Sci U S A.* 2014 Apr 15;111(15):E1519-27.
- Raja-Khan N, Urbanek M, Rodgers RJ, Legro RS. The role of TGF- β in polycystic ovary syndrome. *Reprod Sci.* 2014 Jan;21(1):20-31.
- Roth LW, McCallie B, Alvero R, Schoolcraft WB, Minjarez D, Katz-Jaffe MG. Altered microRNA and gene expression in the follicular fluid of women with polycystic ovary syndrome. *J Assist Reprod Genet.* 2014 Mar;31(3):355-62.
- Sang Q, Li X, Wang H, Wang H, Zhang S, Feng R, Xu Y, Li Q, Zhao X, Xing Q, Jin L, He L, Wang L. Quantitative methylation level of the EPHX1 promoter in peripheral blood DNA is associated with polycystic ovary syndrome. *PLoS One.* 2014 Feb 5;9(2):e88013.
- Schmidt J, Weijdegård B, Mikkelsen AL, Lindenberg S, Nilsson L, Brännström M. Differential expression of inflammation-related genes in the ovarian stroma and granulosa cells of PCOS women. *Mol Hum Reprod.* 2014 Jan;20(1):49-58.
- Schweighofer N, Lerchbaum E, Trummer O, Schwetz V, Pieber T, Obermayer-Pietsch B. Metformin resistance alleles in polycystic ovary syndrome: pattern and association with glucose metabolism. *Pharmacogenomics.* 2014 Feb;15(3):305-17.
- Shen W, Li T, Hu Y, Liu H, Song M. Common polymorphisms in the CYP1A1 and CYP11A1 genes and polycystic ovary syndrome risk: a meta-analysis and meta-regression. *Arch Gynecol Obstet.* 2014 Jan;289(1):107-18.
- Song LY, Luo JR, Peng QL, Wang J, Xie L, He Y, Li S, Qin X. Lack of association of INS VNTR polymorphism with polycystic ovary syndrome: a meta-analysis. *J Assist Reprod Genet.* 2014 Mar 28.

AEPCOS QUARTERLY PUBLICATION LIST

- Wu XQ, Xu SM, Liu JF, Bi XY, Wu YX, Liu J. Association between FSHR polymorphisms and polycystic ovary syndrome among Chinese women in north China. *J Assist Reprod Genet.* 2014 Mar;31(3):371-7.
- Yang Z, Yang X, Xu J, Sun Y, Shi Y, Fang S. Association between adiponectin receptor 1 gene polymorphism and insulin resistance in Chinese patients with polycystic ovary syndrome. *Gynecol Obstet Invest.* 2014;77(1):45-9.
- Yu M, Feng R, Sun X, Wang H, Wang H, Sang Q, Jin L, He L, Wang L. Polymorphisms of pentanucleotide repeats (tttta)_n in the promoter of CYP11A1 and their relationships to polycystic ovary syndrome (PCOS) risk: a meta-analysis. *Mol Biol Rep.* 2014 Mar 9. [Epub ahead of print]
- Xu L, Shi Y, Gu J, Wang Y, Wang L, You L, Qi X, Ye Y, Chen Z. Association between Ghrelin Gene Variations, Body Mass Index, and Waist-to-hip Ratio in Patients with Polycystic Ovary Syndrome. *Exp Clin Endocrinol Diabetes.* 2014 Mar;122(3):144-8.
- Zhang W, Wei D, Sun X, Li J, Yu X, Shi Y, Chen ZJ. Family-based analysis of adiponectin gene polymorphisms in Chinese Han polycystic ovary syndrome. *Fertil Steril.* 2014 Feb 19.



Kauai, Waimea Canyon

AEPCOS QUARTERLY PUBLICATION LIST

PCOS: IMMUNOLOGY

- Oleszczak B, Szablewski L, Pliszka M, Głuszak O, Stopińska-Głuszak U. Transport of deoxy-D-glucose into lymphocytes of patients with polycystic ovary syndrome. Endocrine. 2014 Feb 11.

PCOS: AFTER THE MENOPAUSE

- Snyder ML, Shields KJ, Korytkowski MT, Sutton-Tyrrell K, Talbott EO. Complement protein C3 and coronary artery calcium in middle-aged women with polycystic ovary syndrome and controls. Gynecol Endocrinol. 2014 Mar 5.

PCOS: METABOLIC DYSFUNCTION/ CARDIOVASCULAR DISEASE

- Altinkaya SÖ, Nergiz S, Küçük M, Yüksel H. Apelin levels in relation with hormonal and metabolic profile in patients with polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2014 May;176:168-72.
- Androulakis II, Kandaraki E, Christakou C, Karachalios A, Marinakis E, Paterakis T, Diamanti-Kandarakis E. Visceral adiposity index (VAI) is related to the severity of anovulation and other clinical features in women with polycystic ovary syndrome. Clin Endocrinol (Oxf). 2014 Mar 7
- Aye MM, Kilpatrick ES, Aburima A, Wraith KS, Magwenzi S, Spurgeon B, Rigby AS, Sandeman D, Naseem KM, Atkin SL. Acute hypertriglyceridemia induces platelet hyperactivity that is not attenuated by insulin in polycystic ovary syndrome. J Am Heart Assoc. 2014 Feb 28;3(1):e000706.

AEPCOS QUARTERLY PUBLICATION LIST

- Aye MM, Kilpatrick ES, Afolabi P, Wootton SA, Rigby AS, Coady AM, Sandeman DD, Atkin SL. Postprandial effects of long-term niacin/laropirant use on glucose and lipid metabolism and on cardiovascular risk in patients with polycystic ovary syndrome *Diabetes Obes Metab*. 2014 Jun;16(6):545-52.
- Aziz M, Wissing ML, Naver KV, Faber J, Skouby SO. Polycystic ovary syndrome and low-grade inflammation with special reference to YKL-40. *Gynecol Endocrinol*. 2014 Apr;30(4):311-5.
- Barthelmess EK, Naz RK. Polycystic ovary syndrome: current status and future perspective. *Front Biosci (Elite Ed)*. 2014 Jan 1;6:104-19.
- Bhatt S, Mutharasan P, Garcia OA, Jafari N, Legro RS, Dunaif A, Urbanek M. The inflammatory gene pathway is not a major contributor to PCOS. *J Clin Endocrinol Metab*. 2014 Jan 1
- Buyukkaya R, Besir FH, Yazgan S, Karatas A, Kose SA, Aydin Y, Erdogmus B. The evaluation of carotid intima-media thickness and visceral obesity as an atherosclerosis predictor in newly-diagnosed polycystic ovary syndrome. *Clin Ter*. 2014;165(1):e6-11
- Caner S, Altınbaş A, Saykı M, Büyükcım F, Yılmaz B, Cakal E, Coban S, Delibaşı T. M30 Does Not Predict the Severity of Hepatosteatois, Whereas Adiponectin Level Declined With Increase of ALT and the Severity of Hepatic Steatois *J Clin Lab Anal*. 2014 Mar 19.
- Caserta D, Adducchio G, Picchia S, Ralli E, Matteucci E, Moscarini M. Metabolic syndrome and polycystic ovary syndrome: an intriguing overlapping *Gynecol Endocrinol*. 2014 Feb 19. [Epub ahead of print]
- Celik C, Tasdemir N, Abali R, Bastu E, Yilmaz M. Progression to impaired glucose tolerance or type 2 diabetes mellitus in polycystic ovary syndrome: a controlled follow-up study *Fertil Steril*. 2014 Apr;101(4):1123-1128.e1.
- da Silva AM, de Andrade AC, Dias BH, da Silva Medeiros MA, Rao VS, das Chagas Medeiros F. Elevated diastolic blood pressure in insulin-resistant polycystic ovarian syndrome patients. *Arch Gynecol Obstet*. 2014 Jan;289(1):119-22.
- Dardzińska JA, Rachoń D, Kuligowska-Jakubowska M, Aleksandrowicz-Wrona E, Płoszyński A, Wyrzykowski B, Lysiak-Szydłowska W. Effects of metformin or an oral contraceptive containing cyproterone acetate on serum c-reactive protein, interleukin-6 and soluble vascular cell adhesion molecule-1 concentrations in women with polycystic ovary syndrome. *Exp Clin Endocrinol Diabetes*. 2014 Feb;122(2):118-25.

AEPCOS QUARTERLY PUBLICATION LIST

- Genazzani AD, Santagni S, Rattighieri E, Chierchia E, Despini G, Marini G, Prati A, Simoncini T. Modulatory role of D-chiro-inositol (DCI) on LH and insulin secretion in obese PCOS patients. *Gynecol Endocrinol*. 2014 Mar 7. [Epub ahead of print]
- González F, Kirwan JP, Rote NS, Minium J, O'Leary VB. Glucose and lipopolysaccharide regulate proatherogenic cytokine release from mononuclear cells in polycystic ovary syndrome *J Reprod Immunol*. 2014 Feb 2.
- González F, Sia CL, Bearson DM, Blair HE. Hyperandrogenism induces a proinflammatory TNF α response to glucose ingestion in a receptor-dependent fashion. *J Clin Endocrinol Metab*. 2014 Feb 10
- Guleria AK, Syal SK, Kapoor A, Kumar S, Tiwari P, Dabadghao P. Cardiovascular disease risk in young Indian women with polycystic ovary syndrome. *Gynecol Endocrinol*. 2014 Jan;30(1):26-9.
- Guzel EC, Celik C, Abali R, Kucukyalcin V, Celik E, Guzel M, Yilmaz M. Omentin and chemerin and their association with obesity in women with polycystic ovary syndrome. *Gynecol Endocrinol*. 2014 Feb 13. [Epub ahead of print]
- Haqq L, McFarlane J, Dieberg G, Smart N. Effect of lifestyle intervention on the reproductive endocrine profile in women with polycystic ovarian syndrome: a systematic review and meta-analysis. *Endocr. Connect*. 2014 Feb 28;3(1):36-46.
- Heimark D, McAllister J, Lerner J. Decreased myo-inositol to chiro-inositol (M/C) ratios and increased M/C epimerase activity in PCOS theca cells demonstrate increased insulin sensitivity compared to controls. *Endocr J*. 2014;61(2):111-7.
- Hillman JK, Johnson LN, Limaye M, Feldman RA, Sammel M, Dokras A. Black women with polycystic ovary syndrome (PCOS) have increased risk for metabolic syndrome and cardiovascular disease compared with white women without PCOS. *Fertil Steril*. 2014 Feb;101(2):530-5.
- Japur CC, Diez-Garcia RW, de Oliveira Penaforte FR, de Sá MF. .Imbalance Between Postprandial Ghrelin and Insulin Responses to an Ad Libitum Meal in Obese Women With Polycystic Ovary Syndrome. *Reprod Sci*. 2014 Feb 11. [Epub ahead of print]
- Karbek B, Ozbek M, Karakose M, Topaloglu O, Bozkurt NC, Cakır E, Aslan MS, Delibasi T. Copeptin, a surrogate marker for arginine vasopressin, is associated with cardiovascular risk in patients with polycystic ovary syndrome. *J Ovarian Res*. 2014 Mar 14;7(1):31.

AEPCOS QUARTERLY PUBLICATION LIST

- Keskin Kurt R, Okyay AG, Hakverdi AU, Gungoren A, Dolapcioglu KS, Karateke A, Dogan MO. The effect of obesity on inflammatory markers in patients with PCOS: a BMI-matched case-control study. Arch Gynecol Obstet. 2014 Mar 19. [Epub ahead of print]
- Kocer D, Bayram F, Diri H. The effects of metformin on endothelial dysfunction, lipid metabolism and oxidative stress in women with polycystic ovary syndrome. Gynecol Endocrinol. 2014 May;30(5):367-71.
- Küçük M, Altinkaya SO, Nergiz S, Sezer SD, Yüksel H, Bağlı I, Yıldız G. Interleukin-6 levels in relation with hormonal and metabolic profile in patients with polycystic ovary syndrome. Gynecol Endocrinol. 2014 Mar 14. [Epub ahead of print]
- Luque-Ramírez M, Martí D, Fernández-Durán E, Alpañés M, Álvarez-Blasco F, Escobar-Morreale HF. Office blood pressure, ambulatory blood pressure monitoring, and echocardiographic abnormalities in women with polycystic ovary syndrome: role of obesity and androgen excess. Hypertension. 2014 Mar;63(3):624-9.
- Maleedhu P, M V, S S B S, Kodumuri PK, Devi D V. Status of homocysteine in polycystic ovary syndrome (PCOS). J Clin Diagn Res. 2014 Feb;8(2):31-3. Epub 2014 Feb 3.
- Malin SK, Kirwan JP, Sia CL, González F. Glucose-stimulated oxidative stress in mononuclear cells is related to pancreatic β -cell dysfunction in polycystic ovary syndrome. J Clin Endocrinol Metab. 2014 Jan;99(1):322-9.
- Manco M, Castagneto-Gissey L, Arrighi E, Carnicelli A, Brufani C, Luciano R, Mingrone G. Insulin Dynamics in Young Women with Polycystic Ovary Syndrome and Normal Glucose Tolerance across Categories of Body Mass Index. PLoS One. 2014 Apr 4;9(4):e92995.
- Merhi Z. Advanced glycation end products and their relevance in female reproduction. Hum Reprod. 2014 Jan;29(1):135-45
- Mes-Krowinkel MG, Louwers YV, Mulders AG, de Jong FH, Fauser BC, Laven JS. Influence of oral contraceptives on anthropomorphic, endocrine, and metabolic profiles of anovulatory polycystic ovary syndrome patients. Fertil Steril. 2014 Mar 25.
- Morotti E, Battaglia B, Fabbri R, Paradisi R, Venturoli S, Battaglia C. Cigarette smoking and cardiovascular risk in young women with polycystic ovary syndrome. Int J Fertil Steril. 2014 Jan;7(4):301-12.

AEPCOS QUARTERLY PUBLICATION LIST

- Porwal S, Tewari S, Sharma RK, Singhal S, Narula SC. Periodontal Status and High Sensitive C-Reactive Protein Levels in Polycystic Ovary Syndrome: With and Without Medical Treatment. *J Periodontol*. 2014 Mar 4.
- Ramanand SJ, Ramanand JB, Ghongane BB, Patwardhan MH, Patwardhan VM, Ghanghas R, Halasawadekar NR, Patil P. Correlation between serum adiponectin and clinical characteristics, biochemical parameters in Indian women with polycystic ovary syndrome. *Indian J Endocrinol Metab*. 2014 Mar;18(2):221-5.
- Raja-Khan N, Urbanek M, Rodgers RJ, Legro RS. The role of TGF- β in polycystic ovary syndrome. *Reprod Sci*. 2014 Jan;21(1):20-31.
- Saranya K, Pal GK, Habeebullah S, Pal P. Assessment of cardiovascular autonomic function in patients with polycystic ovary syndrome. *J Obstet Gynaecol Res*. 2014 Jan;40(1):192-9.
- Shi Y, Cui Y, Sun X, Ma G, Ma Z, Gao Q, Chen ZJ. Hypertension in women with polycystic ovary syndrome: prevalence and associated cardiovascular risk factors. *Eur J Obstet Gynecol Reprod Biol*. 2014 Feb;173:66-70.
- Sahin SB, Cure MC, Ugurlu Y, Ergul E, Gur EU, Alyildiz N, Bostan M. Epicardial adipose tissue thickness and NGAL levels in women with polycystic ovary syndrome. *J Ovarian Res*. 2014 Feb 16;7(1):24.
- Sprung VS, Jones H, Pugh CJ, Aziz NF, Daousi C, Kemp GJ, Green DJ, Cable NT, Cuthbertson DJ. Endothelial dysfunction in hyperandrogenic polycystic ovary syndrome is not explained by either obesity or ectopic fat deposition. *Clin Sci (Lond)*. 2014 Jan 1;126(1):67-74.
- Sung YA, Oh JY, Chung H, Lee H. Hyperandrogenemia is implicated in both the metabolic and reproductive morbidities of polycystic ovary syndrome. *Fertil Steril*. 2014 Mar;101(3):840-5.
- Tan BK, Chen J, Hu J, Amar O, Mattu HS, Ramanjaneya M, Patel V, Lehnert H, Randeve HS. Circulatory changes of the novel adipokine adipolin/CTRP12 in response to metformin treatment and an oral glucose challenge in humans. *Clin Endocrinol (Oxf)*. 2014 Feb 23.
- Tantalaki E, Piperi C, Livadas S, Kollias A, Adamopoulos C, Koulouri A, Christakou C, Diamanti-Kandarakis E. Impact of dietary modification of advanced glycation end products (AGEs) on the hormonal and metabolic profile of women with polycystic ovary syndrome (PCOS). *Hormones (Athens)*. 2014 Jan;13(1):65-73.

AEPCOS QUARTERLY PUBLICATION LIST

- Taşolar H, Mete T, Ballı M, Altun B, Cetin M, Yüce T, Taşolar S, Otlı O, Bayramoğlu A, Pekdemir H. Assessment of atrial electromechanical delay in patients with polycystic ovary syndrome in both lean and obese subjects. J Obstet Gynaecol Res. 2014 Apr;40:1059-66.
- Tock L, Carneiro G, Togeiro SM, Hachul H, Pereira AZ, Tufik S, Zanella MT. Obstructive sleep apnea predisposes to nonalcoholic Fatty liver disease in patients with polycystic ovary syndrome Endocr Pract. 2014 Mar 1;20(3):244-51.
- Tosi F, Di Sarra D, Bonin C, Zambotti F, Dall'Alda M, Fiers T, Kaufman JM, Donati M, Franchi M, Zanolin ME, Bonora E, Moghetti P. Plasma levels of pentraxin-3, an inflammatory protein involved in fertility, are reduced in women with polycystic ovary syndrome. Eur J Endocrinol. 2014 Feb 4;170(3):401-9.
- Tsouma I, Kouskouni E, Demeridou S, Boutsikou M, Hassiakos D, Chasiakou A, Hassiakou S, Baka S. Correlation of visfatin levels and lipoprotein lipid profiles in women with polycystic ovary syndrome undergoing ovarian stimulation. Gynecol Endocrinol. 2014 Feb 27. [Epub ahead of print]
- Yilmaz H, Celik HT, Ozdemir O, Kalkan D, Namuslu M, Abusoglu S, Atalay CR, Yigitoglu R. Serum galectin-3 levels in women with PCOS. J Endocrinol Invest. 2014 Feb;37(2):181-7.
- Zhang XJ, Huang LL, Su H, Chen YX, Huang J, He C, Li P, Yang DZ, Wan JB. Characterizing plasma phospholipid fatty acid profiles of polycystic ovary syndrome patients with and without insulin resistance using GC-MS and chemometrics approach. J Pharm Biomed Anal. 2014 Jul;95:85-92.



Snorkeling in Kauai

AEPCOS QUARTERLY PUBLICATION LIST

PCOS: NEUROENDOCRINE DYSFUNCTION

- Bassiouny YA, Rabie WA, Hassan AA, Darwish RK. Association of the luteinizing hormone/choriogonadotropin receptor gene polymorphism with polycystic ovary syndrome. *Gynecol Endocrinol*. 2014 Mar 5.
- Hendrix AO, Hughes CL, Selgrade JF. Modeling endocrine control of the pituitary-ovarian axis: androgenic influence and chaotic dynamics. *Bull Math. Biol.* 2014 Jan;76(1):136-56.
- Van Vugt DA, Krzemien A, Alsaadi H, Frank TC, Reid RL. Glucose-induced inhibition of the appetitive brain response to visual food cues in polycystic ovary syndrome patients. *Brain Res*. 2014 Apr 16;1558:44-56.
- Wang P, Zhao H, Li T, Zhang W, Wu K, Li M, Bian Y, Liu H, Ning Y, Li G, Chen ZJ. Hypomethylation of the LH/Choriogonadotropin Receptor Promoter Region Is a Potential Mechanism Underlying Susceptibility to Polycystic Ovary Syndrome. *Endocrinology*. 2014 Apr;155(4):1445-52.

PCOS: OVARY

- Ahmed S, Pahwa S, Das CJ, Mir FA, Nisar S, Jehangir M, Parveen S, Rashid A, Ganie MA. Comparative evaluation of sonographic ovarian morphology of Indian women with polycystic ovary syndrome versus those of normal women. *Indian J Endocrinol Metab*. 2014 Mar;18(2):180-4.
- Böttcher B, Tsybulyak I, Grubinger T, Wildt L, Seeber B. Dynamics of anti-Müllerian hormone during controlled ovarian stimulation. *Gynecol Endocrinol*. 2014 Feb;30(2):121-5.
- Christ JP, Willis AD, Brooks ED, Vanden Brink H, Jarrett BY, Pierson RA, Chizen DR, Lujan ME. Follicle number, not assessments of the ovarian stroma, represents the best ultrasonographic marker of polycystic ovary syndrome. *Fertil Steril*. 2014 Jan;101(1):280-287.e1.
- Dewailly D. Ultrasound definition of polycystic ovarian morphology: good news and bad news. *Fertil Steril*. 2014 Jan;101(1):49-50.

AEPCOS QUARTERLY PUBLICATION LIST

- Kim E, Seok HH, Lee SY, Lee DR, Moon J, Yoon TK, Lee WS, Lee KA. Correlation between Expression of Glucose Transporters in Granulosa Cells and Oocyte Quality in Women with Polycystic Ovary Syndrome. *Endocrinol Metab (Seoul)*. 2014 Mar;29(1):40-7.
- Köninger A, Sauter L, Edimiris P, Kasimir-Bauer S, Kimmig R, Strowitzki T, Schmidt B. Predictive markers for the FSH sensitivity of women with polycystic ovarian syndrome. *Hum Reprod*. 2014 Mar;29(3):518-24.
- Leonhardt H, Gull B, Stener-Victorin E, Hellström M. Ovarian volume and antral follicle count assessed by MRI and transvaginal ultrasonography: a methodological study. *Acta Radiol*. 2014 Mar;55(2):248-56.
- Ortega-Hrepich C, Polyzos NP, Anckaert E, Guzman L, Tournaye H, Smitz J, De Vos M. The effect of ovarian puncture on the endocrine profile of PCOS patients who undergo IVMReprod Biol Endocrinol. 2014 Feb 24;12:18.
- Roth LW, McCallie B, Alvero R, Schoolcraft WB, Minjarez D, Katz-Jaffe MG. Altered microRNA and gene expression in the follicular fluid of women with polycystic ovary syndrome. *J Assist Reprod Genet*. 2014 Mar;31(3):355-62.
- Sahmay S, Aydın Y, Atakul N, Aydogan B, Kaleli S. Relation of antimüllerian hormone with the clinical signs of hyperandrogenism and polycystic ovary morphology. *Gynecol Endocrinol*. 2014 Feb;30(2):130-4.
- Saller S, Kunz L, Berg D, Berg U, Lara H, Urra J, Hecht S, Pavlik R, Thaler CJ, Mayerhofer A. Dopamine in human follicular fluid is associated with cellular uptake and metabolism-dependent generation of reactive oxygen species in granulosa cells: implications for physiology and pathology. *Hum Reprod*. 2014 Mar;29(3):555-67.
- Sahmay S, Aydın Y, Atakul N, Aydogan B, Kaleli S. Relation of antimüllerian hormone with the clinical signs of hyperandrogenism and polycystic ovary morphology. *Gynecol Endocrinol*. 2014 Feb;30(2):130-4.
- Shayya RF, Rosencrantz MA, Chuan SS, Cook-Andersen H, Roudebush WE, Irene Su H, Shimasaki S, Chang RJ. Decreased inhibin B responses following recombinant human chorionic gonadotropin administration in normal women and women with polycystic ovary syndrome. *Fertil. Steril* 2014 101: 275-9
- Shehata IA, Ballard JR, Casper AJ, Hennings LJ, Cressman E, Ebbini ES. High-intensity focused ultrasound for potential treatment of polycystic ovary syndrome: toward a noninvasive surgery. *Fertil Steril*. 2014 Feb;101(2):545-51.

AEPCOS QUARTERLY PUBLICATION LIST

- Unfer V, Carlomagno G, Papaleo E, Vailati S, Candiani M, Baillargeon JP. Hyperinsulinemia Alters Myoinositol to D-chiroinositol Ratio in the Follicular Fluid of Patients With PCOS. Reprod Sci. 2014 Feb 4.

PCOS: PHENOTYPIC VARIATION

- Alebić MS, Bulum T, Stojanović N, Duvnjak L. Definition of insulin resistance using the homeostasis model assessment (HOMA-IR) in IVF patients diagnosed with polycystic ovary syndrome (PCOS) according to the Rotterdam criteria. Endocrine. 2014 Feb 13.
- Amato MC, Guarnotta V, Ciresi A, Modica R, Pantò F, Giordano C. No phenotypic differences for polycystic ovary syndrome (PCOS) between women with and without type 1 diabetes mellitus. J Clin Endocrinol Metab. 2014 Jan;99(1):203-11.
- Clark NM, Podolski AJ, Brooks ED, Chizen DR, Pierson RA, Lehotay DC, Lujan ME. Prevalence of Polycystic Ovary Syndrome Phenotypes Using Updated Criteria for Polycystic Ovarian Morphology: An Assessment of Over 100 Consecutive Women Self-reporting Features of Polycystic Ovary Syndrome. Reprod Sci. 2014 Feb 11.
- Hosseinpanah F, Barzin M, Keihani S, Tehrani FR, Azizi F. Metabolic aspects of different phenotypes of polycystic ovary syndrome: Iranian PCOS Prevalence Study. Clin Endocrinol (Oxf). 2014 Jan 16.
- Kim JJ, Hwang KR, Choi YM, Moon SY, Chae SJ, Park CW, Kim HO, Choi DS, Chan Kwon H, Kang BM, Lee BS, Cho SH, Kim TJ, Kim T, Kim MJ, Park HY. Complete phenotypic and metabolic profiles of a large consecutive cohort of untreated Korean women with polycystic ovary syndrome. Fertil Steril. 2014 Mar 6.
- Ladrón de Guevara A, Fux-Otta C, Crisosto N, Szafrzyk de Mereshian P, Echiburú B, Iraci G, Perez-Bravo F, Sir-Petermann T. Metabolic profile of the different phenotypes of polycystic ovary syndrome in two Latin American populations. Fertil Steril. 2014 Mar 22.
- Lauritsen MP, Bentzen JG, Pinborg A, Loft A, Forman JL, Thuesen LL, Cohen A, Hougaard DM, Nyboe Andersen A. The prevalence of polycystic ovary syndrome in a normal population according to the Rotterdam criteria versus revised criteria including anti-Müllerian hormone. Hum Reprod. 2014 Apr;29(4):791-801.
- Lerchbaum E, Schwetz V, Giuliani A, Obermayer-Pietsch B. Influence of a positive family history of both type 2 diabetes and PCOS on metabolic and endocrine parameters in a large cohort of PCOS women. Eur J Endocrinol. 2014 Apr 10;170(5):727-39.

AEPCOS QUARTERLY PUBLICATION LIST

- Mott MM, Kitos NR, Coviello AD. Practice Patterns in Screening for Metabolic Disease in Women with PCOS of Diverse Race-Ethnic Backgrounds. *Endocr Pract.* 2014 Mar 18;1-26.
- O'Reilly MW, Taylor AE, Crabtree NJ, Hughes BA, Capper F, Crowley RK, Stewart PM, Tomlinson JW, Arlt W. .Hyperandrogenemia predicts metabolic phenotype in polycystic ovary syndrome: the utility of serum androstenedione. *J Clin Endocrinol Metab.* 2014 Jan 1
- Sjaarda LA, Mumford SL, Kissell K, Schliep KC, Hammoud AO, Perkins NJ, Weck J, Wactawski-Wende J, Schisterman EF. Increased androgen, anti-Müllerian hormone and sporadic anovulation in healthy, eumenorrheic women: a mild PCOS-like phenotype? *J Clin Endocrinol Metab.* 2014 Feb 28
- Thathapudi S, Kodati V, Erukkambattu J, Katragadda A, Addepally U, Hasan Q. Anthropometric and biochemical characteristics of polycystic ovarian syndrome in south Indian women using AES-2006 criteria. *Int J Endocrinol Metab.* 2014 Jan 5;12(1):e12470.

PCOS PREGNANCY AND COMPLICATIONS

- Bailey AP, Hawkins LK, Missmer SA, Correia KF, Yanushpolsky EH. Effect of body mass index on in vitro fertilization outcomes in women with polycystic ovary syndrome. *Am J Obstet Gynecol.* 2014 Mar 18.
- Grigorescu V, Zhang Y, Kissin DM, Sauber-Schatz E, Sunderam M, Kirby RS, Diop H, McKane P, Jamieson DJ. Maternal characteristics and pregnancy outcomes after assisted reproductive technology by infertility diagnosis: ovulatory dysfunction versus tubal obstruction. *Fertil Steril.* 2014 Apr;101(4):1019-25.
- Helseth R, Vanky E, Stridsklev S, Vogt C, Carlsen SM. Maternal and fetal insulin levels at birth in women with polycystic ovary syndrome: data from a randomized controlled study on metformin. *Eur J Endocrinol.* 2014 Apr 10;170(5):769-75.
- Joham AE, Boyle JA, Ranasinha S, Zoungas S, Teede HJ. Contraception use and pregnancy outcomes in women with polycystic ovary syndrome: data from the Australian Longitudinal Study on Women's Health. *Hum Reprod.* 2014 Apr;29(4):802-8.
- Köşüş N, Köşüş A, Duran M, Turhan NO. Effect of underlying infertility factors on second trimester serum screening results. *J Reprod Med.* 2014 Jan-Feb;59(1-2):76-80.

AEPCOS QUARTERLY PUBLICATION LIST

- Kothari R, Gafton J, Treasure J, Micali N. 2D:4D ratio in children at familial high-risk for eating disorders: The role of prenatal testosterone exposure. *Am J Hum Biol.* 2014 Mar-Apr;26(2):176-82.
- Li HW, Lee VC, Lau EY, Yeung WS, Ho PC, Ng EH. Cumulative live-birth rate in women with polycystic ovary syndrome or isolated polycystic ovaries undergoing in-vitro fertilisation treatment. *J Assist Reprod Genet.* 2014 Feb;31(2):205-11.
- Liu L, Tong X, Jiang L, Li TC, Zhou F, Zhang S. A comparison of the miscarriage rate between women with and without polycystic ovarian syndrome undergoing IVF treatment. *Eur J Obstet Gynecol Reprod Biol.* 2014 May;176:178-82.
- Nahuis MJ, Oude Lohuis EJ, Bayram N, Hompes PG, Oosterhuis GJ, van der Veen F, Mol BW, van Wely M. Pregnancy complications and metabolic disease in women with clomiphene citrate-resistant anovulation randomized to receive laparoscopic electrocautery of the ovaries or ovulation induction with gonadotropins: a 10-year follow-up. *Fertil Steril.* 2014 Jan;101(1):270-4.
- Naver K, Grinsted J, Larsen S, Hedley P, Jørgensen F, Christiansen M, Nilas L. Increased risk of preterm delivery and pre-eclampsia in women with polycystic ovary syndrome and hyperandrogenaemia. *BJOG.* 2014 Apr;121(5):575-81.
- Zhang CM, Zhao Y, Li R, Yu Y, Yan LY, Li L, Liu NN, Liu P, Qiao J. Metabolic heterogeneity of follicular amino acids in polycystic ovary syndrome is affected by obesity and related to pregnancy outcome. *BMC Pregnancy Childbirth.* 2014 Jan 10;14:11.

PCOS REVIEWS AND PROTOCOLS

- Barry JA, Azizia MM, Hardiman PJ. Risk of endometrial, ovarian and breast cancer in women with polycystic ovary syndrome: a systematic review and meta-analysis. *Hum Reprod Update.* 2014 Mar 30.
- Barthelmess EK, Naz RK. Polycystic ovary syndrome: current status and future perspective. *Front Biosci (Elite Ed).* 2014 Jan 1;6:104-19.

AEPCOS QUARTERLY PUBLICATION LIST

- Dewailly D, Andersen CY, Balen A, Broekmans F, Dilaver N, Fanchin R, Griesinger G, Kelsey TW, La Marca A, Lambalk C, Mason H, Nelson SM, Visser JA, Wallace WH, Anderson RA. The physiology and clinical utility of anti-Mullerian hormone in women. *Hum Reprod Update*. 2014 May-Jun;20(3):370-85.
- Franik S, Kremer JA, Nelen WL, Farquhar C. Aromatase inhibitors for subfertile women with polycystic ovary syndrome *Cochrane Database Syst Rev*. 2014 Feb 24;2:CD010287.
- Ke RW. Endocrine basis for recurrent pregnancy loss. *Obstet Gynecol Clin North Am*. 2014 Mar;41(1):103-12.
- Legro RS, Brzyski RG, Diamond MP, Coutifaris C, Schlaff WD, Alvero R, Casson P, Christman GM, Huang H, Yan Q, Haisenleder DJ, Barnhart KT, Bates GW, Usadi R, Lucidi R, Baker V, Trussell JC, Krawetz SA, Snyder P, Ohl D, Santoro N, Eisenberg E, Zhang H; National Institute of Child Health and Human Development Reproductive Medicine Network. The Pregnancy in Polycystic Ovary Syndrome II study: baseline characteristics and effects of obesity from a multicenter randomized clinical trial. *Fertil Steril*. 2014 Jan;101(1):258-269.e8.
- Li S, Huang X, Zhong H, Peng Q, Chen S, Xie Y, Qin X, Qin A. 154. Low circulating adiponectin levels in women with polycystic ovary syndrome: an updated meta-analysis. *Tumour Biol*. 2014 Jan 12.
- Li X, Feng Y, Lin JF, Billig H, Shao R. Endometrial progesterone resistance and PCOS. *J Biomed Sci*. 2014 Jan 9;21:2.
- Merhi Z. Advanced glycation end products and their relevance in female reproduction. *Hum Reprod*. 2014 Jan;29(1):135-45.
- Murri M, Insenser M, Escobar-Morreale HF. Metabolomics in polycystic ovary syndrome. *Clin Chim Acta*. 2014 Feb 15;429:181-8.
- Nandi A, Chen Z, Patel R, Poretsky L. Polycystic ovary syndrome *Endocrinol Metab Clin North Am*. 2014 Mar;43(1):123-47.
- Nathan N, Sullivan SD. The Utility of Metformin Therapy in Reproductive-Aged Women with Polycystic Ovary Syndrome (PCOS). *Curr Pharm Biotechnol*. 2014 Mar 30.
- Orio F, Palomba S. Reproductive endocrinology: New guidelines for the diagnosis and treatment of PCOS. *Nat Rev Endocrinol*. 2014 Mar;10(3):130-2.

AEPCOS QUARTERLY PUBLICATION LIST

- Palomba S, Materazzo C, Falbo A, Orio F, La Sala GB, Sultan C. Metformin, oral contraceptives or both to manage oligo-amenorrhea in adolescents with polycystic ovary syndrome? A clinical review. Gynecol Endocrinol. 2014 May;30(5):335-40.
- Pantasri T, Norman RJ. The effects of being overweight and obese on female reproduction: a review. Gynecol Endocrinol. 2014 Feb;30(2):90-4.
- Reverchon M, Ramé C, Bertoldo M, Dupont J. Adipokines and the Female Reproductive Tract. Int J Endocrinol. 2014;2014:232454. Epub 2014 Feb 18.

PCOS PSYCHOLOGY

- Banting LK, Gibson-Helm M, Polman R, Teede HJ, Stepto NK. Physical activity and mental health in women with polycystic ovary syndrome. BMC Womens Health. 2014 Mar 27;14(1):51.
- Barry JA, Kuczmierczyk AR, Hardiman PJ. Reporting the Rates of Depression in Polycystic Ovary Syndrome (PCOS). J Sex Med. 2014 Mar 17.
- McCook JG, Bailey BA, Williams SL, Anand S, Reame NE. Differential Contributions of Polycystic Ovary Syndrome (PCOS) Manifestations to Psychological Symptoms. J Behav Health Serv Res. 2014 Jan 4.
- Teede H, Gibson-Helm M, Norman RJ, Boyle J. Polycystic ovary syndrome: perceptions and attitudes of women and primary health care physicians on features of PCOS and renaming the syndrome. J Clin Endocrinol Metab. 2014 Jan;99(1):E107-11.



Na Pali Coast, Kauai

AEPCOS QUARTERLY PUBLICATION LIST

PCOS INFERTILITY

- Böttcher B, Tsybulyak I, Grubinger T, Wildt L, Seeber B. Dynamics of anti-Müllerian hormone during controlled ovarian stimulation. *Gynecol Endocrinol*. 2014 Feb;30(2):121-5.
- Moolenaar LM, Nahuis MJ, Hompes PG, van der Veen F, Mol BW. Cost-effectiveness of treatment strategies in women with PCOS who do not conceive after six cycles of clomiphene citrate. *Reprod Biomed Online*. 2014 Feb 8.
- Tu J, Lin G, Lu C, Gong F. A novel modified ultra-long agonist protocol improves the outcome of high body mass index women with polycystic ovary syndrome undergoing IVF/ICSI. *Gynecol Endocrinol*. 2014 Mar;30(3):209-12.
- Weintraub A, Margalioth EJ, Chetrit AB, Gal M, Goldberg D, Alerhand S, Eldar-Geva T. The dynamics of serum anti-Müllerian-hormone levels during controlled ovarian hyperstimulation with GnRH-antagonist short protocol in polycystic ovary syndrome and low responders. *Eur J Obstet Gynecol Reprod Biol*. 2014 May;176:163-7.
- West S, Vähäsarja M, Bloigu A, Pouta A, Franks S, Hartikainen AL, Järvelin MR, Corbett S, Vääräsmäki M, Morin-Papunen L. The impact of self-reported oligo-amenorrhea and hirsutism on fertility and lifetime reproductive success: results from the Northern Finland Birth Cohort 1966. *Hum Reprod*. 2014 Mar;29(3):628-33.
- Xiao S, Li Y, Li T, Chen M, Xu Y, Wen Y, Zhou C. Evidence for decreased expression of ADAMTS-1 associated with impaired oocyte quality in PCOS patients. *J Clin Endocrinol Metab*. 2014 Mar 19:
- Yazici G, Savas A, Tasdelen B, Dilek S. Role of luteal phase support on gonadotropin ovulation induction cycles in patients with polycystic ovary syndrome. *J Reprod Med*. 2014 Jan-Feb;59(1-2):25-30

AEPCOS QUARTERLY PUBLICATION LIST

PCOS HORMONE ASSAYS AND DIAGNOSIS

- Cuzzola A, Mazzini F, Petri A. A comprehensive study for the validation of a LC-MS/MS method for the determination of free and total forms of urinary cortisol and its metabolites. *J Pharm Biomed Anal.* 2014 Jun;94:203-9.
- Haoula Z, Shaw B, Daykin C, Hodgman C, Layfield R, Atiomo W. Validation of proteomic biomarkers previously found to be differentially expressed in women with Polycystic Ovary Syndrome: a cross-sectional study.. *Gynecol Endocrinol.* 2014 Mar;30(3):213-6.
- Keefe CC, Goldman MM, Zhang K, Clarke N, Reitz RE, Welt CK. Simultaneous measurement of thirteen steroid hormones in women with polycystic ovary syndrome and control women using liquid chromatography-tandem mass spectrometry. *PLoS One.* 2014 Apr 8;9(4):e93805.
- Niki H, Matsuzaki T, Kinouchi R, Iwasa T, Kawami T, Kato T, Kuwahara A, Irahara M. Improvement in diagnostic performance of the revised total testosterone measuring system in Japanese women with polycystic ovary syndrome. *J Med Invest.* 2014;61(1.2):65-71.
- Salameh WA, Redor-Goldman MM, Clarke NJ, Mathur R, Azziz R, Reitz RE. Specificity and predictive value of circulating testosterone assessed by tandem mass spectrometry for the diagnosis of polycystic ovary syndrome by the National Institutes of Health 1990 criteria. *Fertil Steril.* 2014 Apr;101(4):1135-1141.e2.
- Tian X, Ruan X, Mueck AO, Wang J, Liu S, Yin D, Lu Y, Wu H, Zhang Y. Anti-Müllerian hormone levels in women with polycystic ovarian syndrome compared with normal women of reproductive age in China. *Gynecol Endocrinol.* 2014 Feb;30(2):126-9.
- Zhao X, Xu F, Qi B, Hao S, Li Y, Li Y, Zou L, Lu C, Xu G, Hou L. Serum metabolomics study of polycystic ovary syndrome based on liquid chromatography-mass spectrometry. *J Proteome Res.* 2014 Feb 7;13(2):1101-11.
- Zhen Y, Yang P, Dong R, Wu Y, Sang Y, Du X, Wang Y, Song Q, Yu L, Rao X. Effect of HbA1C detection on the diagnostic screening for glucose metabolic disorders in polycystic ovary syndrome. *Clin Exp Obstet Gynecol.* 2014;41(1):58-61.

AEPCOS QUARTERLY PUBLICATION LIST

PCOS RCT/TREATMENT

- An Y, Sun Z, Zhang Y, Liu B, Guan Y, Lu M. The use of berberine for women with polycystic ovary syndrome undergoing IVF treatment. *Clin Endocrinol (Oxf)*. 2014 Mar;80(3):425-31.
- Bahmani F, Karamali M, Shakeri H, Asemi Z. The effects of folate supplementation on inflammatory factors and biomarkers of oxidative stress in overweight and obese women with polycystic ovary syndrome: a randomized, double-blind, placebo-controlled clinical trial. *Clin Endocrinol (Oxf)*. 2014 Mar 15.
- Genazzani AD, Santagni S, Ricchieri F, Campedelli A, Rattighieri E, Chierchia E, Marini G, Despini G, Prati A, Simoncini T. Myo-inositol modulates insulin and luteinizing hormone secretion in normal weight patients with polycystic ovary syndrome. *J Obstet Gynaecol Res*. 2014 May;40(5):1353-60.
- Grigoryan O, Absatarova J, Andreeva E, Melnichenko G, Dedov I. Effect of metformin on the level of anti-Mullerian hormone in therapy of polycystic ovary syndrome in obese women. *Minerva Ginecol*. 2014 Feb;66(1):85-9.
- Irani M, Minkoff H, Seifer DB, Merhi Z. Vitamin D Increases Serum Levels of the Soluble Receptor for Advanced Glycation End Products in Women with PCOS. *J Clin Endocrinol Metab*. 2014 Feb 27
- Jensterle Sever M, Kocjan T, Pfeifer M, Kravos NA, Janez A. Short-term combined treatment with liraglutide and metformin leads to significant weight loss in obese women with polycystic ovary syndrome and previous poor response to metformin. *Eur J Endocrinol*. 2014 Feb 7;170(3):451-9.
- Kahraman K, Sükür YE, Atabekoğlu CS, Ateş C, Taşkın S, Cetinkaya SE, Tolunay HE, Ozmen B, Sönmezer M, Berker B. Comparison of two oral contraceptive forms containing cyproterone acetate and drospirenone in the treatment of patients with polycystic ovary syndrome: a randomized clinical trial. *Arch Gynecol Obstet*. 2014 Mar 28.
- Karakurt F, Carlioglu A, Kaygusuz I, Gumus II, Uz B, Akdeniz D. Effect of ethinyl estradiol-cyproterone acetate treatment on asymmetric dimethyl-arginine levels in women with polycystic ovary syndrome. *Arch Gynecol Obstet*. 2014 Jan;289(1):135-40.

AEPCOS QUARTERLY PUBLICATION LIST

- Mazza A, Fruci B, Guzzi P, D'Orrico B, Malaguarnera R, Veltri P, Fava A, Belfiore A. In PCOS patients the addition of low-dose spironolactone induces a more marked reduction of clinical and biochemical hyperandrogenism than metformin alone. *Nutr Metab Cardiovasc Dis*. 2014 Feb;24(2):132-9.
- Mes-Krowinkel MG, Louwers YV, Mulders AG, de Jong FH, Fauser BC, Laven JS. Influence of oral contraceptives on anthropomorphometric, endocrine, and metabolic profiles of anovulatory polycystic ovary syndrome patients. *Fertil Steril*. 2014 Mar 25.
- Panidis D, Tziomalos K, Papadakis E, Chatzis P, Kandaraki EA, Tsourdi EA, Katsikis I. The role of orlistat combined with lifestyle changes in the management of overweight and obese patients with polycystic ovary syndrome. *Clin Endocrinol (Oxf)*. 2014 Mar;80(3):432-8.
- Pau CT, Keefe C, Duran J, Welt C. Metformin Improves Glucose Effectiveness, Not Insulin Sensitivity: Predicting Treatment Response in Women with Polycystic Ovary Syndrome in an Open-Label, Interventional Study. *J Clin Endocrinol Metab*. 2014 Feb 25
- Pizzo A, Laganà AS, Barbaro L. Comparison between effects of myo-inositol and D-chiro-inositol on ovarian function and metabolic factors in women with PCOS. *Gynecol Endocrinol*. 2014 Mar;30(3):205-8.
- Raja-Khan N, Shah J, Stetter CM, Lott ME, Kunselman AR, Dodson WC, Legro RS. High-dose vitamin D supplementation and measures of insulin sensitivity in polycystic ovary syndrome: a randomized, controlled pilot trial. *Fertil Steril*. 2014 Mar 14.
- Shahin AY, Mohammed SA. Adding the phytoestrogen *Cimicifugae Racemosae* to clomiphene induction cycles with timed intercourse in polycystic ovary syndrome improves cycle outcomes and pregnancy rates - a randomized trial. *Gynecol Endocrinol*. 2014 Mar 5.
- Shehata IA, Ballard JR, Casper AJ, Hennings LJ, Cressman E, Ebbini ES. High-intensity focused ultrasound for potential treatment of polycystic ovary syndrome: toward a noninvasive surgery. *Fertil Steril*. 2014 Feb;101(2):545-51.
- Stridsklev S, Carlsen SM, Salvesen O, Clemens I, Vanky E. Mid-pregnancy Doppler ultrasound of the uterine artery in metformin vs. placebo treated PCOS women: a randomized trial. *J Clin Endocrinol Metab*. 2014 Jan 1

AEPCOS QUARTERLY PUBLICATION LIST

PCOS UTERUS

- Li X, Guo YR, Lin JF, Feng Y, Billig H, Shao R. Combination of Diane-35 and Metformin to Treat Early Endometrial Carcinoma in PCOS Women with Insulin Resistance. J Cancer. 2014 Jan 28;5(3):173-81.
- Li X, Shao R. PCOS and obesity: insulin resistance might be a common etiology for the development of type I endometrial carcinoma. Am J Cancer Res. 2014 Jan 15;4(1):73-9.
- Lopes IM, Maganhin CC, Oliveira-Filho RM, Simões RS, Simões MJ, Iwata MC, Baracat EC, Soares JM Jr. Histomorphometric Analysis and Markers of Endometrial Receptivity Embryonic Implantation in Women With Polycystic Ovary Syndrome During the Treatment With Progesterone. Reprod Sci. 2014 Jan 23.
- Saleh HA, Shawky Moiety FM. Polycystic ovarian syndrome and congenital uterine anomalies: the hidden common player. Arch Gynecol Obstet. 2014 Mar 11.

PCOS PREMATURE ADRENARCHE/PUBERTY

- Stueve TR, Wolff MS, Pajak A, Teitelbaum SL, Chen J. CYP19A1 promoter methylation in saliva associated with milestones of pubertal timing in urban girls. BMC Pediatr. 2014 Mar 20;14:78