ANDROGEN EXCESS AND PCOS SOCIETY

Quarterly Review for Androgen Excess-PCOS Society
January 1st – March 31st, 2013

Contents

List of publications

Brief overviews of selected publications

Congenital Adrenal Hyperplasia and Disorders of Steroidogenesis

Combined comment:

1. Gleeson H, Davis J, Jones J, O'Shea E, Clayton PE. The challenge of delivering endocrine care and successful transition to adult services in adolescents with congenital adrenal hyperplasia: experience in a single centre over 18 years. Clin Endocrinol (Oxf). 2013 Jan;78(1):23-8.
2. Downing J, Gleeson HK, Clayton PE, Davis JR, Wales JK, Callery P. Transition in endocrinology: the challenge of maintaining continuity. Clin Endocrinol (Oxf). 2013 Jan;78(1):29-35.
3. Krone N, Rose IT, Willis DS, Hodson J, Wild SH, Doherty EJ, Hahner S, Parajes S, Stimson RH, Han TS, Carroll PV, Conway GS, Walker BR, MacDonald F, Ross RJ, Arlt W; United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE). Genotype-phenotype correlation in 153 adult patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency: analysis of the United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE) cohort. J Clin Endocrinol Metab. 2013 Feb;98(2):E346-54…… 30

PCOS – Metabolic Dysfunction/Cardiovascular Disease/Inflammation

Bird ST, Hartzema AG, Brophy JM, Etminan M, Delaney JA. Risk of venous thromboembolism in women with polycystic ovary syndrome: a population-based matched cohort analysis. CMAJ. 2013;185(2):E115-20.
…… 30

PCOS – Ovary

Palomba S, Falbo A, La Sala GB. Effects of metformin in women with polycystic ovary syndrome treated with gonadotrophins for in vitro fertilisation and intracytoplasmic sperm injection cycles: a systematic review and meta-analysis of randomised controlled trials. BJOG. 2013 Feb;120(3):267-76…… 31

List of Publications

Congenital Adrenal Hyperplasia and Disorders of Steroidogenesis

Abbaszadegan MR, Hassani S, Vakili R, Saberi MR, Baradaran-Heravi A, A'rabi A, Hashemipour M, Razzaghi-Azar M, Moaven O, Baratian A, Ahadian M, Keify F, Meurice N. Two novel mutations in CYP11B1 and modeling the consequent alterations of the translated protein in classic congenital adrenal hyperplasia patients. Endocrine. 2013 Aug;44(1):212-9.

Baquedano MS, Guercio G, Marino R, Berensztein E, Costanzo M, Bailez M, Vaiani E, Maceiras M, Ramirez P, Chaler E, Rivarola MA, Belgorosky A. Unique dominant negative mutation in the N-terminal mitochondrial targeting sequence of StAR, causing a variant form of congenital lipoid adrenal hyperplasia. J Clin Endocrinol Metab. 2013 Jan;98(1):E153-61.

Chan CL, McFann K, Taylor L, Wright D, Zeitler PS, Barker JM. Congenital adrenal hyperplasia and the second newborn screen. J Pediatr. 2013 Jul;163(1):109-13.e1.

Concolino P, Mello E, Zuppi C, Toscano V, Capoluongo E. CYP21A2 p.E238 deletion as result of multiple microconversion events: a genetic study on an Italian congenital adrenal hyperplasia (CAH) family. Diagn Mol Pathol. 2013 Mar;22(1):48-51.

Cordeiro GV, Silva IN, Goulart EM, das Chagas AJ, Kater CE. Final height in congenital adrenal hyperplasia: the dilemma of hypercortisolism versus hyperandrogenism. Arq Bras Endocrinol Metabol. 2013 Mar;57(2):126-31

Downing J, Gleeson HK, Clayton PE, Davis JR, Wales JK, Callery P. Transition in endocrinology: the challenge of maintaining continuity. Clin Endocrinol (Oxf). 2013 Jan;78(1):29-35.

Evliyaoğlu O, Dokurel İ, Bucak F, Özcabı B, Ercan Ö, Ceylaner S. Primary adrenal insufficiency caused by a novel mutation in DAX1 gene. J Clin Res Pediatr Endocrinol. 2013;5(1):55-7.

Eyal O, Tenenbaum-Rakover Y, Shalitin S, Israel S, Weintrob N. Adult height of subjects with nonclassical 21-hydroxylase deficiency. Acta Paediatr. 2013 Apr;102(4):419-23.

Flint JL, Jacobson JD. Adrenal hypoplasia congenita presenting as congenital adrenal hyperplasia. Case Rep Endocrinol. 2013;2013:393584.

Galle J, Kirsch S, Kaufman M. Anorexia nervosa in a patient with congenital adrenal hyperplasia. J Pediatr Endocrinol Metab. 2013;26(1-2):167-72.

Gleeson H, Davis J, Jones J, O'Shea E, Clayton PE. The challenge of delivering endocrine care and successful transition to adult services in adolescents with congenital adrenal hyperplasia: experience in a single centre over 18 years. Clin Endocrinol (Oxf). 2013 Jan;78(1):23-8.

Gomes LG, Madureira G, Mendonca BB, Bachega TA. Mineralocorticoid replacement during infancy for salt wasting congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Clinics (Sao Paulo). 2013;68(2):147-52

González EC, Carvajal F, Frómeta A, Arteaga AL, Castells EM, Espinosa T, Coto R, Pérez PL, Tejeda Y, Del Río L, Segura MT, Almenares P, Robaina R, Fernández JL. Newborn screening for congenital adrenal hyperplasia in Cuba: six years of experience. Clin Chim Acta. 2013 Jun 5;421:73-8.

Haider S, Islam B, D'Atri V, Sgobba M, Poojari C, Sun L, Yuen T, Zaidi M, New MI. Structure-phenotype correlations of human CYP21A2 mutations in congenital adrenal hyperplasia. Proc Natl Acad Sci U S A. 2013 Feb 12;110(7):2605-10.

Han B, Liu W, Zuo CL, Zhu H, Li L, Xu C, Wang XJ, Liu BL, Pan CM, Lu YL, Wu WL, Chen MD, Song HD, Cheng KX, Qiao J. Identifying a novel mutation of CYP17A1 gene from five Chinese 17α-hydroxylase/17, 20-lyase deficiency patients. Gene. 2013 Mar 10;516(2):345-50.

Han TS, Stimson RH, Rees DA, Krone N, Willis DS, Conway GS, Arlt W, Walker BR, Ross RJ; United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE). Glucocorticoid treatment regimen and health outcomes in adults with congenital adrenal hyperplasia. Clin Endocrinol (Oxf). 2013 Feb;78(2):197-203.

Janin C, Pascal Vigneron V, Weryha G, Leheup B. Clinical audit concerning the quality of management in patients with classic form of congenital adrenal hyperplasia. Ann Endocrinol (Paris). 2013 Feb;74(1):13-26.

Jaruratanasirikul S, Thongseiratch T. Diagnosis and management of congenital adrenal hyperplasia: 20-year experience in Songklanagarind Hospital. J Med Assoc Thai. 2013 Mar;96(3):288-93

Kamoun M, Mnif MF, Charfi N, Kacem FH, Naceur BB, Mnif F, Dammak M, Rekik N, Abid M. Adrenal Diseases During Pregnancy: Pathophysiology, Diagnosis and Management Strategies. Am J Med Sci. 2013 Mar 19. [Epub ahead of print]

Kamrath C, Hartmann MF, Wudy SA. Androgen synthesis in patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency. Horm Metab Res. 2013 Feb;45(2):86-91.

Krone N, Rose IT, Willis DS, Hodson J, Wild SH, Doherty EJ, Hahner S, Parajes S, Stimson RH, Han TS, Carroll PV, Conway GS, Walker BR, MacDonald F, Ross RJ, Arlt W; United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE). Genotype-phenotype correlation in 153 adult patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency: analysis of the United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE) cohort. J Clin Endocrinol Metab. 2013 Feb;98(2):E346-54.

Kyriakopoulou L, Yazdanpanah M, Colantonio DA, Chan MK, Daly CH, Adeli K. A sensitive and rapid mass spectrometric method for the simultaneous measurement of eight steroid hormones and CALIPER pediatric reference intervals. Clin Biochem. 2013 May;46(7-8):642-51.

Lekarev O, Tafuri K, Lane AH, Zhu G, Nakamoto JM, Buller-Burckle AM, Wilson TA, New MI. Erroneous prenatal diagnosis of congenital adrenal hyperplasia owing to a duplication of the CYP21A2 gene. J Perinatol. 2013 Jan;33(1):76-8.

Matthews D, Cheetham T. What is the best approach to the teenage patient presenting with nonclassical congenital adrenal hyperplasia: should we always treat with glucocorticoids? Clin Endocrinol (Oxf). 2013 Mar;78(3):338-41.

Merke DP, Chen W, Morissette R, Xu Z, Van Ryzin C, Sachdev V, Hannoush H, Shanbhag SM, Acevedo AT, Nishitani M, Arai AE, McDonnell NB. Tenascin-X haploinsufficiency associated with Ehlers-Danlos syndrome in patients with congenital adrenal hyperplasia. J Clin Endocrinol Metab. 2013 Feb;98(2):E379-87.

Minette MS, Hoyer AW, Pham PP, DeBoer MD, Reller MD, Boston BA. Cardiac function in congenital adrenal hyperplasia: a pattern of reversible cardiomyopathy. J Pediatr. 2013 Jun;162(6):1193-8, 1198.e1.

Mnif MF, Kamoun M, Mnif F, Charfi N, Kallel N, Rekik N, Naceur BB, Fourati H, Daoud E, Mnif Z, Sfar MH, Younes-Mhenni S, Sfar MT, Hachicha M, Abid M. Brain magnetic resonance imaging findings in adult patients with congenital adrenal hyperplasia: Increased frequency of white matter impairment and temporal lobe structures dysgenesis. Indian J Endocrinol Metab. 2013 Jan;17(1):121-7

Moura-Massari VO, Bugano DD, Marcondes JA, Gomes LG, Mendonca BB, Bachega TA. CYP21A2 genotypes do not predict the severity of hyperandrogenic manifestations in the nonclassical form of congenital adrenal hyperplasia. Horm Metab Res. 2013 Apr;45(4):301-7.

New MI, Abraham M, Gonzalez B, Dumic M, Razzaghy-Azar M, Chitayat D, Sun L, Zaidi M, Wilson RC, Yuen T. Genotype-phenotype correlation in 1,507 families with congenital adrenal hyperplasia owing to 21-hydroxylase deficiency. Proc Natl Acad Sci U S A. 2013 Feb 12;110(7):2611-6.

Reisch N, Idkowiak J, Hughes BA, Ivison HE, Abdul-Rahman OA, Hendon LG, Olney AH, Nielsen S, Harrison R, Blair EM, Dhir V, Krone N, Shackleton CH, Arlt W. Prenatal diagnosis of congenital adrenal hyperplasia caused by P450 oxidoreductase deficiency. J Clin Endocrinol Metab. 2013 Mar;98(3):E528-36.

Tee MK, Abramsohn M, Loewenthal N, Harris M, Siwach S, Kaplinsky A, Markus B, Birk O, Sheffield VC, Pavari R, Hershkovitz E, Miller WL. Varied clinical presentations of seven patients with mutations in CYP11A1 encoding the cholesterol side-chain cleavage enzyme, P450scc. J Clin Endocrinol Metab. 2013 Feb;98(2):713-20.

Toraman B, Ökten A, Kalay E, Karagüzel G, Dinçer T, Açıkgöz EG, Karagüzel A. Investigation of CYP21A2 mutations in Turkish patients with 21-hydroxylase deficiency and a novel founder mutation. Gene. 2013 Jan 15;513(1):202-8.

Valsalan R, Zimmermann A. Ambiguous genitalia and hypertension in a patient with congenital adrenal hyperplasia. Intern Med J. 2013 Mar;43(3):334-7.

van der Zwan YG, Janssen EH, Callens N, Wolffenbuttel KP, Cohen-Kettenis PT, van den Berg M, Drop SL, Dessens AB, Beerendonk C; Dutch Study Group on DSD. Severity of virilization is associated with cosmetic

appearance and sexual function in women with congenital adrenal hyperplasia: a cross-sectional study. J Sex Med. 2013 Mar;10(3):866-75.

Ventura A, Brunetti G, Colucci S, Oranger A, Ladisa F, Cavallo L, Grano M, Faienza MF. Glucocorticoid-induced osteoporosis in children with 21-hydroxylase deficiency. Biomed Res Int. 2013;2013:250462. doi: 10.1155/2013/250462.

Wasniewska M, Balsamo A, Valenzise M, Manganaro A, Faggioli G, Bombaci S, Conti V, Ferri M, Aversa T, Cicognani A, De Luca F. Increased large artery intima media thickness in adolescents with either classical or non-classical congenital adrenal hyperplasia. J Endocrinol Invest. 2013 Jan;36(1):12-5.

Winfeld M, Patel P, Shah B, Nass R, Milla S. Early occurrence of cerebral white matter abnormality detected in a neonate with salt-wasting congenital adrenal hyperplasia. J Pediatr Endocrinol Metab. 2013;26(1-2):13-7.

Wooding KM, Auchus RJ. Mass spectrometry theory and application to adrenal diseases. Mol Cell Endocrinol. 2013 May 22;371(1-2):201-7.

Zainuddin AA, Grover SR, Shamsuddin K, Mahdy ZA. Research on Quality of Life in Female Patients with Congenital Adrenal Hyperplasia and Issues in Developing Nations. J Pediatr Adolesc Gynecol. 2013 Mar 15.

Steroidogenesis

Biason-Lauber A, Miller WL, Pandey AV, Flück CE. Of marsupials and men: "Backdoor" dihydrotestosterone synthesis in male sexual differentiation. Mol Cell Endocrinol. 2013 May 22;371(1-2):124-32.

Di Nardo G, Gilardi G. Human aromatase: perspectives in biochemistry and biotechnology. Biotechnol Appl Biochem. 2013 Jan-Feb;60(1):92-101.

Glister C, Satchell L, Bathgate RA, Wade JD, Dai Y, Ivell R, Anand-Ivell R, Rodgers RJ, Knight PG. Functional link between bone morphogenetic proteins and insulin-like peptide 3 signaling in modulating ovarian androgen production. Proc Natl Acad Sci U S A. 2013 Apr 9;110(15):E1426-35.

Kawabe S, Yazawa T, Kanno M, Usami Y, Mizutani T, Imamichi Y, Ju Y, Matsumura T, Orisaka M, Miyamoto K. A novel isoform of liver receptor homolog-1 is regulated by steroidogenic factor-1 and the specificity protein family in ovarian granulosa cells. Endocrinology. 2013 Apr;154(4):1648-60.

Reverchon M, Cornuau M, Ramé C, Guerif F, Royère D, Dupont J. Resistin decreases insulin-like growth factor I-induced steroid production and insulin-like growth factor I receptor signaling in human granulosa cells. Fertil Steril. 2013 Jul;100(1):247-55.e1-3.

Reverchon M, Cornuau M, Cloix L, Ramé C, Guerif F, Royère D, Dupont J. Visfatin is expressed in human granulosa cells: regulation by metformin through AMPK/SIRT1 pathways and its role in steroidogenesis. Mol Hum Reprod. 2013 May;19(5):313-26.

Polycystic ovary syndrome (PCOS)

PCOS – Adolescence

Brown M, Park AS, Shayya RF, Wolfson T, Su HI, Chang RJ. Ovarian imaging by magnetic resonance in adolescent girls with polycystic ovary syndrome and age-matched controls. J Magn Reson Imaging. 2013 Jan 4. [Epub ahead of print] PubMed PMID: 23292744; PubMed Central PMCID: PMC3620938.

Flannery CA, Rackow B, Cong X, Duran E, Selen DJ, Burgert TS. Polycystic ovary syndrome in adolescence: impaired glucose tolerance occurs across the spectrum of BMI. Pediatr Diabetes. 2013 Feb;14(1):42-9. Epub 2012 Aug 28. PubMed PMID: 22925367.

Fuqua JS. Treatment and outcomes of precocious puberty: an update. J Clin Endocrinol Metab. 2013 Jun;98(6):2198-207. Epub 2013 Mar 20. Review. PubMed PMID: 23515450.

Gambineri A, Fanelli F, Prontera O, Repaci A, Di Dalmazi G, Zanotti L, Pagotto U, Flacco ME, Guidi J, Fava GA, Manzoli L, Pasquali R. Prevalence of hyperandrogenic states in late adolescent and young women: epidemiological survey on Italian high-school students. J Clin Endocrinol Metab. 2013 Apr;98(4):1641-50. Epub 2013 Feb 22. PubMed PMID: 23436925.

Kedikova SE, Sirakov MM, Boyadzhieva MV. Leptin levels and adipose tissue percentage in adolescents with polycystic ovary syndrome. Gynecol Endocrinol. 2013 Apr;29(4):384-7. Epub 2013 Jan 25. PubMed PMID: 23350621.

Nidhi R, Padmalatha V, Nagarathna R, Amritanshu R. Effects of a holistic yoga program on endocrine parameters in adolescents with polycystic ovarian syndrome: a randomized controlled trial. J Altern Complement Med. 2013 Feb;19(2):153-60. Epub 2012 Jul 18. PubMed PMID: 22808940.

Poomthavorn P, Chaya W, Mahachoklertwattana P, Sukprasert M, Weerakiet S. Glucose metabolism in obese and lean adolescents with polycystic ovary syndrome. J Pediatr Endocrinol Metab. 2013;26(3-4):319-24. PubMed PMID: 23314524.

Stefater MA, Jenkins T, Inge TH. Bariatric surgery for adolescents. Pediatr Diabetes. 2013 Feb;14(1):1-12. Epub 2012 Jul 25. Review. PubMed PMID: 22830534.

Talib HJ, Alderman EM. Gynecologic and reproductive health concerns of adolescents using selected psychotropic medications. J Pediatr Adolesc Gynecol. 2013 Feb;26(1):7-15. Epub 2012 Aug 25. Review. PubMed PMID: 22929762.

Villa P, Rossodivita A, Sagnella F, Moruzzi MC, Mariano N, Lassandro AP, Pontecorvi A, Scambia G, Lanzone A. Ovarian volume and gluco-insulinaemic markers in the diagnosis of PCOS during adolescence. Clin Endocrinol (Oxf). 2013 Feb;78(2):285-90. PubMed PMID: 22724514.

Yin Q, Chen X, Li L, Zhou R, Huang J, Yang D. Apolipoprotein B/apolipoprotein A1 ratio is a good predictive marker of metabolic syndrome and pre-metabolic syndrome in Chinese adolescent women with polycystic ovary syndrome. J Obstet Gynaecol Res. 2013 Jan;39(1):203-9. Epub 2012 Jun 4. PubMed PMID: 22672648.

Zachurzok A, Deja G, Gawlik A, Drosdzol-Cop A, Małecka-Tendera E. Hyperandrogenism in adolescent girls with type 1 diabetes mellitus treated with intensive and continuous subcutaneous insulin therapy. Endokrynol Pol. 2013;64(2):121-8. PubMed PMID: 23653275.

PCOS – Dermatology and Body Hair Complications

Böttcher B, Stahlhofer KJ, Mattle V, Seeber B, Brezinka C, Wildt L. Ultrasonographic assessment of skin thickness in patients with PCOS - a case-control study. Gynecol Endocrinol. 2013 Apr;29(4):380-3. Epub 2013 Jan 15. PubMed PMID: 23316887.

Cakir GA, Erdogan FG, Gurler A. Isotretinoin treatment in nodulocystic acne with and without polycystic ovary syndrome: efficacy and determinants of relapse. Int J Dermatol. 2013 Mar;52(3):371-6. Epub 2012 Sep 24. PubMed PMID: 22998438.

Karaca Z, Acmaz B, Acmaz G, Tanriverdi F, Unluhizarci K, Aribas S, Sahin Y, Kelestimur F. Routine screening for Cushing's syndrome is not required in patients presenting with hirsutism. Eur J Endocrinol. 2013 Feb 15;168(3):379-84. Print 2013 Mar. PubMed PMID: 23221034.

Moro F, De Simone C, Morciano A, Tropea A, Sagnella F, Palla C, Scarinci E, Teti A, Caldarola G, D'Agostino M, Mancuso S, Lanzone A, Apa R. Psoriatic patients have an increased risk of polycystic ovary syndrome: results of a cross-sectional analysis. Fertil Steril. 2013 Mar 1;99(3):936-42. Epub 2012 Nov 16. PubMed PMID: 23158933.

Vera L, Accornero M, Mora M, Valenzano-Menada M, Minuto F, Giusti M. Increasing hirsutism due to a granulosa-cell tumor in a woman with polycystic ovary syndrome: case report and review of the literature. Gynecol Endocrinol. 2013 Apr;29(4):273-7. Epub 2013 Jan 18. PubMed PMID: 23327624.

PCOS – Endocrine Disrupters

Gregoraszczuk EL, Ptak A. Endocrine-Disrupting Chemicals: Some Actions of POPs on Female Reproduction. Int J Endocrinol. 2013;2013:828532. Epub 2013 May 23. PubMed PMID: 23762054; PubMed Central PMCID: PMC3674739.

Jungbauer A, Medjakovic S. Phytoestrogens and the metabolic syndrome. J Steroid Biochem Mol Biol. 2013 Jan 11. [Epub ahead of print] PubMed PMID: 23318879.

Tarantino G, Valentino R, Di Somma C, D'Esposito V, Passaretti F, Pizza G, Brancato V, Orio F, Formisano P, Colao A, Savastano S. Bisphenol A in polycystic ovary syndrome and its association with liver-spleen axis. Clin Endocrinol (Oxf). 2013 Mar;78(3):447-53. PubMed PMID: 22805002.

PCOS – Etiology and Animal Models

Abbott DH, Nicol LE, Levine JE, Xu N, Goodarzi MO, Dumesic DA. Nonhuman primate models of polycystic ovary syndrome. Mol Cell Endocrinol. 2013 Jul 5;373(1-2):21-8. Epub 2013 Jan 29. PubMed PMID: 23370180; PubMed Central PMCID: PMC3683573.

Baculescu N. The role of androgen receptor activity mediated by the CAG repeat polymorphism in the pathogenesis of PCOS. J Med Life. 2013 Mar 15;6(1):18-25. Epub 2013 Mar 25. PubMed PMID: 23599814; PubMed Central PMCID: PMC3624640.

Benrick A, Maliqueo M, Miao S, Villanueva JA, Feng Y, Ohlsson C, Duleba AJ, Stener-Victorin E. Resveratrol is not as effective as physical exercise for improving reproductive and metabolic functions in rats with dihydrotestosterone-induced polycystic ovary syndrome. Evid Based Complement Alternat Med. 2013;2013:964070. Epub 2013 Apr 8. PubMed PMID: 23690868; PubMed Central PMCID: PMC3638597.

Bernuci MP, Leite CM, Barros P, Kalil B, Leoni GB, Del Bianco-Borges B, Franci CR, Szawka RE, Lara HE, Anselmo-Franci JA. Transitory activation of the central and ovarian norepinephrine systems during cold stress-induced polycystic ovary in rats. J Neuroendocrinol. 2013 Jan;25(1):23-33. PubMed PMID: 22882492.

Celik Ö, Yılmaz E, Celik N, Minareci Y, Turkcuoglu I, Simsek Y, Celik E, Karaer A, Aydin S. Salusins, newly identified regulators of hemodynamics and mitogenesis, increase in polycystic ovarian syndrome. Gynecol Endocrinol. 2013 Jan;29(1):83-6. Epub 2012 Jul 24. PubMed PMID: 22827297.

Chakraborty P, Ghosh S, Goswami SK, Kabir SN, Chakravarty B, Jana K. Altered trace mineral milieu might play an aetiological role in the pathogenesis of polycystic ovary syndrome. Biol Trace Elem Res. 2013 Apr;152(1):9-15. Epub 2013 Jan 16. PubMed PMID: 23322284.

Corbett S, Morin-Papunen L. The Polycystic Ovary Syndrome and recent human evolution. Mol Cell Endocrinol. 2013 Jul 5;373(1-2):39-50. Epub 2013 Jan 23. PubMed PMID: 23352610.

Deveci I, Sürmeli M, Senem Deveci H, Eriman M, Habesoglu M, Tek A, Misirlioglu K, Gunes P. Effects of polycystic ovary syndrome and menopause on rat soft palate and base of tongue. Otolaryngol Head Neck Surg. 2013 Apr;148(4):595-601. Epub 2013 Jan 14. PubMed PMID: 23319372.

Diane A, Vine DF, Heth CD, Russell JC, Proctor SD, Pierce WD. Prior caloric restriction increases survival of prepubertal obese- and PCOS-prone rats exposed to a challenge of time-limited feeding and physical activity. J Appl Physiol. 2013 May;114(9):1158-64. Epub 2013 Feb 28. PubMed PMID: 23449943.

Dumesic DA, Richards JS. Ontogeny of the ovary in polycystic ovary syndrome. Fertil Steril. 2013 Jul;100(1):23-38. Epub 2013 Mar 6. PubMed PMID: 23472949.

Feng Y, Li X, Shao R. Genetic modeling of ovarian phenotypes in mice for the study of human polycystic ovary syndrome. Am J Transl Res. 2013;5(1):15-20. Epub 2013 Jan 21. PubMed PMID: 23390562; PubMed Central PMCID: PMC3560480.

Ikeda K, Baba T, Noguchi H, Nagasawa K, Endo T, Kiya T, Saito T. Excessive androgen exposure in female-to-male transsexual persons of reproductive age induces hyperplasia of the ovarian cortex and stroma but not polycystic ovary morphology. Hum Reprod. 2013 Feb;28(2):453-61. Epub 2012 Nov 27. PubMed PMID: 23188113.

Jidong W, Shuang L, Hongjuan P, Zhenwei Y, Xiaohui M. Lentivirus vectors mediated eGFP transfected into rat ovary in vivo. Clin Exp Obstet Gynecol. 2013;40(1):101-5. PubMed PMID: 23724519.

Johansson J, Mannerås-Holm L, Shao R, Olsson A, Lönn M, Billig H, Stener-Victorin E. Electrical vs manual acupuncture stimulation in a rat model of polycystic ovary syndrome: different effects on muscle and fat tissue insulin signaling. PLoS One. 2013;8(1):e54357. Epub 2013 Jan 18. PubMed PMID: 23349861; PubMed Central PMCID: PMC3548783.

Li H, Chen Y, Yan LY, Qiao J. Increased expression of P450scc and CYP17 in development of endogenous hyperandrogenism in a rat model of PCOS. Endocrine. 2013 Feb;43(1):184-90. Epub 2012 Jul 14. PubMed PMID: 22798247.

Liu S, Dai X, Cai L, Ma X, Liu J, Jiang S, Liu J, Cui Y. Effect of Hsp27 on early embryonic development in the mouse. Reprod Biomed Online. 2013 May;26(5):491-9. Epub 2013 Jan 19. PubMed PMID: 23419798.

Maliqueo M, Sun M, Johansson J, Benrick A, Labrie F, Svensson H, Lönn M, Duleba AJ, Stener-Victorin E. Continuous administration of a P450 aromatase inhibitor induces polycystic ovary syndrome with a metabolic and endocrine phenotype in female rats at adult age. Endocrinology. 2013 Jan;154(1):434-45. Epub 2012 Nov 26. PubMed PMID: 23183180.

Martínez-García MÁ, Montes-Nieto R, Fernández-Durán E, Insenser M, Luque-Ramírez M, Escobar-Morreale HF. Evidence for masculinization of adipokine gene expression in visceral and subcutaneous adipose tissue of obese women with polycystic ovary syndrome (PCOS). J Clin Endocrinol Metab. 2013 Feb;98(2):E388-96. Epub 2013 Jan 21. PubMed PMID: 23337724.

Masszi G, Buday A, Novak A, Horvath EM, Tarszabo R, Sara L, Revesz C, Benko R, Nadasy GL, Benyó Z, Hamar P, Varbiro S. Altered insulin-induced relaxation of aortic rings in a dihydrotestosterone-induced rodent model of polycystic ovary syndrome. Fertil Steril. 2013 Feb;99(2):573-8. Epub 2012 Oct 9. PubMed PMID: 23058684.

Masszi G, Horvath EM, Tarszabo R, Benko R, Novak A, Buday A, Tokes AM, Nadasy GL, Hamar P, Benyó Z, Varbiro S. Reduced estradiol-induced vasodilation and poly-(ADP-ribose) polymerase (PARP) activity in the aortas of rats with experimental polycystic ovary syndrome (PCOS). PLoS One. 2013;8(3):e55589. Epub 2013 Mar 26. PubMed PMID: 23555555; PubMed Central PMCID: PMC3608629.

Masszi G, Novak A, Tarszabo R, Horvath EM, Buday A, Ruisanchez E, Tokes AM, Sara L, Benko R, Nadasy GL, Revesz C, Hamar P, Benyó Z, Varbiro S. Effects of vitamin D3 derivative--calcitriol on pharmacological reactivity of aortic rings in a rodent PCOS model. Pharmacol Rep. 2013;65(2):476-83. PubMed PMID: 23744432.

Moore AM, Prescott M, Campbell RE. Estradiol negative and positive feedback in a prenatal androgen-induced mouse model of polycystic ovarian syndrome. Endocrinology. 2013 Feb;154(2):796-806. Epub 2012 Dec 19. PubMed PMID: 23254197.

Mumm H, Kamper-Jørgensen M, Nybo Andersen AM, Glintborg D, Andersen M. Birth weight and polycystic ovary syndrome in adult life: a register-based study on 523,757 Danish women born 1973-1991. Fertil Steril. 2013 Mar 1;99(3):777-82. Epub 2012 Nov 29. PubMed PMID: 23200688.

Narasimhan A, Sampath S, Jayaraman S, Karundevi B. Estradiol Favors Glucose Oxidation in Gastrocnemius Muscle through Modulation of Insulin Signaling Molecules in Adult Female Rats. Endocr Res. 2013 Mar 14. [Epub ahead of print] PubMed PMID: 23488804.

Pierre A, Peigné M, Grynberg M, Arouche N, Taieb J, Hesters L, Gonzalès J, Picard JY, Dewailly D, Fanchin R, Catteau-Jonard S, di Clemente N. Loss of LH-induced down-regulation of anti-Müllerian hormone receptor expression may contribute to anovulation in women with polycystic ovary syndrome. Hum Reprod. 2013 Mar;28(3):762-9. Epub 2013 Jan 14. PubMed PMID: 23321213.

Pujanek M, Bronisz A, Małecki P, Junik R. Pathomechanisms of the development of obesity in some endocrinopathies - an overview. Endokrynol Pol. 2013;64(2):150-5. PubMed PMID: 23653278.

Rae M, Grace C, Hogg K, Wilson LM, McHaffie SL, Ramaswamy S, MacCallum J, Connolly F, McNeilly AS, Duncan C. The pancreas is altered by in utero androgen exposure: implications for clinical conditions such as polycystic ovary syndrome (PCOS). PLoS One. 2013;8(2):e56263. Epub 2013 Feb 15. PubMed PMID: 23457541; PubMed Central PMCID: PMC3574134.

Salomäki H, Vähätalo LH, Laurila K, Jäppinen NT, Penttinen AM, Ailanen L, Ilyasizadeh J, Pesonen U, Koulu M. Prenatal metformin exposure in mice programs the metabolic phenotype of the offspring during a high fat diet at adulthood. PLoS One. 2013;8(2):e56594. Epub 2013 Feb 15. PubMed PMID: 23457588; PubMed Central PMCID: PMC3574083.

Sellix MT, Murphy ZC, Menaker M. Excess androgen during puberty disrupts circadian organization in female rats. Endocrinology. 2013 Apr;154(4):1636-47. Epub 2013 Feb 15. PubMed PMID: 23417420; PubMed Central PMCID: PMC3602624.

Stener-Victorin E. Hypothetical physiological and molecular basis for the effect of acupuncture in the treatment of polycystic ovary syndrome. Mol Cell Endocrinol. 2013 Jul 5;373(1-2):83-90. Epub 2013 Feb 14. PubMed PMID: 23416841.

Upadhyay RD, Balasinor NH, Kumar AV, Sachdeva G, Parte P, Dumasia K. Proteomics in reproductive biology: beacon for unraveling the molecular complexities. Biochim Biophys Acta. 2013 Jan;1834(1):8-15. Epub 2012 Oct 13. Review. PubMed PMID: 23072795.

Veiga-Lopez A, Moeller J, Patel D, Ye W, Pease A, Kinns J, Padmanabhan V. Developmental programming: impact of prenatal testosterone excess on insulin sensitivity, adiposity, and free fatty acid profile in postpubertal female sheep. Endocrinology. 2013 May;154(5):1731-42. Epub 2013 Mar 24. PubMed PMID: 23525243.

Yan X, Dai X, Wang J, Zhao N, Cui Y, Liu J. Prenatal programs metabolic derangements in pubertal female rats. J Endocrinol. 2013 Mar 19;217(1):119-29. Print 2013 Apr. PubMed PMID: 23426873.

PCOS – General Health Concerns

Azziz R, Chang WY, Stanczyk FZ, Woods K. Effect of bilateral oophorectomy on adrenocortical function in women with polycystic ovary syndrome. Fertil Steril. 2013 Feb;99(2):599-604. Epub 2012 Oct 31. PubMed PMID: 23122827; PubMed Central PMCID: PMC3563739.

Bird ST, Hartzema AG, Etminan M, Brophy JM, Delaney JA. Polycystic ovary syndrome and combined oral contraceptive use: a comparison of clinical practice in the United States to treatment guidelines. Gynecol Endocrinol. 2013 Apr;29(4):365-9. Epub 2013 Jan 11. PubMed PMID: 23311996.

Caserta D, Bordi G, Scarani S, Moscarini M. Endometrial adenocarcinoma in a young woman. Eur J Gynaecol Oncol. 2013;34(2):179-82. PubMed PMID: 23781594.

Cinar N, Harmanci A, Bayraktar M, Yildiz BO. Ethinyl estradiol-drospirenone vs ethinyl estradiol-drospirenone plus metformin in the treatment of lean women with polycystic ovary syndrome. Clin Endocrinol (Oxf). 2013 Mar;78(3):379-84. PubMed PMID: 22509734.

Fanta M. Is polycystic ovary syndrome, a state of relative estrogen excess, a real risk factor for estrogen-dependent malignancies? Gynecol Endocrinol. 2013 Feb;29(2):145-7. Epub 2012 Nov 5. Review. PubMed PMID: 23127146.

Galazis N, Pang YL, Galazi M, Haoula Z, Layfield R, Atiomo W. Proteomic biomarkers of endometrial cancer risk in women with polycystic ovary syndrome: a systematic review and biomarker database integration. Gynecol Endocrinol. 2013 Jul;29(7):638-44. Epub 2013 Mar 25. PubMed PMID: 23527552.

González F. Adrenal dysfunction in polycystic ovary syndrome: has it been lost to follow-up? Fertil Steril. 2013 Feb;99(2):352-3. Epub 2012 Nov 16. PubMed PMID: 23158931.

Jalilian N, Modarresi M, Rezaie M, Ghaderi L, Bozorgmanesh M. Phytotherapeutic Management of Polycystic Ovary Syndrome: Role of Aerial Parts of Wood Betony (Stachys lavandulifolia). Phytother Res. 2013 Jan 11. [Epub ahead of print] PubMed PMID: 23307315.

Johansson J, Redman L, Veldhuis PP, Sazonova A, Labrie F, Holm G, Johannsson G, Stener-Victorin E. Acupuncture for ovulation induction in polycystic ovary syndrome: a randomized controlled trial. Am J Physiol Endocrinol Metab. 2013 May 1;304(9):E934-43. Epub 2013 Mar 12. PubMed PMID: 23482444.

Li QQ, Shi GX, Xu Q, Wang J, Liu CZ, Wang LP. Acupuncture effect and central autonomic regulation. Evid Based Complement Alternat Med. 2013;2013:267959. Epub 2013 May 26. PubMed PMID: 23762116; PubMed Central PMCID: PMC3677642.

Lindenberg S. New approach in patients with polycystic ovaries, lessons for everyone. Fertil Steril. 2013 Apr;99(5):1170-2. Epub 2013 Mar 1. PubMed PMID: 23465705.

Ozçaka O, Buduneli N, Ceyhan BO, Akcali A, Hannah V, Nile C, Lappin DF. Is IL-17 Involved in the Interaction Between Polycystic Ovary Syndrome and Gingival Inflammation? J Periodontol. 2013 Jan 17. [Epub ahead of print] PubMed PMID: 23327719.

PCOS – Genetics

Butler MS, Yang X, Ricciardelli C, Liang X, Norman RJ, Tilley WD, Hickey TE. Small glutamine-rich tetratricopeptide repeat-containing protein alpha is present in human ovaries but may not be differentially expressed in relation to polycystic ovary syndrome. Fertil Steril. 2013 Jun;99(7):2076-83.e1. Epub 2013 Feb 20. PubMed PMID: 23433514.

Chen R, Wang H, Li S, Ren Y. Mitochondrial DNA mutations may not be frequent in patients with polycystic ovary syndrome. Mitochondrial DNA. 2013 Aug;24(4):418-9. Epub 2013 Jan 31. PubMed PMID: 23369089.

Cui L, Zhao H, Zhang B, Qu Z, Liu J, Liang X, Zhao X, Zhao J, Sun Y, Wang P, Li T, Shi Y, Chen ZJ. Genotype-phenotype correlations of PCOS susceptibility SNPs identified by GWAS in a large cohort of Han Chinese women. Hum Reprod. 2013 Feb;28(2):538-44. Epub 2012 Dec 2. PubMed PMID: 23208300.

Deepika ML, Reddy KR, Rani VU, Balakrishna N, Latha KP, Jahan P. Do ACE I/D gene polymorphism serve as a predictive marker for age at onset in PCOS? J Assist Reprod Genet. 2013 Jan;30(1):125-30. Epub 2012 Dec 12. PubMed PMID: 23232975; PubMed Central PMCID: PMC3553350.

Fu L, Zhang Z, Zhang A, Xu J, Huang X, Zheng Q, Cao Y, Wang L, Du J. Association study between FSHR Ala307Thr and Ser680Asn variants and polycystic ovary syndrome (PCOS) in Northern Chinese Han women. J Assist Reprod Genet. 2013 Jun;30(5):717-21. Epub 2013 Mar 29. PubMed PMID: 23536150; PubMed Central PMCID: PMC3663969.

Gao H, Meng J, Xu M, Zhang S, Ghose B, Liu J, Yao P, Yan H, Wang D, Liu L. Serum Heat Shock Protein 70 Concentration in Relation to Polycystic Ovary Syndrome in a Non-Obese Chinese Population. PLoS One. 2013 Jun 18;8(6):e67727. Print 2013. PubMed PMID: 23825680; PubMed Central PMCID: PMC3688989.

Hacıhanefioğlu B, Aybey B, Hakan Özön Y, Berkil H, Karşıdağ K. Association of anthropometric, androgenic and insulin-related features with polymorphisms in exon 8 of SHBG gene in women with polycystic ovary syndrome. Gynecol Endocrinol. 2013 Apr;29(4):361-4. Epub 2013 Jan 10. PubMed PMID: 23305451.

Kim YS, Gu BH, Choi BC, Kim MS, Song S, Yun JH, Chung MK, Choi CH, Baek KH. Apolipoprotein A-IV as a novel gene associated with polycystic ovary syndrome. Int J Mol Med. 2013 Mar;31(3):707-16. Epub 2013 Jan 17. PubMed PMID: 23338533.

Layman LC. The genetic basis of female reproductive disorders: etiology and clinical testing. Mol Cell Endocrinol. 2013 May 6;370(1-2):138-48. Epub 2013 Mar 14. PubMed PMID: 23499866.

Lazaros L, Xita N, Hatzi E, Takenaka A, Kaponis A, Makrydimas G, Sofikitis N, Stefos T, Zikopoulos K, Georgiou I. CYP19 gene variants affect the assisted reproduction outcome of women with polycystic ovary syndrome. Gynecol Endocrinol. 2013 May;29(5):478-82. Epub 2013 Mar 6. PubMed PMID: 23461365.

Li T, Wu K, You L, Xing X, Wang P, Cui L, Liu H, Cui Y, Bian Y, Ning Y, Zhao H, Tang R, Chen ZJ. Common Variant rs9939609 in Gene FTO Confers Risk to Polycystic Ovary Syndrome. PLoS One. 2013 Jul 1;8(7):e66250. Print 2013. PubMed PMID: 23840863; PubMed Central PMCID: PMC3698074.

Lin LH, Baracat MC, Maciel GA, Soares JM Jr, Baracat EC. Androgen receptor gene polymorphism and polycystic ovary syndrome. Int J Gynaecol Obstet. 2013 Feb;120(2):115-8. Epub 2012 Nov 24. Review. PubMed PMID: 23182796.

Mutharasan P, Galdones E, Peñalver Bernabé B, Garcia OA, Jafari N, Shea LD, Woodruff TK, Legro RS, Dunaif A, Urbanek M. Evidence for chromosome 2p16.3 polycystic ovary syndrome susceptibility locus in affected women of European ancestry. J Clin Endocrinol Metab. 2013 Jan;98(1):E185-90. Epub 2012 Nov 1. PubMed PMID: 23118426; PubMed Central PMCID: PMC3537106.

Pau C, Saxena R, Welt CK. Evaluating reported candidate gene associations with polycystic ovary syndrome. Fertil Steril. 2013 May;99(6):1774-8. Epub 2013 Jan 30. PubMed PMID: 23375202; PubMed Central PMCID: PMC3722586.

Sang Q, Zhang S, Zou S, Wang H, Feng R, Li Q, Jin L, He L, Xing Q, Wang L. Quantitative analysis of follistatin (FST) promoter methylation in peripheral blood of patients with polycystic ovary syndrome. Reprod Biomed Online. 2013 Feb;26(2):157-63. Epub 2012 Oct 23. PubMed PMID: 23265961.

Sarkar C, Maitra A. Elucidation of regulatory mechanisms revealed by human promoter sequence analysis of genes co-expressed in forskolin-treated theca cells in PCOS. Arch Gynecol Obstet. 2013 Mar;287(3):477-85. Epub 2012 Oct 17. PubMed PMID: 23073722.

Settas N, Dracopoulou-Vabouli M, Dastamani A, Katsikis I, Chrousos G, Panidis D, Dacou-Voutetakis C. CYP21A2 mutations in women with polycystic ovary syndrome (PCOS). Horm Metab Res. 2013 May;45(5):383-6. Epub 2013 Feb 5. PubMed PMID: 23386413.

Shen HR, Qiu LH, Zhang ZQ, Qin YY, Cao C, Di W. Genome-wide methylated DNA immunoprecipitation analysis of patients with polycystic ovary syndrome. PLoS One. 2013 May 21;8(5):e64801. Print 2013. PubMed PMID: 23705014; PubMed Central PMCID: PMC3660316.

Skrgatić L, Baldani DP, Gersak K, Cerne JZ, Ferk P, Corić M. Genetic polymorphisms of INS, INSR and IRS-1 genes are not associated with polycystic ovary syndrome in Croatian women. Coll Antropol. 2013 Mar;37(1):141-6. PubMed PMID: 23697264.

Xia YH, Yao L, Zhang ZX. Correlation between IL-1β, IL-1Ra gene polymorphism and occurrence of polycystic ovary syndrome infertility. Asian Pac J Trop Med. 2013 Mar;6(3):232-6. PubMed PMID: 23375040.

Xie GB, Xu P, Che YN, Xia YJ, Cao YX, Wang WJ, Qiao D, Wu XK, Yi L, Gao Q, Wang Y. Microsatellite polymorphism in the fibrillin 3 gene and susceptibility to PCOS: a case-control study and meta-analysis. Reprod Biomed Online. 2013 Feb;26(2):168-74. Epub 2012 Oct 23. PubMed PMID: 23265956.

Zadeh-Vakili A, Ramezani Tehrani F, Daneshpour MS, Zarkesh M, Saadat N, Azizi F. Genetic polymorphism of vitamin D receptor gene affects the phenotype of PCOS. Gene. 2013 Feb 15;515(1):193-6. Epub 2012 Dec 13. PubMed PMID: 23246977.

Zou S, Sang Q, Wang H, Feng R, Li Q, Zhao X, Xing Q, Jin L, He L, Wang L. Common genetic variation in CYP1B1 is associated with concentrations of T_4, FT_3 and FT_4 in the sera of polycystic ovary syndrome patients. Mol Biol Rep. 2013 Apr;40(4):3315-20. Epub 2013 Jan 3. PubMed PMID: 23283740.

PCOS – Immunological Considerations

None.

PCOS – After the Menopause

None.

PCOS – Metabolic Dysfunction/Cardiovascular Disease/Inflammation

Abali R, Celik C, Tasdemir N, Guzel S, Alpsoy S, Yuksel A, Celik E. The serum protein α2-Heremans-Schmid glycoprotein/fetuin-a concentration and carotid intima-media thickness in women with polycystic ovary

syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Jul;169(1):45-9. Epub 2013 Feb 19. PubMed PMID: 23433744.

Altieri P, Cavazza C, Pasqui F, Morselli AM, Gambineri A, Pasquali R. Dietary habits and their relationship with hormones and metabolism in overweight and obese women with polycystic ovary syndrome. Clin Endocrinol (Oxf). 2013 Jan;78(1):52-9. PubMed PMID: 22288821.

Arefi S, Mottaghi S, Sharifi AM. Studying the correlation of renin-angiotensin-system (RAS) components and insulin resistance in polycystic ovary syndrome (PCOs). Gynecol Endocrinol. 2013 May;29(5):470-3. Epub 2013 Mar 6. PubMed PMID: 23461768.

Artini PG, Di Berardino OM, Papini F, Genazzani AD, Simi G, Ruggiero M, Cela V. Endocrine and clinical effects of myo-inositol administration in polycystic ovary syndrome. A randomized study. Gynecol Endocrinol. 2013 Apr;29(4):375-9. Epub 2013 Jan 22. PubMed PMID: 23336594.

Aydin K, Cinar N, Aksoy DY, Bozdag G, Yildiz BO. Body composition in lean women with polycystic ovary syndrome: effect of ethinyl estradiol and drospirenone combination. Contraception. 2013 Mar;87(3):358-62. Epub 2012 Aug 13. PubMed PMID: 22898361.

Aydogdu A, Tasci I, Kucukerdonmez O, Tapan S, Aydogdu S, Aydogan U, Sonmez A, Yazici M, Azal O. Increase in subcutaneous adipose tissue and fat free mass in women with polycystic ovary syndrome is related to impaired insulin sensitivity. Gynecol Endocrinol. 2013 Feb;29(2):152-5. Epub 2012 Jul 31. PubMed PMID: 22849614.

Barcellos CR, Lage SH, Rocha MP, Hayashida SA, Baracat EC, Romano A, Brito VN, Marcondes JA. Polycystic ovary syndrome and obesity do not affect vascular parameters related to early atherosclerosis in young women without glucose metabolism disturbances, arterial hypertension and severe abnormalities of lipid profile. Gynecol Endocrinol. 2013 Apr;29(4):370-4. Epub 2013 Jan 18. PubMed PMID: 23327607.

Beller JP, McCartney CR. Cardiovascular risk and combined oral contraceptives: clinical decisions in settings of uncertainty. Am J Obstet Gynecol. 2013 Jan;208(1):39-41. Epub 2012 Feb 1. PubMed PMID: 22360920.

Bird ST, Hartzema AG, Brophy JM, Etminan M, Delaney JA. Risk of venous thromboembolism in women with polycystic ovary syndrome: a population-based matched cohort analysis. CMAJ. 2013 Feb 5;185(2):E115-20. Epub 2012 Dec 3. PubMed PMID: 23209115; PubMed Central PMCID: PMC3563911.

Blair SA, Kyaw-Tun T, Young IS, Phelan NA, Gibney J, McEneny J. Oxidative stress and inflammation in lean and obese subjects with polycystic ovary syndrome. J Reprod Med. 2013 Mar-Apr;58(3-4):107-14. PubMed PMID: 23539878.

Borruel S, Fernández-Durán E, Alpañés M, Martí D, Alvarez-Blasco F, Luque-Ramírez M, Escobar-Morreale HF. Global adiposity and thickness of intraperitoneal and mesenteric adipose tissue depots are increased in women with polycystic ovary syndrome (PCOS). J Clin Endocrinol Metab. 2013 Mar;98(3):1254-63. Epub 2013 Feb 5. PubMed PMID: 23386652.

Cakir E, Doğan M, Topaloglu O, Ozbek M, Cakal E, Vural MG, Yeter E, Delibasi T. Subclinical atherosclerosis and hyperandrogenemia are independent risk factors for increased epicardial fat thickness in patients with

PCOS and idiopathic hirsutism. Atherosclerosis. 2013 Jan;226(1):291-5. Epub 2012 Nov 15. PubMed PMID: 23206979.

Carmina E. Oral contraceptives and cardiovascular risk in women with polycystic ovary syndrome. J Endocrinol Invest. 2013 May;36(5):358-63. Epub 2013 Feb 27. PubMed PMID: 23449010.

Celik C, Abali R, Bastu E, Tasdemir N, Tasdemir UG, Gul A. Assessment of impaired glucose tolerance prevalence with hemoglobin A_1c and oral glucose tolerance test in 252 Turkish women with polycystic ovary syndrome: a prospective, controlled study. Hum Reprod. 2013 Apr;28(4):1062-8. Epub 2013 Jan 18. PubMed PMID: 23335611.

Celik C, Bastu E, Abali R, Alpsoy S, Guzel EC, Aydemir B, Yeh J. The relationship between copper, homocysteine and early vascular disease in lean women with polycystic ovary syndrome. Gynecol Endocrinol. 2013 May;29(5):488-91. Epub 2013 Mar 12. PubMed PMID: 23480818.

Chen X, Jia X, Qiao J, Guan Y, Kang J. Adipokines in reproductive function: a link between obesity and polycystic ovary syndrome. J Mol Endocrinol. 2013 Mar 18;50(2):R21-37. Print 2013 Apr. Review. PubMed PMID: 23335807.

Chen YH, Heneidi S, Lee JM, Layman LC, Stepp DW, Gamboa GM, Chen BS, Chazenbalk G, Azziz R. miRNA-93 inhibits GLUT4 and is overexpressed in adipose tissue of polycystic ovary syndrome patients and women with insulin resistance. Diabetes. 2013 Jul;62(7):2278-86. Epub 2013 Mar 14. PubMed PMID: 23493574; PubMed Central PMCID: PMC3712080.

Christakou C, Diamanti-Kandarakis E. Structural, Biochemical and Non-Traditional Cardiovascular Risk Markers in PCOS. Curr Pharm Des. 2013;19(32):5764-74. PubMed PMID: 23448483.

Coskun A, Arikan T, Kilinc M, Arikan DC, Ekerbiçer HÇ. Plasma selenium levels in Turkish women with polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Jun;168(2):183-6. Epub 2013 Mar 13. PubMed PMID: 23490536.

de Mendonça-Louzeiro MR, Annichino-Bizzacchi JM, Magna LA, Quaino SK, Benetti-Pinto CL. Faster thrombin generation in women with polycystic ovary syndrome compared with healthy controls matched for age and body mass index. Fertil Steril. 2013 May;99(6):1786-90. Epub 2013 Feb 15. PubMed PMID: 23415973.

Di Domenico K, Wiltgen D, Nickel FJ, Magalhães JA, Moraes RS, Spritzer PM. Cardiac autonomic modulation in polycystic ovary syndrome: does the phenotype matter? Fertil Steril. 2013 Jan;99(1):286-92. Epub 2012 Sep 29. PubMed PMID: 23025880.

Dogan MI, Tasci I, Bulucu F, Aydogdu A, Acar R, Ceyhan T, Koc B, Demir O, Gezer M, Saglam K. Abdominal obesity is associated with a lower ankle-brachial index in women with polycystic ovary syndrome. Angiology. 2013 Feb;64(2):105-11. Epub 2012 Feb 21. PubMed PMID: 22355193.

Dong Z, Huang J, Huang L, Chen X, Yin Q, Yang D. Associations of acanthosis nigricans with metabolic abnormalities in polycystic ovary syndrome women with normal body mass index. J Dermatol. 2013 Mar;40(3):188-92. Epub 2013 Jan 5. PubMed PMID: 23289590.

El-Mesallamy HO, Abd El-Razek RS, El-Refaie TA. Circulating high-sensitivity C-reactive protein and soluble CD40 ligand are inter-related in a cohort of women with polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Jun;168(2):178-82. Epub 2013 Feb 21. PubMed PMID: 23434327.

Ezeh U, Pall M, Mathur R, Dey D, Berman D, Chen IY, Dumesic DA, Azziz R. Effects of endogenous androgens and abdominal fat distribution on the interrelationship between insulin and non-insulin-mediated glucose uptake in females. J Clin Endocrinol Metab. 2013 Apr;98(4):1541-8. Epub 2013 Feb 28. PubMed PMID: 23450052; PubMed Central PMCID: PMC3615210.

G S, A B, Kamath A, Shivaprakash P, Adhikari P, Up R, Hn G, Padubidri JR. Acanthosis Nigricansin PCOS Patients and Its Relation with Type 2 Diabetes Mellitus and Body Mass at a Tertiary Care Hospital in Southern India. J Clin Diagn Res. 2013 Feb;7(2):317-9. Epub 2013 Feb 1. PubMed PMID: 23543316; PubMed Central PMCID: PMC3592301.

Galazis N, Afxentiou T, Xenophontos M, Diamanti-Kandarakis E, Atiomo W. Proteomic biomarkers of type 2 diabetes mellitus risk in women with polycystic ovary syndrome. Eur J Endocrinol. 2013 Feb 1;168(2):R33-43. Print 2013 Feb. Review. PubMed PMID: 23093701.

González F, Kirwan JP, Rote NS, Minium J. Elevated circulating levels of tissue factor in polycystic ovary syndrome. Clin Appl Thromb Hemost. 2013 Jan-Feb;19(1):66-72. Epub 2012 Feb 12. PubMed PMID: 22327820.

González F, Kirwan JP, Rote NS, Minium J. Glucose ingestion stimulates atherothrombotic inflammation in polycystic ovary syndrome. Am J Physiol Endocrinol Metab. 2013 Feb 15;304(4):E375-83. Epub 2012 Dec 18. PubMed PMID: 23249695; PubMed Central PMCID: PMC3566504.

Gower BA, Chandler-Laney PC, Ovalle F, Goree LL, Azziz R, Desmond RA, Granger WM, Goss AM, Wright Bates G. Favourable metabolic effects of a eucaloric lower-carbohydrate diet in women with PCOS. Clin Endocrinol (Oxf). 2013 Feb 27. [Epub ahead of print] PubMed PMID: 23444983.

Gözdemir E, Kaygusuz I, Kafalı H. Is hepcidin a new cardiovascular risk marker in polycystic ovary syndrome? Gynecol Obstet Invest. 2013;75(3):196-202. Epub 2013 Mar 15. PubMed PMID: 23548757.

Harmanci A, Cinar N, Bayraktar M, Yildiz BO. Oral contraceptive plus antiandrogen therapy and cardiometabolic risk in polycystic ovary syndrome. Clin Endocrinol (Oxf). 2013 Jan;78(1):120-5. PubMed PMID: 22702394.

Hernández-Mijares A, Bañuls C, Gómez-Balaguer M, Bergoglio M, Víctor VM, Rocha M. Influence of obesity on atherogenic dyslipidemia in women with polycystic ovary syndrome. Eur J Clin Invest. 2013 Jun;43(6):549-56. Epub 2013 Mar 26. PubMed PMID: 23528141.

Huang ZH, Manickam B, Ryvkin V, Zhou XJ, Fantuzzi G, Mazzone T, Sam S. PCOS is associated with increased CD11c expression and crown-like structures in adipose tissue and increased central abdominal fat depots independent of obesity. J Clin Endocrinol Metab. 2013 Jan;98(1):E17-24. Epub 2012 Nov 1. PubMed PMID: 23118428; PubMed Central PMCID: PMC3537096.

Insenser M, Montes-Nieto R, Murri M, Escobar-Morreale HF. Proteomic and metabolomic approaches to the study of polycystic ovary syndrome. Mol Cell Endocrinol. 2013 May 6;370(1-2):65-77. Epub 2013 Feb 17. PubMed PMID: 23422073.

Jeon YE, Lee KE, Jung JA, Yim SY, Kim H, Seo SK, Cho S, Choi YS, Lee BS. Kisspeptin, leptin, and retinol-binding protein 4 in women with polycystic ovary syndrome. Gynecol Obstet Invest. 2013;75(4):268-74. Epub 2013 Apr 4. PubMed PMID: 23571154.

Kale-Gurbuz T, Akhan SE, Bastu E, Telci A, Iyibozkurt AC, Topuz S. Adiponectin, leptin and ghrelin levels in obese adolescent girls with polycystic ovary syndrome. J Pediatr Adolesc Gynecol. 2013 Feb;26(1):27-30. Epub 2012 Nov 15. PubMed PMID: 23158749.

Karakas SE, Banaszewska B, Spaczynski RZ, Pawelczyk L, Duleba A. Free fatty acid binding protein-4 and retinol binding protein-4 in polycystic ovary syndrome: response to simvastatin and metformin therapies. Gynecol Endocrinol. 2013 May;29(5):483-7. Epub 2013 Mar 12. PubMed PMID: 23480783.

Karoli R, Fatima J, Chandra A, Gupta U, Islam FU, Singh G. Prevalence of hepatic steatosis in women with polycystic ovary syndrome. J Hum Reprod Sci. 2013 Jan;6(1):9-14. PubMed PMID: 23869143; PubMed Central PMCID: PMC3713587.

Kasapoglu T. Do oral contraceptive pills really protect against venous thromboembolism, especially in polycystic ovary syndrome patients? Prescription bias or not? Am J Obstet Gynecol. 2013 Feb 24. [Epub ahead of print] PubMed PMID: 23462511.

Kim JJ, Chae SJ, Choi YM, Hwang KR, Song SH, Yoon SH, Kim SM, Ku SY, Kim SH, Kim JG, Moon SY. Atherogenic changes in low-density lipoprotein particle profiles were not observed in non-obese women with polycystic ovary syndrome. Hum Reprod. 2013 May;28(5):1354-60. Epub 2013 Mar 10. PubMed PMID: 23477907.

Koiou E, Tziomalos K, Katsikis I, Papadakis E, Kandaraki EA, Panidis D. Platelet-derived microparticles in overweight/obese women with the polycystic ovary syndrome. Gynecol Endocrinol. 2013 Mar;29(3):250-3. Epub 2012 Dec 6. PubMed PMID: 23216335.

Koleva DI, Orbetzova MM, Atanassova PK. Adipose tissue hormones and appetite and body weight regulators in insulin resistance. Folia Med (Plovdiv). 2013 Jan-Mar;55(1):25-32. PubMed PMID: 23905484.

Lawrence JM, Andrade SE, Avalos LA, Beaton SJ, Chiu VY, Davis RL, Dublin S, Pawloski PA, Raebel MA, Smith DH, Toh S, Wang JQ, Kaplan S, Amini T, Hampp C, Hammad TA, Scott PE, Cheetham TC; Medication Exposure in Pregnancy Risk Evaluation Program (MEPREP) Study Group. Prevalence, trends, and patterns of use of antidiabetic medications among pregnant women, 2001-2007. Obstet Gynecol. 2013 Jan;121(1):106-14. PubMed PMID: 23262934.

Lecke SB, Morsch DM, Spritzer PM. Association between adipose tissue expression and serum levels of leptin and adiponectin in women with polycystic ovary syndrome. Genet Mol Res. 2013 Feb 28;12(AOP). [Epub ahead of print] PubMed PMID: 23479161.

Lerchbaum E, Schwetz V, Giuliani A, Obermayer-Pietsch B. Hypertriglyceridemic waist is associated with impaired glucose tolerance in polycystic ovary syndrome. Nutr Metab Cardiovasc Dis. 2013 Feb;23(2):e15-6. Epub 2012 Dec 4. PubMed PMID: 23218173.

Lim SS, Norman RJ, Davies MJ, Moran LJ. The effect of obesity on polycystic ovary syndrome: a systematic review and meta-analysis. Obes Rev. 2013 Feb;14(2):95-109. Epub 2012 Oct 31. Review. PubMed PMID: 23114091.

Lunger F, Wildt L, Seeber B. Accurate screening for insulin resistance in PCOS women using fasting insulin concentrations. Gynecol Endocrinol. 2013 Jun;29(6):541-4. Epub 2013 Mar 7. PubMed PMID: 23464983.

Mahmood K, Naeem M, Rahimnajjad NA. Metformin: the hidden chronicles of a magic drug. Eur J Intern Med. 2013 Jan;24(1):20-6. Epub 2012 Nov 21. Review. PubMed PMID: 23177353.

Markopoulos MC, Valsamakis G, Kouskouni E, Boutsiadis A, Papassotiriou I, Creatsas G, Mastorakos G. Study of carbohydrate metabolism indices and adipocytokine profile and their relationship with androgens in polycystic ovary syndrome after menopause. Eur J Endocrinol. 2012 Dec 10;168(1):83-90. Print 2013 Jan. PubMed PMID: 23076844.

Mather KJ, Steinberg HO, Baron AD. Insulin resistance in the vasculature. J Clin Invest. 2013 Mar 1;123(3):1003-4. Epub 2013 Mar 1. PubMed PMID: 23454764; PubMed Central PMCID: PMC3582147.

Minozzi M, Nordio M, Pajalich R. The Combined therapy myo-inositol plus D-Chiro-inositol, in a physiological ratio, reduces the cardiovascular risk by improving the lipid profile in PCOS patients. Eur Rev Med Pharmacol Sci. 2013 Feb;17(4):537-40. PubMed PMID: 23467955.

Mohiyiddeen L, Watson AJ, Apostolopoulos NV, Berry R, Alexandraki KI, Jude EB. Effects of low-dose metformin and rosiglitazone on biochemical, clinical, metabolic and biophysical outcomes in polycystic ovary syndrome. J Obstet Gynaecol. 2013 Feb;33(2):165-70. PubMed PMID: 23445141.

Montes-Nieto R, Insenser M, Martínez-García MÁ, Escobar-Morreale HF. A nontargeted proteomic study of the influence of androgen excess on human visceral and subcutaneous adipose tissue proteomes. J Clin Endocrinol Metab. 2013 Mar;98(3):E576-85. Epub 2013 Jan 24. PubMed PMID: 23348399.

Moran LJ, Ko H, Misso M, Marsh K, Noakes M, Talbot M, Frearson M, Thondan M, Stepto N, Teede HJ. Dietary composition in the treatment of polycystic ovary syndrome: a systematic review to inform evidence-based guidelines. J Acad Nutr Diet. 2013 Apr;113(4):520-45. Epub 2013 Feb 16. Review. PubMed PMID: 23420000.

Mortada R, Comerford K, Kallail KJ, Karakas SE. Utility of hemoglobin-A1C in nondiabetic women with polycystic ovary syndrome. Endocr Pract. 2013 Mar-Apr;19(2):284-9. PubMed PMID: 23529348.

Murri M, Luque-Ramírez M, Insenser M, Ojeda-Ojeda M, Escobar-Morreale HF. Circulating markers of oxidative stress and polycystic ovary syndrome (PCOS): a systematic review and meta-analysis. Hum Reprod Update. 2013 May-Jun;19(3):268-88. Epub 2013 Jan 9. PubMed PMID: 23303572.

Nascimento AD, Silva Lara LA, Japur de Sá Rosa-e-Silva AC, Ferriani RA, Reis RM. Effects of metformin on serum insulin and anti-Mullerian hormone levels and on hyperandrogenism in patients with polycystic ovary syndrome. Gynecol Endocrinol. 2013 Mar;29(3):246-9. Epub 2012 Nov 30. PubMed PMID: 23194004.

Ojeda-Ojeda M, Murri M, Insenser M, Escobar-Morreale HF. Mediators of Low-Grade Chronic Inflammation in Polycystic Ovary Syndrome (PCOS). Curr Pharm Des. 2013;19(32):5775-91. PubMed PMID: 23448487.

Oliveira Rdo S, Redorat RG, Ziehe GH, Mansur VA, Conceição FL. Arterial hypertension and metabolic profile in patients with polycystic ovary syndrome. Rev Bras Ginecol Obstet. 2013 Jan;35(1):21-6. PubMed PMID: 23338549.

Ormazabal P, Romero C, Gabler F, Quest AF, Vega M. Decreased Phosphorylation of Y14Caveolin-1 in Endometrial Tissue of Polycystic Ovary Syndrome Patients may be Related with an Insulin Resistant State in this Tissue. Horm Metab Res. 2013 Apr;45(4):e2. Epub 2013 Jan 15. PubMed PMID: 23322509.

Pedersen SD. Metabolic complications of obesity. Best Pract Res Clin Endocrinol Metab. 2013 Apr;27(2):179-93. Epub 2013 Mar 6. PubMed PMID: 23731880.

Pepene CE. Serum under-carboxylated osteocalcin levels in women with polycystic ovary syndrome: weight-dependent relationships with endocrine and metabolic traits. J Ovarian Res. 2013 Jan 22;6(1):4. PubMed PMID: 23339653; PubMed Central PMCID: PMC3557170.

Phelan N, O'Connor A, Kyaw Tun T, Correia N, Boran G, Roche HM, Gibney J. Leucocytosis in women with polycystic ovary syndrome (PCOS) is incompletely explained by obesity and insulin resistance. Clin Endocrinol (Oxf). 2013 Jan;78(1):107-13. PubMed PMID: 22712547.

Rahimi-Ardabili H, Pourghassem Gargari B, Farzadi L. Effects of vitamin D on cardiovascular disease risk factors in polycystic ovary syndrome women with vitamin D deficiency. J Endocrinol Invest. 2013 Jan;36(1):28-32. Epub 2012 Mar 22. PubMed PMID: 22453059.

Ravn P, Haugen AG, Glintborg D. Overweight in polycystic ovary syndrome. An update on evidence based advice on diet, exercise and metformin use for weight loss. Minerva Endocrinol. 2013 Mar;38(1):59-76. Review. PubMed PMID: 23435443.

Rey-Roldan E, Perez Lana MB, Galluzzo L, Blanco G, Onetto C, Straminsky V, Nolting MP. Is the polycystic ovary syndrome the causative of the increase in inflammatory markers and metabolic risk? Gynecol Endocrinol. 2013 Feb;29(2):141-4. Epub 2012 Nov 2. PubMed PMID: 23116196.

Roessler KK, Birkebaek C, Ravn P, Andersen MS, Glintborg D. Effects of exercise and group counselling on body composition and VO2max in overweight women with polycystic ovary syndrome. Acta Obstet Gynecol Scand. 2013 Mar;92(3):272-7. Epub 2013 Jan 21. PubMed PMID: 23237575.

Sasidevi A, Vellanki P, Kunselman AR, Raja-Khan N, Dunaif A, Legro RS. Familial aggregation of circulating C-reactive protein in polycystic ovary syndrome. Hum Reprod. 2013 Mar;28(3):770-6. Epub 2012 Dec 20. PubMed PMID: 23257395; PubMed Central PMCID: PMC3571499.

Schooling CM, Au Yeung SL, Freeman G, Cowling BJ. The effect of statins on testosterone in men and women, a systematic review and meta-analysis of randomized controlled trials. BMC Med. 2013 Feb 28;11:57. PubMed PMID: 23448151; PubMed Central PMCID: PMC3621815.

Seow KM, Lin YH, Wang PH, Hwang JL, Ho LT, Juan CC. Aquaglyceroporin-7 overexpression in women with the polycystic ovary syndrome. Gynecol Obstet Invest. 2013;75(2):126-31. Epub 2012 Dec 7. PubMed PMID: 23235401.

Silva Dantas W, Gualano B, Patrocínio Rocha M, Roberto Grimaldi Barcellos C, Dos Reis Vieira Yance V, Miguel Marcondes JA. Metabolic Disturbance in PCOS: Clinical and Molecular Effects on Skeletal Muscle Tissue. ScientificWorldJournal. 2013 Jun 5;2013:178364. Print 2013. PubMed PMID: 23844380; PubMed Central PMCID: PMC3687487.

Sova H, Puistola U, Morin-Papunen L, Karihtala P. Metformin decreases serum 8-hydroxy-2'-deoxyguanosine levels in polycystic ovary syndrome. Fertil Steril. 2013 Feb;99(2):593-8. Epub 2012 Oct 31. PubMed PMID: 23122829.

Sprung VS, Atkinson G, Cuthbertson DJ, Pugh CJ, Aziz N, Green DJ, Cable NT, Jones H. Endothelial function measured using flow-mediated dilation in polycystic ovary syndrome: a meta-analysis of the observational studies. Clin Endocrinol (Oxf). 2013 Mar;78(3):438-46. Review. PubMed PMID: 22775449.

Sprung VS, Cuthbertson DJ, Pugh CJ, Daousi C, Atkinson G, Aziz NF, Kemp GJ, Green DJ, Cable NT, Jones H. Nitric oxide-mediated cutaneous microvascular function is impaired in polycystic ovary sydrome but can be improved by exercise training. J Physiol. 2013 Mar 15;591(Pt 6):1475-87. Epub 2013 Jan 14. PubMed PMID: 23318877; PubMed Central PMCID: PMC3607167.

Stepto NK, Cassar S, Joham AE, Hutchison SK, Harrison CL, Goldstein RF, Teede HJ. Women with polycystic ovary syndrome have intrinsic insulin resistance on euglycaemic-hyperinsulaemic clamp. Hum Reprod. 2013 Mar;28(3):777-84. Epub 2013 Jan 12. PubMed PMID: 23315061.

Teng HW, Chien YW, Hsu MI, Chen CI. The relationship between carotid intima-media thickness and endogenous androgens in young women with polycystic ovary syndrome in Taiwan. Gynecol Endocrinol. 2013 Mar;29(3):238-41. Epub 2012 Nov 23. PubMed PMID: 23174031.

Thomson RL, Spedding S, Brinkworth GD, Noakes M, Buckley JD. Seasonal effects on vitamin D status influence outcomes of lifestyle intervention in overweight and obese women with polycystic ovary syndrome. Fertil Steril. 2013 May;99(6):1779-85. Epub 2013 Jan 26. PubMed PMID: 23357457.

Tziomalos K, Katsikis I, Papadakis E, Kandaraki EA, Macut D, Panidis D. Comparison of markers of insulin resistance and circulating androgens between women with polycystic ovary syndrome and women with metabolic syndrome. Hum Reprod. 2013 Mar;28(3):785-93. Epub 2013 Jan 12. PubMed PMID: 23315058.

Unluer AN, Findik RB, Sevinc N, Karakaya J. Comparison of HbA1c levels in obese and non-obese polycystic ovarian patients. Clin Exp Obstet Gynecol. 2013;40(1):148-50. PubMed PMID: 23724531.

Wu J, Wu Y, Zhang X, Li S, Lu D, Li S, Yang G, Liu D. Elevated serum thioredoxin-interacting protein in women with polycystic ovary syndrome is associated with insulin resistance. Clin Endocrinol (Oxf). 2013 Mar 5. [Epub ahead of print] PubMed PMID: 23461678.

Xiang S, Hua F, Chen L, Tang Y, Jiang X, Liu Z. Lipid accumulation product is related to metabolic syndrome in women with polycystic ovary syndrome. Exp Clin Endocrinol Diabetes. 2013 Feb;121(2):115-8. Epub 2013 Feb 20. PubMed PMID: 23426706.

Yildir IC, Kutluturk F, Tasliyurt T, Yelken BM, Acu B, Beyhan M, Erkorkmaz U, Yilmaz A. Insulin resistance and cardiovascular risk factors in women with PCOS who have normal glucose tolerance test. Gynecol Endocrinol. 2013 Feb;29(2):148-51. Epub 2012 Nov 5. PubMed PMID: 23127112.

Yilmaz E, Celik O, Celik N, Simsek Y, Celik E, Yildirim E. Serum orexin-A (OXA) level decreases in polycystic ovarian syndrome. Gynecol Endocrinol. 2013 Apr;29(4):388-90. Epub 2013 Jan 25. PubMed PMID: 23350701.

Zhu JP, Teng YC, Zhou J, Lu W, Tao MF, Jia WP. Increased mean glucose levels in patients with polycystic ovary syndrome and hyperandrogenemia as determined by continuous glucose monitoring. Acta Obstet Gynecol Scand. 2013 Feb;92(2):165-71. Epub 2012 Dec 5. PubMed PMID: 23072215.

PCOS – Neuroendocrine Dysfunction

None.

PCOS – Ovary

Abd Elgafor I. Efficacy of combined metformin-letrozole in comparison with bilateral ovarian drilling in clomiphene-resistant infertile women with polycystic ovarian syndrome. Arch Gynecol Obstet. 2013 Jul;288(1):119-23. Epub 2013 Jan 30. PubMed PMID: 23361456.

Abu Hashim H, Al-Inany H, De Vos M, Tournaye H. Three decades after Gjönnaess's laparoscopic ovarian drilling for treatment of PCOS; what do we know? An evidence-based approach. Arch Gynecol Obstet. 2013 Aug;288(2):409-22. Epub 2013 Mar 30. PubMed PMID: 23543241.

Ayaz A, Alwan Y, Farooq MU. Metformin-clomiphene citrate vs. clomiphene citrate alone: Polycystic ovarian syndrome. J Hum Reprod Sci. 2013 Jan;6(1):15-8. PubMed PMID: 23869144; PubMed Central PMCID: PMC3713569.

Bates GW, Bowling M. Physiology of the female reproductive axis. Periodontol 2000. 2013 Feb;61(1):89-102. PubMed PMID: 23240945.

Begum MR, Akhter S, Ehsan M, Begum MS, Khan F. Pretreatment and co-administration of oral anti-diabetic agent with clomiphene citrate or rFSH for ovulation induction in clomiphene-citrate-resistant polycystic ovary syndrome. J Obstet Gynaecol Res. 2013 May;39(5):966-73. Epub 2013 Feb 4. PubMed PMID: 23379651.

Boqun X, Xiaonan D, Yugui C, Lingling G, Xue D, Gao C, Feiyang D, Jiayin L, Gao L, Li M, Zhang Y, Ma X. Expression of SET Protein in the Ovaries of Patients with Polycystic Ovary Syndrome. Int J Endocrinol. 2013;2013:367956. Epub 2013 Jun 3. PubMed PMID: 23861679; PubMed Central PMCID: PMC3686144.

Cakiroglu Y, Vural B, Isgoren S. The effects of drospirenone-ethinyl estradiol and drospirenone-ethinyl estradiol + metformin on ovarian ultrasonographic markers, body fat mass index, leptin, and ghrelin. Arch Gynecol Obstet. 2013 Jul;288(1):213-20. Epub 2013 Feb 3. PubMed PMID: 23377194.

Capalbo A, Bono S, Spizzichino L, Biricik A, Baldi M, Colamaria S, Ubaldi FM, Rienzi L, Fiorentino F. Sequential comprehensive chromosome analysis on polar bodies, blastomeres and trophoblast: insights into female meiotic errors and chromosomal segregation in the preimplantation window of embryo development. Hum Reprod. 2013 Feb;28(2):509-18. Epub 2012 Nov 11. PubMed PMID: 23148203.

Casadei L, Madrigale A, Puca F, Manicuti C, Emidi E, Piccione E, Dewailly D. The role of serum anti-Müllerian hormone (AMH) in the hormonal diagnosis of polycystic ovary syndrome. Gynecol Endocrinol. 2013 Jun;29(6):545-50. Epub 2013 Mar 19. PubMed PMID: 23506275.

Copperman AB, Benadiva C. Optimal usage of the GnRH antagonists: a review of the literature. Reprod Biol Endocrinol. 2013 Mar 15;11:20. PubMed PMID: 23496864; PubMed Central PMCID: PMC3618003.

Dąbkowska-Huć A, Lemm M, Sikora J, Witek A, Skałba P. Anti-Müllerian hormone dynamics during ovulation induction treatment with recombinant follicle-stimulating hormone in women with polycystic ovary syndrome. Endokrynol Pol. 2013;64(3):203-7. PubMed PMID: 23873424.

Dong X, Zheng Y, Liao X, Xiong T, Zhang H. Does progesterone-induced endometrial withdrawal bleed before ovulation induction have negative effects on IUI outcomes in patients with polycystic ovary syndrome? Int J Clin Exp Pathol. 2013 May 15;6(6):1157-63. Print 2013. PubMed PMID: 23696936; PubMed Central PMCID: PMC3657371.

Dubourdieu S, Fréour T, Dessolle L, Barrière P. Prospective, randomized comparison between pulsatile GnRH therapy and combined gonadotropin (FSH+LH) treatment for ovulation induction in women with hypothalamic amenorrhea and underlying polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 May;168(1):45-8. Epub 2013 Jan 5. PubMed PMID: 23298894.

Duncan WC, Nio-Kobayashi J. Targeting angiogenesis in the pathological ovary. Reprod Fertil Dev. 2013;25(2):362-71. Review. PubMed PMID: 22951108.

Farhi A, Reichman B, Boyko V, Hourvitz A, Ron-El R, Lerner-Geva L. Maternal and neonatal health outcomes following assisted reproduction. Reprod Biomed Online. 2013 May;26(5):454-61. Epub 2013 Jan 30. PubMed PMID: 23518031.

Fenton A, Panay N. Anti-Müllerian hormone - is it a clinically useful test? Climacteric. 2013 Feb;16(1):1-2. PubMed PMID: 23320765.

Gleicher N, Kim A, Weghofer A, Kushnir VA, Shohat-Tal A, Lazzaroni E, Lee HJ, Barad DH. Hypoandrogenism in association with diminished functional ovarian reserve. Hum Reprod. 2013 Apr;28(4):1084-91. Epub 2013 Feb 20. PubMed PMID: 23427231.

Grynberg M, El Hachem H, de Bantel A, Benard J, le Parco S, Fanchin R. In vitro maturation of oocytes: uncommon indications. Fertil Steril. 2013 Apr;99(5):1182-8. Epub 2013 Feb 4. Review. PubMed PMID: 23380185.

Guzman L, Adriaenssens T, Ortega-Hrepich C, Albuz FK, Mateizel I, Devroey P, De Vos M, Smitz J. Human antral follicles <6 mm: a comparison between in vivo maturation and in vitro maturation in non-hCG primed

cycles using cumulus cell gene expression. Mol Hum Reprod. 2013 Jan;19(1):7-16. Epub 2012 Sep 6. PubMed PMID: 22956770.

Guzman L, Ortega-Hrepich C, Polyzos NP, Anckaert E, Verheyen G, Coucke W, Devroey P, Tournaye H, Smitz J, De Vos M. A prediction model to select PCOS patients suitable for IVM treatment based on anti-Mullerian hormone and antral follicle count. Hum Reprod. 2013 May;28(5):1261-6. Epub 2013 Feb 20. PubMed PMID: 23427238.

Homburg R, Ray A, Bhide P, Gudi A, Shah A, Timms P, Grayson K. The relationship of serum anti-Mullerian hormone with polycystic ovarian morphology and polycystic ovary syndrome: a prospective cohort study. Hum Reprod. 2013 Apr;28(4):1077-83. Epub 2013 Feb 1. PubMed PMID: 23377771.

Ismail MT, Hassanin MZ, Elshmaa NS. Preincisional infiltration and intraperitoneal instillation of levobupivacaine 0.25% for management of early postoperative pain following laparoscopic ovarian drilling. J Obstet Gynaecol Res. 2013 Feb;39(2):543-8. Epub 2012 Aug 26. PubMed PMID: 22925421.

Karuputhula NB, Chattopadhyay R, Chakravarty B, Chaudhury K. Oxidative status in granulosa cells of infertile women undergoing IVF. Syst Biol Reprod Med. 2013 Apr;59(2):91-8. Epub 2013 Jan 2. PubMed PMID: 23278116.

Khalaf M, Morera J, Bourret A, Reznik Y, Denoual C, Herlicoviez M, Mittre H, Benhaim A. BMP system expression in GCs from polycystic ovary syndrome women and the in vitro effects of BMP4, BMP6, and BMP7 on GC steroidogenesis. Eur J Endocrinol. 2013 Feb 20;168(3):437-44. Print 2013 Mar. PubMed PMID: 23243014.

Kim MK, Park EA, Kim HJ, Choi WY, Cho JH, Lee WS, Cha KY, Kim YS, Lee DR, Yoon TK. Does supplementation of in-vitro culture medium with melatonin improve IVF outcome in PCOS? Reprod Biomed Online. 2013 Jan;26(1):22-9. Epub 2012 Oct 12. PubMed PMID: 23177415.

King SM, Modi DA, Eddie SL, Burdette JE. Insulin and insulin-like growth factor signaling increases proliferation and hyperplasia of the ovarian surface epithelium and decreases follicular integrity through upregulation of the PI3-kinase pathway. J Ovarian Res. 2013 Feb 7;6(1):12. PubMed PMID: 23388061; PubMed Central PMCID: PMC3724505.

Kumar P, Nawani N, Malhotra N, Malhotra J, Patil M, Jayakrishnan K, Kar S, Jirge PR, Mahajan N. Assisted reproduction in polycystic ovarian disease: A multicentric trial in India. J Hum Reprod Sci. 2013 Jan;6(1):49-53. PubMed PMID: 23869152; PubMed Central PMCID: PMC3713578.

Light A, Hammes SR. Membrane receptor cross talk in steroidogenesis: recent insights and clinical implications. Steroids. 2013 Jun;78(6):633-8. Epub 2013 Feb 1. PubMed PMID: 23380369.

Lujan ME, Jarrett BY, Brooks ED, Reines JK, Peppin AK, Muhn N, Haider E, Pierson RA, Chizen DR. Updated ultrasound criteria for polycystic ovary syndrome: reliable thresholds for elevated follicle population and ovarian volume. Hum Reprod. 2013 May;28(5):1361-8. Epub 2013 Mar 15. PubMed PMID: 23503943.

Misso ML, Costello MF, Garrubba M, Wong J, Hart R, Rombauts L, Melder AM, Norman RJ, Teede HJ. Metformin versus clomiphene citrate for infertility in non-obese women with polycystic ovary syndrome: a

systematic review and meta-analysis. Hum Reprod Update. 2013 Jan-Feb;19(1):2-11. Epub 2012 Sep 6. PubMed PMID: 22956412.

Palomba S, Falbo A, La Sala GB. Effects of metformin in women with polycystic ovary syndrome treated with gonadotrophins for in vitro fertilisation and intracytoplasmic sperm injection cycles: a systematic review and meta-analysis of randomised controlled trials. BJOG. 2013 Feb;120(3):267-76. Epub 2012 Nov 30. Review. PubMed PMID: 23194199.

Paradisi R, Fabbri R, Battaglia C, Venturoli S. Ovulatory effects of flutamide in the polycystic ovary syndrome. Gynecol Endocrinol. 2013 Apr;29(4):391-5. Epub 2013 Jan 18. PubMed PMID: 23327685.

Peluso JJ. Progesterone receptor membrane component 1 and its role in ovarian follicle growth. Front Neurosci. 2013 Jun 13;7:99. PubMed PMID: 23781168; PubMed Central PMCID: PMC3680780.

Şahin N, Toylu A, Gülekli B, Doğan E, Kovali M, Atabey N. The levels of hepatocyte growth factor in serum and follicular fluid and the expression of c-Met in granulosa cells in patients with polycystic ovary syndrome. Fertil Steril. 2013 Jan;99(1):264-9. Epub 2012 Oct 1. PubMed PMID: 23036804.

Salah IM. Office microlaparoscopic ovarian drilling (OMLOD) versus conventional laparoscopic ovarian drilling (LOD) for women with polycystic ovary syndrome. Arch Gynecol Obstet. 2013 Feb;287(2):361-7. Epub 2012 Sep 1. PubMed PMID: 22941326.

Sun X, Zhang D, Zhang W. Effect of metformin on ovulation and reproductive outcomes in women with polycystic ovary syndrome: a meta-analysis of randomized controlled trials. Arch Gynecol Obstet. 2013 Aug;288(2):423-30. Epub 2013 Feb 21. PubMed PMID: 23430028.

Tang T, Balen AH. Use of metformin for women with polycystic ovary syndrome. Hum Reprod Update. 2013 Jan-Feb;19(1):1. Epub 2012 Oct 31. PubMed PMID: 23114640.

Tannus S, Weissman A, Boaz M, Horowitz E, Ravhon A, Golan A, Levran D. The effect of delayed initiation of gonadotropin-releasing hormone antagonist in a flexible protocol on in vitro fertilization outcome. Fertil Steril. 2013 Mar 1;99(3):725-30. Epub 2012 Dec 7. PubMed PMID: 23219008.

Vitek WS, Witmyer J, Carson SA, Robins JC. Estrogen-suppressed in vitro maturation: a novel approach to in vitro maturation. Fertil Steril. 2013 Jun;99(7):1886-90. Epub 2013 Mar 18. PubMed PMID: 23517862.

Vosnakis C, Georgopoulos NA, Rousso D, Mavromatidis G, Katsikis I, Roupas ND, Mamali I, Panidis D. Diet, physical exercise and Orlistat administration increase serum anti-Müllerian hormone (AMH) levels in women with polycystic ovary syndrome (PCOS). Gynecol Endocrinol. 2013 Mar;29(3):242-5. Epub 2012 Nov 30. PubMed PMID: 23194076.

Wu D, Kimura F, Takashima A, Shimizu Y, Takebayashi A, Kita N, Zhang G, Murakami T. Intake of vinegar beverage is associated with restoration of ovulatory function in women with polycystic ovary syndrome. Tohoku J Exp Med. 2013;230(1):17-23. PubMed PMID: 23666047.

Xiao J, Chen S, Zhang C, Chang S. Effectiveness of GnRH antagonist in the treatment of patients with polycystic ovary syndrome undergoing IVF: a systematic review and meta analysis. Gynecol Endocrinol. 2013 Mar;29(3):187-91. Epub 2012 Nov 30. Review. PubMed PMID: 23194095.

PCOS – Phenotypic Variation

Ezeh U, Yildiz BO, Azziz R. Referral bias in defining the phenotype and prevalence of obesity in polycystic ovary syndrome. J Clin Endocrinol Metab. 2013 Jun;98(6):E1088-96. Epub 2013 Mar 28. PubMed PMID: 23539721; PubMed Central PMCID: PMC3667270.

Hampton T. NIH panel: Name change, new priorities advised for polycystic ovary syndrome. JAMA. 2013 Mar 6;309(9):863. PubMed PMID: 23462765.

Kozakowski J, Zgliczyński W. Body composition, glucose metabolism markers and serum androgens - association in women with polycystic ovary syndrome. Endokrynol Pol. 2013;64(2):94-100. PubMed PMID: 23653271.

Mehta J, Kamdar V, Dumesic D. Phenotypic expression of polycystic ovary syndrome in South asian women. Obstet Gynecol Surv. 2013 Mar;68(3):228-34. PubMed PMID: 23945839.

Moghetti P, Tosi F, Bonin C, Di Sarra D, Fiers T, Kaufman JM, Giagulli VA, Signori C, Zambotti F, Dall'Alda M, Spiazzi G, Zanolin ME, Bonora E. Divergences in insulin resistance between the different phenotypes of the polycystic ovary syndrome. J Clin Endocrinol Metab. 2013 Apr;98(4):E628-37. Epub 2013 Mar 8. PubMed PMID: 23476073.

Ning N, Balen A, Brezina PR, Leong M, Shoham Z, Wallach EE, Zhao Y. How to recognize PCOS: results of a web-based survey at IVF-worldwide.com. Reprod Biomed Online. 2013 May;26(5):500-5. Epub 2013 Jan 26. PubMed PMID: 23419796.

Panidis D, Tziomalos K, Chatzis P, Papadakis E, Delkos D, Tsourdi EA, Kandaraki EA, Katsikis I. Association between menstrual cycle irregularities and endocrine and metabolic characteristics of the polycystic ovary syndrome. Eur J Endocrinol. 2013 Jan 17;168(2):145-52. Print 2013 Feb. PubMed PMID: 23109645.

Qiao J. Pay more attention to ethnic differences in polycystic ovary syndrome phenotypic expression. Chin Med J (Engl). 2013;126(11):2003-6. PubMed PMID: 23769547.

Ramanand SJ, Ghongane BB, Ramanand JB, Patwardhan MH, Ghanghas RR, Jain SS. Clinical characteristics of polycystic ovary syndrome in Indian women. Indian J Endocrinol Metab. 2013 Jan;17(1):138-45. PubMed PMID: 23776867; PubMed Central PMCID: PMC3659881.

Sirdah MM, Abushahla AK, Ghalayeni BY, Aburamadan AG. Etiological risk factors for subfertility among Palestinian women in Gaza. J Biomed Res. 2013 Mar;27(2):127-34. Epub 2013 Jan 30. PubMed PMID: 23554803; PubMed Central PMCID: PMC3602870.

Yasmin E, Balen AH, Barth JH. The association of body mass index and biochemical hyperandrogenaemia in women with and without polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Feb;166(2):173-7. Epub 2012 Oct 23. PubMed PMID: 23102586.

Zhang HY, Guo CX, Zhu FF, Qu PP, Lin WJ, Xiong J. Clinical characteristics, metabolic features, and phenotype of Chinese women with polycystic ovary syndrome: a large-scale case-control study. Arch Gynecol Obstet. 2013 Mar;287(3):525-31. Epub 2012 Oct 30. PubMed PMID: 23108387.

PCOS – Pregnancy Complications

Boutzios G, Livadas S, Piperi C, Vitoratos N, Adamopoulos C, Hassiakos D, Iavazzo C, Diamanti-Kandarakis E. Polycystic ovary syndrome offspring display increased oxidative stress markers comparable to gestational diabetes offspring. Fertil Steril. 2013 Mar 1;99(3):943-50. Epub 2012 Nov 29. PubMed PMID: 23200689.

Brodin T, Hadziosmanovic N, Berglund L, Olovsson M, Holte J. Antimüllerian hormone levels are strongly associated with live-birth rates after assisted reproduction. J Clin Endocrinol Metab. 2013 Mar;98(3):1107-14. Epub 2013 Feb 13. PubMed PMID: 23408576.

Capula C, Chiefari E, Vero A, Iiritano S, Arcidiacono B, Puccio L, Pullano V, Foti D, Brunetti A, Vero R. Predictors of postpartum glucose tolerance testing in italian women with gestational diabetes mellitus. ISRN Endocrinol. 2013 Jul 17;2013:182505. PubMed PMID: 23956870; PubMed Central PMCID: PMC3730210.

Chakraborty P, Goswami SK, Rajani S, Sharma S, Kabir SN, Chakravarty B, Jana K. Recurrent pregnancy loss in polycystic ovary syndrome: role of hyperhomocysteinemia and insulin resistance. PLoS One. 2013 May 21;8(5):e64446. Print 2013. PubMed PMID: 23700477; PubMed Central PMCID: PMC3660299.

Galazis N, Docheva N, Nicolaides KH, Atiomo W. Proteomic biomarkers of preterm birth risk in women with polycystic ovary syndrome (PCOS): a systematic review and biomarker database integration. PLoS One. 2013;8(1):e53801. Epub 2013 Jan 29. PubMed PMID: 23382852; PubMed Central PMCID: PMC3558492.

Glueck CJ, Goldenberg N, Pranikoff J, Khan Z, Padda J, Wang P. Effects of metformin-diet intervention before and throughout pregnancy on obstetric and neonatal outcomes in patients with polycystic ovary syndrome. Curr Med Res Opin. 2013 Jan;29(1):55-62. Epub 2012 Dec 12. PubMed PMID: 23205605.

Hong Y, Xie QX, Chen CY, Yang C, Li YZ, Chen DM, Xie MQ. Insulin resistance in first-trimester pregnant women with pre-pregnant glucose tolerance and history of recurrent spontaneous abortion. J Biol Regul Homeost Agents. 2013 Jan-Mar;27(1):225-31. PubMed PMID: 23489701.

Jones BJ, Zöllner J, Haynes S, Cheng F, Dornhorst A. In vitro fertilization treatment influences glucose tolerance in multiple pregnancy. Diabet Med. 2013 Feb;30(2):252-4. PubMed PMID: 22827740.

Kamalanathan S, Sahoo JP, Sathyapalan T. Pregnancy in polycystic ovary syndrome. Indian J Endocrinol Metab. 2013 Jan;17(1):37-43. PubMed PMID: 23776851; PubMed Central PMCID: PMC3659904.

Kazerooni T, Ghaffarpasand F, Asadi N, Dehkhoda Z, Dehghankhalili M, Kazerooni Y. Correlation between thrombophilia and recurrent pregnancy loss in patients with polycystic ovary syndrome: a comparative study. J Chin Med Assoc. 2013 May;76(5):282-8. Epub 2013 Mar 20. PubMed PMID: 23683262.

Maliqueo M, Lara HE, Sánchez F, Echiburú B, Crisosto N, Sir-Petermann T. Placental steroidogenesis in pregnant women with polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Feb;166(2):151-5. Epub 2012 Nov 2. PubMed PMID: 23122578.

Mayama R, Izawa T, Sakai K, Suciu N, Iwashita M. Improvement of insulin sensitivity promotes extravillous trophoblast cell migration stimulated by insulin-like growth factor-I. Endocr J. 2013;60(3):359-68. Epub 2012 Nov 30. PubMed PMID: 23197113.

Purwana IN, Kanasaki H, Oride A, Miyazaki K. Successful pregnancy after the treatment of primary amenorrhea in a patient with non-classical congenital adrenal hyperplasia. J Obstet Gynaecol Res. 2013 Jan;39(1):406-9. Epub 2012 Jun 4. PubMed PMID: 22672538.

Sahmay S, Guralp O, Aydogan B, Cepni I, Oral E, Irez T. Anti-Müllerian hormone and polycystic ovary syndrome: assessment of the clinical pregnancy rates in in-vitro fertilization patients. Gynecol Endocrinol. 2013 May;29(5):440-3. Epub 2013 Mar 6. PubMed PMID: 23461296.

Sella T, Shalev V, Elchalal U, Chovel-Sella A, Chodick G. Screening for gestational diabetes in the 21st century: a population-based cohort study in Israel. J Matern Fetal Neonatal Med. 2013 Mar;26(4):412-6. Epub 2012 Oct 30. PubMed PMID: 23035769.

Skvarca A, Tomazic M, Blagus R, Krhin B, Janez A. Adiponectin/leptin ratio and insulin resistance in pregnancy. J Int Med Res. 2013 Feb;41(1):123-8. Epub 2013 Jan 23. PubMed PMID: 23569137.

Thomopoulos C, Tsioufis C, Michalopoulou H, Makris T, Papademetriou V, Stefanadis C. Assisted reproductive technology and pregnancy-related hypertensive complications: a systematic review. J Hum Hypertens. 2013 Mar;27(3):148-57. Epub 2012 Apr 12. Review. PubMed PMID: 22495105.

PCOS – Protocol Reviews

None.

PCOS – Psychology

Açmaz G, Albayrak E, Acmaz B, Başer M, Soyak M, Zararsız G, Ipekmüderris I. Level of Anxiety, Depression, Self-Esteem, Social Anxiety, and Quality of Life among the Women with Polycystic Ovary Syndrome. ScientificWorldJournal. 2013 Jul 9;2013:851815. Print 2013. PubMed PMID: 23935436; PubMed Central PMCID: PMC3725786.

Annagür BB, Tazegül A, Uguz F, Kerimoglu ÖS, Tekinarslan E, Celik Ç. Biological correlates of major depression and generalized anxiety disorder in women with polycystic ovary syndrome. J Psychosom Res. 2013 Mar;74(3):244-7. Epub 2013 Jan 23. PubMed PMID: 23438716.

Ercan CM, Coksuer H, Aydogan U, Alanbay I, Keskin U, Karasahin KE, Baser I. Sexual dysfunction assessment and hormonal correlations in patients with polycystic ovary syndrome. Int J Impot Res. 2013 Jul;25(4):127-32. Epub 2013 Feb 14. PubMed PMID: 23407282.

Ferraresi SR, Lara LA, Reis RM, Rosa e Silva AC. Changes in sexual function among women with polycystic ovary syndrome: a pilot study. J Sex Med. 2013 Feb;10(2):467-73. Epub 2012 Dec 4. PubMed PMID: 23210985.

Gugatschka M, Lichtenwagner S, Schwetz V, Lerchbaum E, Graupp M, Gerstenberger C, Kiesler K, Obermayer-Pietsch B, Friedrich G. Subjective and objective vocal parameters in women with polycystic ovary syndrome. J Voice. 2013 Jan;27(1):98-100. Epub 2012 Nov 15. PubMed PMID: 23159022.

Hoirisch-Clapauch S, Nardi AE. Psychiatric remission with warfarin: Should psychosis be addressed as plasminogen activator imbalance? Med Hypotheses. 2013 Feb;80(2):137-41. Epub 2012 Dec 2. PubMed PMID: 23211375.

Kozica SL, Gibson-Helm ME, Teede HJ, Moran LJ. Assessing Self-efficacy and Self-help Methods in Women with and without Polycystic Ovary Syndrome. Behav Med. 2013;39(3):90-6. PubMed PMID: 23930901.

Milsom SR, Nair SM, Ogilvie CM, Stewart JM, Merry SN. Polycystic ovary syndrome and depression in New Zealand adolescents. J Pediatr Adolesc Gynecol. 2013 Jun;26(3):142-7. Epub 2013 Feb 26. PubMed PMID: 23452749.

Rellini AH, Stratton N, Tonani S, Santamaria V, Brambilla E, Nappi RE. Differences in sexual desire between women with clinical versus biochemical signs of hyperandrogenism in polycystic ovarian syndrome. Horm Behav. 2013 Jan;63(1):65-71. Epub 2012 Nov 2. PubMed PMID: 23127604.

PCOS – Thyroid Complications

Artini PG, Uccelli A, Papini F, Simi G, Di Berardino OM, Ruggiero M, Cela V. Infertility and pregnancy loss in euthyroid women with thyroid autoimmunity. Gynecol Endocrinol. 2013 Jan;29(1):36-41. Epub 2012 Jul 27. Review. PubMed PMID: 22835333.

Benetti-Pinto CL, Berini Piccolo VR, Garmes HM, Teatin Juliato CR. Subclinical hypothyroidism in young women with polycystic ovary syndrome: an analysis of clinical, hormonal, and metabolic parameters. Fertil Steril. 2013 Feb;99(2):588-92. Epub 2012 Oct 25. PubMed PMID: 23103018.

Garelli S, Masiero S, Plebani M, Chen S, Furmaniak J, Armanini D, Betterle C. High prevalence of chronic thyroiditis in patients with polycystic ovary syndrome. Eur J Obstet Gynecol Reprod Biol. 2013 Jul;169(2):248-51. Epub 2013 Mar 31. PubMed PMID: 23548659.

Katulande P, Kariyawasam SS, Senanayake HM, Weerakkodi M. Multicystic ovaries and pituitary pseudo-adenoma associated with primary hypothyroidism. J Obstet Gynaecol. 2013 Jan;33(1):17-9. PubMed PMID: 23259871.

PCOS – Uterus

Vélez LM, Abruzzese GA, Motta AB. The biology of the peroxisome proliferator-activated receptor system in the female reproductive tract. Curr Pharm Des. 2013;19(25):4641-6. PubMed PMID: 23565653.

Premature Adrenarche

Corvalán C, Uauy R, Mericq V. Obesity is positively associated with dehydroepiandrosterone sulfate concentrations at 7 y in Chilean children of normal birth weight. Am J Clin Nutr. 2013 Feb;97(2):318-25.

DeSalvo DJ, Mehra R, Vaidyanathan P, Kaplowitz PB. In children with premature adrenarche, bone age advancement by 2 or more years is common and generally benign. J Pediatr Endocrinol Metab. 2013;26(3-4):215-21

Lavery GG, Idkowiak J, Sherlock M, Bujalska I, Ride JP, Saqib K, Hartmann MF, Hughes B, Wudy SA, De Schepper J, Arlt W, Krone N, Shackleton CH, Walker EA, Stewart PM. Novel H6PDH mutations in two girls with premature adrenarche: 'apparent' and 'true' CRD can be differentiated by urinary steroid profiling. Eur J Endocrinol. 2013 Feb 1;168(2):K19-26.

Brief summaries of selected publications

Congenital Adrenal Hyperplasia and Disorders of Steroidogenesis

Comment:

4. **Gleeson H, Davis J, Jones J, O'Shea E, Clayton PE. The challenge of delivering endocrine care and successful transition to adult services in adolescents with congenital adrenal hyperplasia: experience in a single centre over 18 years. Clin Endocrinol (Oxf). 2013 Jan;78(1):23-8.**
5. **Downing J, Gleeson HK, Clayton PE, Davis JR, Wales JK, Callery P. Transition in endocrinology: the challenge of maintaining continuity. Clin Endocrinol (Oxf). 2013 Jan;78(1):29-35.**
6. **Krone N, Rose IT, Willis DS, Hodson J, Wild SH, Doherty EJ, Hahner S, Parajes S, Stimson RH, Han TS, Carroll PV, Conway GS, Walker BR, MacDonald F, Ross RJ, Arlt W; United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE). Genotype-phenotype correlation in 153 adult patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency: analysis of the United Kingdom Congenital adrenal Hyperplasia Adult Study Executive (CaHASE) cohort. J Clin Endocrinol Metab. 2013 Feb;98(2):E346-54.**

Congenital adrenal hyperplasia (CAH) is an autosomal recessive disorder that requires life-long contact with health care professionals. The challenges of organizing and ensuing successful transitions for patients from pediatric to adult care are increasingly recognized. A recent study in the UK [Arlt W, et al., Health status of adults with congenital adrenal hyperplasia: a cohort study of 203 patients. United Kingdom Congenital Adrenal Hyperplasia Adult Study Executive (CaHASE).J Clin Endocrinol Metab. 2010;95:5110-21] suggested that most adult patients with CAH are not seeking or receiving medical services. Gleeson and colleagues [refs #1 and 2 in this section] provide information on 53 patients (57% women) with CAH from a single center in the UK. The subjects were aged 17-20 years at the time of transition. In this audit, Gleeson et al [ref #1, 2 in this section] noted that 50% of patients with CAH had poor biochemical control and/or adverse clinical consequences. Further, 50% of those transferred to an adult specialist were lost of follow-up. Glitches in the process of transferring care from pediatric to adult health care providers negatively impacts medical care, decreases quality of life, and increases risks for potentially avoidable consequences of CAH. Krone and colleagues [ref #3 in this section] concluded that the patient's genotype did not correlate well with the current health status. Rather steroid dose and health provision were the major factors influencing current health status. These papers emphasize the relevance and importance of adequate planning for transition of emerging adults with chronic health disorders to adult care.

PCOS – Metabolic Dysfunction/Cardiovascular Disease/Inflammation

Bird ST, Hartzema AG, Brophy JM, Etminan M, Delaney JA. Risk of venous thromboembolism in women with polycystic ovary syndrome: a population-based matched cohort analysis. CMAJ. 2013;185(2):E115-20.

These authors questioned whether there is an additional risk among women with polycystic ovary syndrome. They thus developed a population-based cohort from the IMS LifeLink Health Plan Claims Database which includes managed care organizations in the United States. Women aged 18-46 years taking combined oral

contraceptives and who had a diagnosis of PCOS (n = 43,506) were matched, based on a propensity score, to control women (n = 43 506) taking oral contraceptives. The definition of venous thromboembolism was based on administrative coding and use of anticoagulation and Cox proportional hazards model was used to assess the relative risk. The incidence of venous thromboembolism among women with PCOS was 23.7/10,000 person-years, while that for matched controls was 10.9/10,000 person-years. Women with PCOS taking combined oral contraceptives had an RR for venous thromboembolism of 2.14 (95% confidence interval [CI] 1.41-3.24) compared with other contraceptive users. The incidence of venous thromboembolism was 6.3/10 000 person-years among women with PCOS not taking oral contraceptives; the incidence was 4.1/10 000 person-years among matched controls. The RR of venous thromboembolism among women with PCOS not taking oral contraceptives was 1.55 (95% CI 1.10-2.19). They concluded that there was a 2-fold increased risk of venous thromboembolism among women with PCOS who were taking combined oral contraceptives and a 1.5-fold increased risk among women with PCOS not taking oral contraceptives.

PCOS – Ovary

Palomba S, Falbo A, La Sala GB. Effects of metformin in women with polycystic ovary syndrome treated with gonadotrophins for in vitro fertilisation and intracytoplasmic sperm injection cycles: a systematic review and meta-analysis of randomised controlled trials. BJOG. 2013 Feb;120(3):267-76.

This metanalysis by Palomba et al provides more insight, and produces more questions, on the effects of metformin treatment when providing IVF care to infertile PCOS patients. The metanalysis contained 10 RCTs, significantly more than previous metanalyses, resulting in a total of over 900 subjects. They confirm previous findings of significantly lower OHSS rates with metformin treatment. Of greater interest, however, are higher embryo implantation rates and lower miscarriage rates when metformin is used, particularly with standard dosing and when given long-term. Live birth rates are not different with metformin administration. When the authors removed one study from the analysis, however, specifically evaluating PCOS patients with diminished ovarian reserve, metformin treatment increased the live birth rate. Clinicians are increasingly using metformin in PCOS patients undergoing IVF. This treatment certainly requires more study to confirm its benefit.