

References

- Abott D.H, Dumesic D.A & Franks S (2002):** Developmental origin of polycystic ovary syndrome: a hypothesis. *Journal of Endocrinology*, 174: 1-5.
- Abott D.H, Dumestic D.A, Eisner J.R, Colman R.J & Kemnitz J.W (1998):** Insights into the development of PCOS from studies of prenatally androgenized female rhesus monkeys. *Trends of Endocrinology and Metabolism*; 9: 62-67
- Abraham GE, Maroulis GB & Marshall JR (1979):** Evaluation of ovulation and corpus luteum function using measurements of plasma progesterone. *Obstet Gynecol*; 44:522.
- Achard C & Thiers J (1921):** Le virilisme pileaire et son association a L'insuffisance glucolytique (diabetes des femmes a barb). *Bulletin of the Academy of National Medicine*, 86, 51-64. Quoted from Dunaif, A. (1997): Insulin resistance and the polycystic ovary syndrome: mechanism and implications for pathogenesis. *Endocrine Reviews*, 18(6): 774-800.
- Adashi EY & Rock JR (1981):** Fertility following bilateral ovarian wedge resection: a critical analysis of 90 consecutive cases of PCOS. *Fertil Steril*; 36: 320-325.
- Almahbobi G, Anderiesz C, Hutchinson P, et al., (1996):** Functional integrity of granulosa cells from polycystic ovaries. *Clinical Endocrinology*, 44; 571-580.

- American Diabetes Association (1997):** Clinical practice recommendations Diabetes Care 20(suppl 1): S1-S70.
- Amin E, El-Sayed MM, El-Gamel BA, et al., (1980):** Comparative study of the effect of oral contraceptives containing 50 µg of estrogen on adrenal cortical function. Am J Obstet Gynecol; 137: 831-833.
- Andersen P, Seljeflot I, Abdelnoor M, et al., (1995):** Increased insulin sensitivity and fibrinolytic capacity after dietary intervention in obese women with polycystic ovary syndrome. Metabolism: Clinical and Experimental; 44: 611-616.
- Apter D, Butzow T, Laughlin G.A & Yen S.S (1994):** Accelerated 24-hour luteinizing hormone pulsatile activity in adolescent girls with ovarian hyperandrogenism: relevance to the developmental phase of polycystic ovarian syndrome. Journal of Clinical Endocrinology and Metabolism; 79: 119-125.
- Atiomo WU, Bates SA, Condon JE, et al., (1998):** The plasminogen activator system in women with polycystic ovary syndrome. Fertil Steril; 69: 236-241.
- Azziz R, Dewailly D & Owerbach D (1994):** Clinical review 56: Nonclassic adrenal hyperplasia: current concepts. J Clin Endocrinol Meab; 78: 810-815.
- Azziz R, Ehrman D, Legro RS, et al., (2001a):** Troglitazone improves ovulation and hirsutism in the polycystic ovary syndrome, a multi-center double blind, placebo-controlled trial. J. Clin. Endocrinol. Metab; 86: 1626.

- Azziz R, Ehrmann D, Legro RS, et al., (2001b):** PCOS/ Troglitazone Study Group. Troglitazone improves ovulation and hirsutism in the polycystic ovary syndrome: a multicenter, and hirsutism in the polycystic ovary syndrome: a multicenter, double blind, placebo controlled trial. *J Clin endocrinol Metab*; 86: 1626-1632.
- Bach L.A (1999):** The insulin-like growth factors system: basic and clinical aspects. *Australian and New Zealand Journal of Medicine*; 29: 355-361.
- Balen A.H, Conway G.S, Kaltsas G, et al., (1995):** Polycystic ovary syndrome: the spectrum of the disorder in 1741 patients. *Human Reproduction*; 10: 2107-2111.
- Balen A (2001):** Polycystic ovary syndrome and cancer. *Hum Reprod Update*; 7: 522-525.
- Barnes R.B, Rosenfield R.L, Burstein S & Ehrmann D.A (1989):** Pituitary-ovarian responses to nafarelin testing in the polycystic ovary syndrome. *New England Journal of Medicine*; 320: 559-565.
- Barth JH & Clark S (2003):** Acne and hirsuties in teenagers. *Best Pract Res. Clin. Obstet. Gynecol.*; 17: 131-148.
- Berga SL & Yen S.S (1998):** Opioidergic regulation of LH pulsatility in women with polycystic ovary syndrome. *Clinical Endocrinology*; 30: 177-184.
- Bergh C, Carlsson B, Olsson J.H, et al., (1993):** Regulation of androgen production in cultured human thecal cells by insulin-like growth factor I and insulin. *Fertility and Sterility*; 59: 323-331.

- Biffignandi P, Massuchetti C & Molinetti GM (1984):** Female hirsutism: pathophysiological considerations and therapeutic options. *Endocr Rev*; 498-513.
- Birdsall M.A, Farquhar C.M & White H.D (1997):** Association between polycystic ovaries and extent of coronary artery disease in women having cardiac catheterization. *Annals of International Medicine*; 126: 32-35.
- Bracero N & Zacur HA (2001):** Polycystic ovary syndrome and hyperprolactinemia. *Obstet gynecol Clin North Am*; 28: 77-84.
- Branigan EF & Estes MA (2003):** A randomized trial of treatment of clomiphene citrate-resistant anovulation with the use of oral contraceptive pill suppression and repeat clomiphene citrate treatments. *Am J Obstet Gynecol*; 188: 1924.
- Burghen GA, Givens JR & Kitabchi AE (1980):** Correlation of hyperandrogenism with hyperinsulinism in polycystic ovarian disease. *J Clin Endocrinol Metab*. Jan; 50(1): 113- 6.
- Buyaloso RP & Lee CT (1996):** Polycystic ovary syndrome: Pathophysiology and outcome with in vitro fertilization. *Fertil Steril*; 65:1.
- Calaf-Alsina J, Rodriguez-Espinosa J, Cabero-Roura A, et al., (1987):** Effects of cyproterone-containing oral contraceptive on hormonal levels in polycystic ovarian disease. *Obstet Gynecol*; 69: 255-258.
- Campbell PJ & Gerich JE (1990):** Impact changes and clinical outcome after laparoscopic ovarian resection in patients with PCOS. *Human reprod*; 8: 359-363.

- Cara J.F, Fan J, Azzarello J & Rosenfield R.L (1990):** Insulin like growth factor-1 enhances luteinizing hormone binding to rat ovarian theca-interstitial cells. *Journal of Clinical Investigation*; 86: 560-565.
- Carmina E, Legro RS, Stamets K, Lowell J & Lobo RA (2003):** Difference in body weight between American and Italian women with polycystic ovary syndrome: influence of the diet. *Hum Reprod*; 18: 2289-2293.
- Centers of Disease Control & Prevention (2000):** contribution of assisted reproductive technology and ovulation-inducing drugs to triplet and higher order multiple births-United States, 1980-97. *MMWR*; 49: 535.
- Cesare Battaglia MD, Paolo G, Arliniv D, et al., (1995):** The role of color Doppler imaging in the diagnosis of polycystic ovarian syndrome. *Am J Obstet Gynecol*; 172: 108-13.
- Chen X, Yang D, Li L, Feng S & Wang L (2006):** Abnormal glucose tolerance in Chinese women with polycystic ovary syndrome. *Hum Reprod*; 21(8): 2027-32.
- Cheung A.P., Lu J.K. & Chang R.J (1997):** Pulsatile gonadotrophin secretion in women with polycystic ovary syndrome after gonadotrophin releasing hormone agonist treatment. *Human Reproduction*, 12, 1156-1164.
- Chin D, Shackleton C, Prasad V.K, et al., (2000):** Increased 5alpha reductase and normal 11beta-hydroxysteroid dehydrogenase metabolism of C19 and C21 steroids in a young population with polycystic ovarian syndrome. *Journal of Pediatric Endocrinology and Metabolism*, 13, 253-259.

- Christian RC, Dumesic DA, Behrenbeck T, et al., (2003):** Prevalence and predictors of coronary artery clarification in women with polycystic ovary syndrome. *J Clin Endocrinol Metab*; 88: 2562-2568.
- Christman G.M, Randolph J.F, Kelch R.P & Marshall J.C (1991):** Reduction of gonadotropin-releasing hormone pulse frequency is associated with subsequent selective follicle-stimulating hormone secretion in women with polycystic ovarian disease. *Journal of Clinical Endocrinology and Metabolism*; 72: 1278-1285.
- Ciotta L, Cianci A & Cologen AE (1995):** Clinical and endocrine effects of finasteride, 5 α -reductase inhibitor, in women with idiopathic hirsutism. *Fertil Steril*; 64: 299-306.
- Ciotta L, Cianci A & marletta E, et al., (1994):** Treatment of hirsutism with flutamide and a low-damage oral contraceptive in polycystic ovaian disease. *Fertil Steril*; 62: 1129-1135.
- Clark AM, Ledger W, Galletly C, et al., (1995):** Weight loss results in significant improvement in pregnancy and ovulation rates in anovultory obese women. *Hum Reprod*; 10: 2705-2715.
- Clark AM, Thornely B, Timlinson L, Galletley C & Norman RJ (1998):** Weight loss in obese infertile women results in improvement in reproductive outcome for all forms of fertility treatment. *Hum Reprod*; 13: 1502-1511.
- Clark JH & Markaverick BM (1982):** The agonistic-antagonistic properties of clomiphene: a review. *Pharmacol Ther*; 15: 467-478.

- Conn JJ, Jacobs HS & Conway GS (2000):** The prevalence of polycystic ovaries in women with type 2 diabetes mellitus. *Clin Endocrinol (Oxf)*.; 52(1):81-6.
- Conway GS, Avey C & Rumsby G (1994):** The tyrosine kinase domain of the insulin receptor gene is normal in women with hyperinsulinaemia and polycystic ovary syndrome. *Hum Reprod*.; 9(9):1681-3.
- Conway GS, Honour JW & Jacobs HS (1989):** Heterogeneity of the polycystic ovary syndrome: clinical, endocrine and ultrasound features in 556 patients. *Clin Endocrinol (Oxf)*.; 30(4):459-70.
- Conway GS, Jacobs HS, Holly JM & Wass JA (1990):** Effects of luteinizing hormone, insulin, insulin-like growth factor-I and insulin-like growth factor small binding protein 1 in the polycystic ovary syndrome. *Clin Endocrinol (Oxf)*.; 33(5): 593-603.
- Correy JF, Marsden DE & Schokman FC (1982):** The outcome of pregnancy resulting from clomiphene-induced ovulation. *Aust NZ J Obstet Gynecol*; 22: 18.
- Cresswell JL, Barker DJ, Osmond C, Egger P, Phillips DI & Fraser RB (1997):** Fetal growth, length of gestation, and polycystic ovaries in adult life. *Lancet*. 18; 350(9085):1131-5.
- Cunningham SK, Loughin T, Culliton M, et al., (1973):** Plasma sex hormone-binding globulin and androgen levels in the management of hirsute patients. *Acta Endocrinol (Copenh)*.; 104: 365-371.

- Cusan L, Dupont A, Belanger A, et al., (1990):** Treatment of hirsutism with the pure antiandrogen flutamide. *J Am Acad Dermatol*; 23: 462-469.
- Cutfield WS, Jefferies CA, Jackson WE, Robinson EM & Hofman PL. (2003):** Evaluation of HOMA and QUICKI as measures of insulin sensitivity in prepubertal children. *Pediatr Diabetes*; 4(3):119-25.
- Dahlgren E, Janson PO, Johansson S, et al., (1994):** Hemostatic and metabolic variables in women with polycystic ovary syndrome. *Fertil Steril*; 61(3):455-60.
- Dahlgren E, Johansson S, Lindstedt G, et al., (1992):** Women with polycystic ovary syndrome wedge resected in 1956 to 1965: a long-term follow up focusing on natural history and circulating hormones. *Fertil Steril*; 57(3):505-13.
- Daly DC, Walters CA, Soto-Albers CE, et al., (1984):** A randomized study of dexamethasone in ovulation induction with clomiphene citrate. *Fertil Steril*; 41: 844.
- David A & Ehrmann, M.D (2005):** Polycystic Ovary Syndrome. *N Engl J Med*; 352: 1223-36.
- De Leo V, Fulghesu AM, La Marea A, et al., (2000):** Hormonal and clinical effects of GnRH agonists alone, or in combination with a combined oral contraceptive or flutamide in women with severe hirsutism. *Gynecol Endocrinol*; 14: 411.
- De Waart MJ (1987):** Pelvic adhesions following microsurgical wedge resection compared to laparoscopic electrocoagulation of the rabbit ovaries. *Infertility*; 10: 33-39.

- Derksen J, Negesser SK, Meinders AE, Haak HR & van de Velde CJ. (1994):** Identification of virilizing adrenal tumors in hirsute women. *N. Engl. J. Med*; 331: 968-973.
- DeUgarte M, Brtolucci Alfred A. & Azziz R (2005):** Prevalence of insulin resistance in the polycystic ovary syndrome using homeostasis model assessment. *Fertil Steril*; 83: 1454-1460.
- Diabetes Prevention Program Research Council (2002):** Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N. Engl. J. Med*; 346-393.
- Diamanti-Kandarakis E, Baillargeon JP, Iuorno MJ, Jakubowicz DJ & Nestler JE. (2003):** A modern medical quandary: polycystic ovary syndrome, insulin resistance, and oral contraceptive pills. *J Clin Endocrinol Metab*; 88(5):1927-32.
- Diamanti-Kandarakis E., Mitrakou A., Hennes M.M., et al., (1995):** Insulin sensitivity and antiandrogenic therapy in women with polycystic ovary syndrome. *Metabolism: Clinical and Experimental*; 44: 525-531.
- Diamanti-Kandarakis E., Mitrakou A., Raptis S., Tolis G. & Duleba A.J. (1998):** The effect of a pure antiandrogen receptor blocker, flutamide, on the lipid profile in the polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*; 83: 2699-2705.
- Dickey RP & Pyrzak R (2002):** Prevention of high order multiple pregnancy. *Hum Reprod*; 17: 1411.

- Dickey RP, Taylor SN, Curole DN, et al., (1997):** Relationship of clomiphene dose and patient weight to successful treatment. Hum Reprod; 12: 449.
- Dimanti-Kandarakis E., Spina G., Kouli C & Migdalis I. (2001):** Increased endothelin-1 levels in women with polycystic ovary syndrome and the beneficial effect of metformin therapy. Journal of Clinical Endocrinology and Metabolism; 86: 4666-4673.
- Duanif A, Hoffman AR, Scully RE, Flier JS, Longcope C, Levy LJ & Crowley JR WF (1985):** The clinical, biochemical and ovarian morphologic features in women with acanthosis nigricans and masculinization. Obstet. Gynecol. 66: 545-525.
- Duanif A., Graf, M., Mandeli, J., Laumas, V. & Dobrjansky, A (1987):** Characterization of groups of hyperandrogenic women with acanthosis nigricans, impaired glucose tolerance, and/or hyperinsulinemia. Journal of Clinical Endocrinology and Metabolism, 65, 499-507.
- Duanif A., Segal, K.R., Futterweit, W. & Dobrjansky, A (1989):** Profound peripheral insulin resistance, independent of obesity, in polycystic ovary syndrome. Diabetes, 38, 1165-1174.
- Duanif A., Green, G., Futterweit, W. & Dobrjansky, A (1990):** Suppression of hyperandrogenism does not improve peripheral or hepatic insulin resistance in the polycystic ovary syndrome. Journal of Clinical Endocrinology and Metabolism, 70, 699-704.
- Duanif A (1992):** Insulin resistance and ovarian hyperandrogenism. The Endocrinologist 2:248-260.

- Duanif A (1995):** Hyperandrogenic anovulation (PCOS): a unique disorder of insulin action associated with an increased risk of non-insulin-dependent diabetes mellitus. *American Journal of Medicine*, 98, 33S-39S.
- Duanif A., Scott, D., Finegood, D., Quintana, B. & Whitcomb, R (1996):** The insulin-sensitizing agent troglitazone improves metabolic and reproductive abnormalities in the polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 81, 3299-3306.
- Duanif A (1997):** Insulin resistance and the polycystic ovary syndrome: mechanism and implications for pathogenesis. *Endocrine Reviews*, 18(6): 774-800.
- Duanif A & Thomas A (2001):** Current concepts in the polycystic ovary syndrome. *Annu Rev Med*, 52:401-419.
- Duanif A, Wu X, Lee A & Diamanti-Kandarakis E (2001):** Defects in insulin receptor signaling in vivo in the polycystic ovary syndrome (PCOS). *Am J Physiol Endocrinol Metab*; 281: E392-E399.
- Dumesic D.A, Abbott D.H, Eisner J.R. & Goy R.W (1997):** Prenatal exposure of female rhesus monkeys to testosterone propionate increases serum luteinizing hormone levels in adulthood. *Fertility and Sterility*; 67: 155-163.
- Ecochard R, Marret H, Rabilloud M, et al., (2000):** Sensitivity and specificity of ultrasound indices of ovulation in spontaneous cycles. *Eur J Obstet Gynecol Reprol Biol*; 91: 59-67.

- Ehrmann DA, Barnes RB, Rosenfield RL, Cavaghan MK & Imperial J (1999):** Prevalence of impaired glucose tolerance and diabetes in women with polycystic ovary syndrome. *Diabetes Care*; 22:141-146
- Ehrmann DA, Breda E, Cavaghan MK, et al (2002):** Insulin secretory responses to rising and falling glucose concentrations are delayed in subjects with impaired glucose tolerance. *Diabetologia*; 45:509-517
- Ehrmann DA, Breda E, Corcoran MC, et al (2004):** Impaired beta-cell compensation to dexamethasone-induced hyperglycemia in women with polycystic ovary syndrome. *Am J Physiol Endocrinol Metab*; 287:H241-E246.
- Ehrmann, D.A., Barnes, R.B. & Rosenfield, R.L (1995):** Polycystic ovary syndrome as a form of functional ovarian hyperandrogenism due to dysregulation of androgen secretion. *Endocrine Reviews*, 16, 322-353.
- Ehrmann, D.A., Cavaghan, M.K., Imperial, J., Sturis, J., Rosenfield, R.L. & Polonsky, K.S (1997a):** Effects of metformin on insulin secretion, insulin action, and ovarian steroidogenesis in women with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 82, 524-530.
- Ehrmann, D.A., Rosenfield, R.L., Barnes, R.B., Brigell, D.F. & Sheikh, Z (1992):** Detection of functional ovarian hyperandrogenism in women with androgen excess. *New England Journal of Medicine*, 327, 157-162.

- Ehrmann, D.A., Schneider, D.J., Sobel, B.E., Cavaghan, M.K., Imperial, J., Rosenfield, R.L. & Polonsky, K.S (1997b):** Troglitazone improves defects in insulin action, insulin secretion, ovarian steroidogenesis, and fibrinolysis in women with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 82, 2108-2116.
- Eisner, J.R., Barnett, M.A., Dumesic, D.A. & Abbott, D.H (2002):** Ovarian hyperandrogenism in adult female rhesus monkeys exposed to prenatal androgen excess. *Fertility and Sterility*, 77, 167-172.
- Eisner, J.R., Dumesic, D.A., Kemnitz, J.W. & Abbott, D.H (2000):** Timing of prenatal androgen excess determines differential impairment in insulin secretion and action in adult female rhesus monkeys. *Journal of Clinical Endocrinology and Metabolism*, 85, 1206-1210.
- El-Biely MM & Habba M (2001):** The use of metformin to augment the induction of ovulation in obese infertile patients with polycystic ovary syndrome. *Middle East Fertil Soc J*; 6: 43.
- Ettinger B & Goldtich IM (1977):** Medroxyprogesterone acetate for the evaluation of hypertestosteronism in hirsute women. *Fertil Steril* 28: 1285-1288.
- Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (2001):** Executive Summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *JAMA*; 285:2486-2497

- Felemban A, Tan SL & Tulandi T (2000):** Laparoscopic treatment of polycystic ovary with insulated needle cautery: as rappraisal. *Fertil Steril*; 73: 266-269.
- Felming R, Hopkinson ZE, Wallce AM, Greer IA & Sattar N (2001):** Ovarian function and metabolic factors in women with oligomenorrhea treated with metformin in a randomized double blind placebo-controlled trial. *J Clin Endocrinol Metab*; 87: 569-576.
- Ferriman D, Gallwey JD (1961):** Clinical assessment of body hair growth in women. *J Clin. Endocrinol. Metab*; 21: 1440-7.
- Flier JS, Eastman RC, Miaker KL, Matteson D & Rowe JW (1985):** Acanthosis nigricans in obese women with hyperandrogenism. Characterization of an insulin-resistance state distinct from the Type A and B syndromes. *Diabetes*; 34: 101- 107.
- Fogel RB, Malhotra A, Pillar G, Pittman SD, Dunaif A & White DP (2001):** Increased prevalence of obstructive sleep apnea syndrome in obese women with polycystic ovary syndrome. *J Clin Endocrinol Metab*; 86:1175-1180.
- Franks S (1989):** Polycystic ovary syndrome: a changing perspective. *Clin Endocrinol (Oxf)*; 31:87-120.
- Franks S (1995):** Polycystic ovary syndrome. *N Engl J Med*; 333: 853- 861.
- Gal M, Orky J, Burr I, et al., (1994):** Low dose ketoconazole attenuates serum androgen levels in patients with polycystic ovary syndrome and inhibits ovarian steroidogenesis in vitro. *Fertil Steril*; 61: 823-832.

- Gambineri A, Pelusi C, Vicennati V, Pagotto U, Pasquali R. (2002):** Obesity and the polycystic ovary syndrome. *Int J Obes Relat Metab Disord*;26(7):883-96.
- Garner PR & Poznanski N (1984):** Treatment of severe hirsutism in resulting from hyperandrogenism with the reverse sequential cyproterone acetate regimen. *J Reprod Med*; 29: 232-236.
- Genazzani AD, Petralgia F, Battaglia C, Gamba O, et al., (1997):** A long term treatment with gonadotropin-releasing hormone agonist plus a low-dose oral contraceptive improves the recovery of the ovulatory function in patients with polycystic ovary syndrome. *Fertil Steril*; 67: 463- 71.
- Gharib , S.D., Wierman, M.E., Shupnik, M.A. & Chin, W.W (1990):** Molecular biology of the pituitary gonadotropins. *Endocrine Reviews*, 11, 177-199.
- Glueck CJ, Wang P, Fontaine R, Tracy T, Sieve-Smith L (1999):** Metformin induced resumption of normal menses in 39 of 43 (91%) previously amenorrheic women with the polycystic ovary syndrome. *Metabolism*; 48(4): 511-19.
- Glueck, C.J., Phillips, H., Cameron, D., Sieve-Smith, L. & Wang, P (2001):** Continuing metformin throughout pregnancy in women with polycystic ovary syndrome appears to safely reduce first-trimester spontaneous abortion: a pilot study. *Fertility and Sterility*, 75, 46-52.
- Glueck C.J., Wang, P., Kobayashi, S., Phillips, H. & Sieve-Smith, L. (2002):** Metformin therapy throughout pregnancy reduces the redevelopment of gestational diabetes in women with polycystic ovary syndrome. *Fertility and Sterility*, 77, 520-525.

- Glueck CJ, Moreira A, Goldenberg N, Sieve L & Wang P (2003a):** Pioglitazone and metformin in obese women with polycystic ovary syndrome not optimally responsive to metformin. Hum Reprod; 18: 1618-1622.
- Glueck CJ, Papanna R, Wang P, Goldenberg N & Sieve-Smith L (2003b):** Incidence and treatment of metabolic syndrome in newly referred women with confirmed polycystic ovarian syndrome. Metabolism; 52:908-915.
- Gocial B, Keye WR, Fein SH, & Nardi RV (2000):** Subcutaneously administered repronex in female patients undergoing in vitro fertilization is as effective and well tolerated as intramuscular menotropin treatment. Repronex SG JVF Study Group Steril; 79: 73-86.
- Golan A, Ron-el R, Herman A, Soffer Y, Weinraub Z & Caspi E (1989):** Ovarian hyperstimulation syndrome: an update review. Obstet Gynecol Surv; 44: 430-39.
- Golditch JM & Price VH (1990):** Treatment of hirsutism with cimetidine. Obstet Gynecol; 75: 911-913.
- Goldsland IF, Walton C, Felton C, et al., (1992):** Insulin resistance, secretion and metabolism in users of oral contraceptives. J Clin Metab; 74: 64-70.
- Gopal M, Duntley S, Uhles M & Attarian H (2002):** The role of obesity in the increased prevalence_of_obstructive sleep apnea syndrome in patients with polycystic ovary syndrome. Sleep Med; 3:401-4.
- Graham DJ, Green L, Senior JR & Nourjah P (2003):** Toglitzazone-induced liver failure: a case study. Am J Med; 114: 299.

- Guzick D.S., Wing, R., Smith, D., Berga, S.L. & Winters, S.J (1994):** Endocrine consequences of weight loss in obese, hyperandrogenic, anovulatory women. *Fertility and Sterility*, 61, 598-604.
- Guzick, D.S., Talbott, E.G., Sutton-Tyrrell, K., Herzog, H.C., Kuller, L.H. & Wolfson, S.K. Jr (1996):** Carotid atherosclerosis in women with polycystic ovary syndrome: initial results from a case-control study. *American Journal of Obstetrics and Gynecology*, 174, 1224-1229; discussion 1229-32.
- Gysler M, Marach CM, Mishell DR Jr & Bailey EJ (1982):** A decade's experience with an individualized clomiphene treatment regimen including its effect on the postcoital test. *Fertile Steril*; 37: 161.
- Hacihanefloglu, B., Seyisoglu, H., Karsidag, K., Elter, K., Aksu, F., Yilmaz, T. & Gurol, A.O. (2000):** Influence of insulin resistance on total renin level in normotensive women with polycystic ovary syndrome. *Fertility and Sterility*, 73, 261-265.
- Hammond MJ, Holme JK & Talbent LM (1983):** Factors affecting the pregnancy rate in clomiphene citrate induction of ovulation. *Obstet Gynecol*; 62: 196.
- Hardie, L., Trayhurn, P., Abramovich, D. & Fowler, P. (1997):** Circulating leptin in women: a longitudinal study in the menstrual cycle and during pregnancy. *Clinical Endocrinology*, 47, 101-106.
- Hardiman P, Pillay OC & Ationio W (2003):** Polycystic ovary syndrome and endometrial carcinoma. *Lancet*; 361:1810-1812. [Erratum, *Lancet* 2003; 362:1082.]

- Hayes, F.J., Taylor, A.E., Martin, K.A. & Hall, J.E. (1998):** Use of a gonadotropin releasing hormone antagonist as a physiologic probe in polycystic ovary syndrome: assessment of neuroendocrine and androgen dynamics. *Journal of Clinical Endocrinology and Metabolism*, 83, 2343-2349.
- Heald A, Whitehead S, Anderson S, Cruickshank K, Riste L, Laing I, Rudenski A, Buckler H. (2005):** Screening for insulin resistance in women with polycystic ovarian syndrome. *Gynecol Endocrinol*; 20 (2): 84-91.
- Helfer EL, Miller JL & Rose LI (1988):** Side effects of spironolactone therapy in the hirsute women. *J Clin Endocrinol Metab*; 66: 208-211.
- Hillier, S.G., Yong, E.L., IHingworth, P.J., Baird, D.T., Schwall, R.H. & Mason, A.J (1991):** Effect of recombinant inhibin on androgen synthesis in cultured human thecal cells. *Molecular and Cellular Endocrinology*, 75, R1-R6.
- Hollmann M, Runnebaum B & Gerhard I (1996):** Effects of weight loss on the hormonal profile in obese, infertile women. *Hum Reprod*; 11: 1884-91.
- Holte, J., Bergh, T., Berne, C., Wide, L. & Lithell, H (1995):** Restored insulin sensitivity but persistently increased early insulin secretion* after weight loss in obese women with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 80, 2586-2593.

- Homburg R (2002):** What is polycystic ovarian syndrome? A proposal for a consensus on the definition and diagnosis of polycystic ovarian syndrome. Hum Reprod; 17:2495-2499.
- Homburg R, Eshel A, Armar NA, et al., (1989):** One hundred pregnancies after treatment with pulsatile LHRH: to induce ovulation. Br Med J; 298: 809.
- Horton, R., Pasupulctti, V. & Antonipillai, I (1993):** Androgen induction of steroid 5 alpha-reductase may be mediated via insulin-like growth factor-1. Endocrinology, 133,447-451.
- Hughesdon PEM (1982):** Morphology and Morphogenesis of the Stein-Leventhal ovary and the so-called hyperthecosis. Obstet Gynecol Surv; 37: 59-77.
- Ibanez, L., Potau, N., Francois, I. & de Zegher, F (1998):** Precocious pubarche, hyperinsulinism, and ovarian hyperandrogenism in girls: relation to reduced fetal growth. Journal of Clinical Endocrinology and Metabolism, 83, 3558-3562.
- Ibanez, L., Potau, N., Marcos, M.V. & de Zegher, F (1999):** Exaggerated adrenarche and hyperinsulinism in adolescent girls born small for gestational age. Journal of Clinical Endocrinology and Metabolism, 84, 4739-4741.
- Imani B, Eijkemans MJC, te Velde ER, et al., (1998):** Predictors of patients remaining anovulatory during clomiphene citrate induction of ovulation in normogonadotropic oligomenorrheic infertility. J Clin Endocrinol Metab; 83: 2361-63.

- Imani B, Eijkemans MJ, te Velde ER, Habbema JD & Fauser BC (2002):**
A nomogram to predict the probability of live birth after clomiphene citrate induction of ovulation in normogonadotropic oligoamenorrhoeic infertility. *Fertil Steril*; 77: 91-98.
- Imse, V., Holzapfel, G., Hinney, B., Kuhn, W. & Wuttke, W (1992):**
Comparison of luteinizing hormone pulsatility in the serum of women suffering from polycystic ovarian disease using a bioassay and live different immunoassays. *Journal of Clinical Endocrinology and Metabolism*, 74, 1053-1061.
- Isaacs JD Jr, Linsoln SR & Cowan BD (1997):** Extended clomiphene citrate (CC) and prednisone for the treatment of chronic anovulation resistant to CC alone. *Fertil*; 67: 641.
- Ivan Valencie (2004):** Use of letrozole for ovulation induction in treatment of polycystic ovary syndrome, *Gynecol. Obst. Treat.*; 189: 198.
- Jacobs , H.S (1990):** Insulin-like growth factor receptor. In: *Insulin*, (eds P. Cuatrecasas & S. Jacobs), pp. 269. Springer-Verlag, New York.
- Jacobs H, Wild S, Pierpoint T & McKeigue (2003):** Cardiovascular disease in women with polycystic ovary syndrome at long-term follow-up: a retrospective cohort study. *Clin Endocrinol*; 58: 595.
- Jacobs, H.S. & Conway, G.S (1999):** Leptin, polycystic ovaries and polycystic ovary syndrome. *Human Reproduction Update*, 5, 166-171.
- Jakubowicz DJ, Seppala M, Jakubowicz S, et al., (2001):** Insulin reduction with metformin increases luteal phase serum glycodelin and insulin-like growth factor-binding protein I concentrations and enhances uterine vascularity and blood flow in the polycystic ovary syndrome. *J Clin Endocrinol Metab*; 86: 1126- 29.

- Jakubowicz, D.J., luorno, M.J., Jakubowicz, S., Roberts, K.A. & Nestler, J.E. (2002):** Effects of metformin on early pregnancy loss in the polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 87, 524-529.
- Jeppson S, Gershagen S, Johansson ED, et al., (1982):** Plasma levels of medroxyprogesterone acetate (MPA), sex-hormone binding globulin, gonadal steroids. Gonadotrophins and prolactin in women during long-term use of depo MPA (Depo-Provera) as a contraceptive agent. *Acta Endocrinol (Copenh.)*; 99: 339-343.
- Jonard S, Robert Y, Cortet-Rudelii C, Pigny P, Decanter C & Dewailly D (2003):** Ultrasound examination of polycystic ovaries: is it worth counting the follicles? *Hum Reprod*; 18: 598-603.
- Jonathan S (2002):** Berek. Novak's text book of Gynecology. Williams & Wilkins; 25: 840-852.
- Judd HL, Rigg LA, Anderson DC & Yen SSC (1976):** The effect of ovarian wedge resection on circulating gonadotropin and ovarian steroid levels in patients with polycystic ovary syndrome. *J Clin Endocrinol Metab*; 43: 347-352.
- Kahnn SE, Prigeon RL, McCulloch DK, et al., (1993):** Quantification of the relationship between insulin sensitivity and B-cell function in human subjects: evidence for a hyperbolic function. *Diabetes*; 42:1663-1672.
- Kelly CJG, Speirs A, Gould GW, Petrie JR, Lyall H & Connell JMC (2002):** Altered vascular function in young women with polycystic ovary syndrome. *J Clin Endocrinol Metab*; 87: 742-746.

- Kiddy DS, Hamilton-Fairley D, Seppa'la' M, et al., (1989):** Diet-induced changes in sex hormone binding globulin and free testosterone in women with normal or polycystic ovaries: correlation with serum insulin and insulin-like factor-I. Clin Endocrino; 31: 757-761.
- Kierland RR, Lakatos I & Szijarto L (1947):** Acanthosis nigricans: An analysis of data in twenty-two cases and a study of its frequency necropsy material. J. Invest Dermatol.; 9: 299- 305.
- Knochenhauer ES, Key TJ, Kahsar-Miller M, Waggoner W, Boots LR & Azziz R (1998):** Prevalence of the polycystic ovary syndrome in unselected black and white women of the southeastern United States: a prospective study. J Clin Endocrinol Metab; 83:3078-3082.
- Kocak M, Caliskan E, Simsir C & Haberal A (2002):** Metformin therapy improves ovulatory rates, cervical scores, and pregnancy rates in clomiphene citrate-resistant women with polycystic ovary syndrome. Fertil Steril; 7: 101-104.
- Kousta E, Cela E, Lawrence N, et al., (2000):** The prevalence of polycystic ovaries in women with a history of gestational diabetes. Clin Endocrinol (Oxf); 53:501-507.
- Krosnick A (2000):** The diabetes and obesity epidemic among the Pima Indians. N J Med; 97:31-37.
- Lakhani, K., Constantinovici, N., Purcell, W.M., Fernando, R. & Hardiman, P (2000):** Internal carotid-artery response to 5% carbon dioxide in women with polycystic ovaries. Lancet, 356; 1166-1167.

- Lanzone A., Caruso, A., Di Simone, N., De Carolis, S., Fulghesu, A.M. & Mancuso, S (1995):** Polycystic ovary disease. A risk factor for gestational diabetes? *Journal of Reproductive Medicine*, 40: 312- 316.
- Lees, C., Jurkovic, D., Zaidi, J. & Campbell, S (1998):** Unexpected effect of a nitric oxide donor on uterine artery Doppler velocimetry in oligomenorrheic women with polycystic ovaries. *Ultrasound in Obstetrics and Gynecology*, 11,129-132.
- Legro RS, Kinselmann AR, Dodson WC, Dunaif A (1999):** Prevalence and predictors of risk for type 2 diabetes mellitus and impaired glucose tolerance in polycystic ovary syndrome: a prospective, controlled study in 254 affected women. *J Clin Endocrinol Metab*;84(1):165-9.
- Legro RS (2003):** Polycystic ovary syndrome and cardiovascular disease: a premature association? *Endocr Rev*; 24:302-312.
- Legro, R.S., Bentley-Lewis, R., Driscoll, D., Wang, S.C. & Dunaif, A (2002):** Insulin resistance in the sisters of women with polycystic ovary syndrome: association with hyperandrogenemia rather than menstrual irregularity. *Journal of Clinical Endocrinology and Metabolism*, 87, 2128-2133.

- Li TC, Saravlose H, Chow MS, et al., (1998):** Factors affecting the outcome of laparoscopic ovarian drilling for PCOS in women with anovulatory infertility. *Br J Obstet Gynecol*; 105: 338-344.
- Lissak A, Sorokin Y, Carderon I, et al., (1989):** Treatment of hirsutism with cimetidine: a prospective randomized controlled trial. *Fertil Steril*; 247: 250.
- Lobo RA, Carmina E (2000):** The importance of diagnosing the polycystic ovary syndrome. *Ann Intern Med* 20; 132(12):989-93.
- Lobo RA, Gysler M, March CM, et al., (1982):** Clinical and laboratory predictors of clomiphene response. *Fertil Steril*; 37: 168.
- Lockwood, G.M., Muttukrishna, S., Groome, N.P., Matthews, D.R. & Ledger, W.L (1998):** Mid-follicular phase pulses of inhibin B are absent in polycystic ovarian syndrome and are initiated by successful laparoscopic ovarian diathermy: a possible mechanism regulating emergence of the dominant follicle. *Journal of Clinical Endocrinology and Metabolism*, 83, 1730-1735.
- Lord JM, Flight IH & Norman R.J (2003a):** Metformin in polycystic ovary syndrome: systemic review and meta-analysis. *Br Med J*; 327: 951.
- Lord JM, Flight IH & Norman RJ (2003b):** Insulin-sensitizing drugs (metformin. Troglitazone, rosiglitazone, proglitazone, D-chiroinositol) for polycystic ovary syndrome. *Cochrane Database Syst Rev*; CD003053.

- Luppa, P., Muller, B., Jacob, K., Kimmig, R., Strowitzki, T., Hoss, C., Weber, M.M., Engelhardt, D. & Lobo, R.A (1995):** Variations of steroid hormone metabolites in serum and urine in polycystic ovary syndrome after nafarclin stimulation: evidence for an altered resistance in the polycystic ovary syndrome. *Journal of Clinical Investigation*, 96, 801-810.
- Lynfield YL & MacWilliams P (1970):** Shaving and hair growth. *J Invest Dermatol*; 55: 170-172.
- Marcos RN, Abdul-Malak ME & Shikora E (1994):** Treatment of hirsutism with a gonadotropin-releasing hormone agonist and estrogen replacement therapy. *Fertil Steril*; 61: 427-431.
- Marshall, J.C. & Eagleson, C.A (1999):** Neuroendocrine aspects of polycystic ovary syndrome. *Endocrinology and Metabolism Clinics of North America*, 28, 295-324.
- Martin A, Hamilton BE, Sutton PD, et al., (2003):** Births: final data for 2002. *Natl Vital Stat Rep*; 52:1.
- Martinez AR, Bernardus RE, Kucharska D & Schoemaker J (1991):** Urinary luteinizing hormone testing and prediction of ovulation in spontaneous, clomiphene citrate and human menopausal gonadotropin-stimulated cycles. A clinical evaluation. *Acta Endocrinol*; 124: 357.
- Marynick SP, Chakmakjian ZH, McCaffree DL, et al., (1983):** Androgen excess and acne. *N. Engl. J. Med*; 308: 981-986.

- Mather KJ, Verma S, Corenblum B & Anderson TJ (2000):** Normal endothelial function despite insulin resistance in healthy women with the polycystic ovary syndrome. *J Clin Endocrinol Metab*; 85:1851-1856.
- Metwally MF & Casper RF (2003):** Research into the role of aromatase inhibitors in infertility treatment; expert opinion on investigational drugs; 12: 353-71.
- Michelmore, K., Ong, K., Mason, S., Bennett, S., Perry, L., Vessey, M., Balcn, A. & Dunger, D (2001):** Clinical features in women with polycystic ovaries: relationships to insulin sensitivity, insulin gene VNTR and birth weight. *Clinical Endocrinology*, 55, 439-446.
- Mikkelsen TJ, Kroboth PD, Cameron WJ, et al., (1986):** Single-dose pharmacokinetics of clomiphene citrate in normal volunteers. *Fertil Steril*; 46: 392-95.
- Miller PB & Soules MR (1996):** The usefulness of a urinary LH kit for ovulation prediction during menstrual cycles of normal women. *Obstet Gynecol*; 87: 13.
- Minard RH, Guenther TM & Kon H (1979):** Studies on the destruction of adrenal and testicular cytochrome P-450 by spironolactone. *J Biol Chem*; 254: 1726-1733.
- Mitwally MF & Casper RF (2001):** Use of an aromatase inhibitor for induction of ovulation in patients with an inadequate response to clomiphene citrate. *Fertil Steril*; 75: 305.

- Modan M, Harris MI & Halkin H (1989):** Evaluation of WHO and NDDG criteria for impaired glucose tolerance. Results from two national samples. *Diabetes* 38:1630-1635
- Moggetti P, Tosi F, Castello R, et al., (1996):** The insulin resistance in women with hyperandrogenism is partially reversed by antiandrogen treatment: evidence that androgens impair insulin action in women. *J Clin Endocrinol Metab*; 81: 852-56.
- Moggetti P, Castello R, Negri C, et al., (2000):** Metformin effects on clinical features, endocrine and metabolic profiles, and insulin sensitivity in polycystic ovary syndrome: a randomized double blind, placebo controlled 6-month trial, followed by open, long term clinical evaluation. *J. Clin. Endocrinol Metab*; 85: 139-146.
- Mokdad AH, Ford ES, Bowman BA, et al., (2003):** Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *JAMA*; 289:76-79.
- Morales A.J., Laughlin, G.A., Butzow, T., Maheshwari, H., Baumann, G. & Yen, S.S (1996):** Insulin, somatotrophic, and luteinizing hormone axes in lean and obese women with polycystic ovary syndrome: common and distinct features. *Journal of Clinical Endocrinology and Metabolism*, 81, 2854-2864.
- Moran C. & Azziz, R (2001):** The role of the adrenal cortex in polycystic ovary syndrome. *Obstetrics and Gynecology Clinics of North America*, 28, 63-75.
- Mowszowicz I, Wright F, Vincens M, et al., (1984):** Androgen metabolism in hirsute patients treated with cyproterone acetate. *J. Steroid Biochem. Mol. Biol.*; 20: 757-761.

- Naether OGI & Fischer R (1993):** Adhesion formation after laparoscopic electrocoagulation of the ovarian surface in PCOS patients. *Fertil Steril*; 60: 95-98.
- National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) (2002):** Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III): final report. *Circulation*; 106:3143-3421.
- Nelson, V.L., Qin Kn, K.N., Rosenfield R.L., et al., (2001):** The biochemical basis for increased testosterone production in theca cells propagated from patients with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 86, 5925-5933.
- Nestler JE & Jakubowicz DJ (1996):** Decreases in ovarian cytochrome p450c 17 alpha activity and serum free testosterone after reduction of insulin secretion in polycystic ovary syndrome. *N Engl J Med*; 335: 617.
- Nestler JE & Jakubowicz DJ (1997):** Lean women with polycystic ovary syndrome respond to insulin reduction with decreases in ovarian P450c17 alpha activity and serum androgens. *J Clin Endocrinol Metab*; 82:4075-4079.
- Nestler JE, Jakubowicz DJ, Reamer P, Gunn RD & Allan G (1999):** Ovulatory and metabolic of D-ciro-inosinol in polycystic ovary syndrome. *N Engl J Med*; 340: 1314.

- Nestler, J.E (1993):** Sex hormone-binding globulin: a marker for hyperinsulinemia and/or insulin resistance? *Journal of Clinical Endocrinology and Metabolism*, 76, 273-274.
- Nestler, J.E. Barlascini, C.O. Matt, D.W. Steingold, K.A. Plymate, S.R. Clore, J.N. & Blackard, W.G (1989):** Suppression of serum insulin by diazoxide reduces serum testosterone levels in obese women with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 68, 1027-1032.
- Nestler, J.E. Jakubowicz, DJ. de Vargas, A.F. Brik, C. Quintero, N. & Medina, F (1998):** Insulin stimulates testosterone biosynthesis by human thecal cells from women with polycystic ovary syndrome by activating its own receptor and using inositolglycan mediators as the signal transduction system. *Journal of Clinical Endocrinology and Metabolism*, 83, 2001-2005.
- Norman RJ, Masters L, Milner CR, Wang JX & Davies MJ (2001):** Relative risk of conversion from normoglycaemia to impaired glucose tolerance or non-insulin dependent diabetes mellitus in polycystic ovarian syndrome. *Hum Reprod*; 16:1995-1998.
- Oksanen, L. Tiitinen, A. Kaprio, J. Koistinen, H.A. Karonen, S. & Kontula, K (2000):** No evidence for mutations of the leptin or leptin receptor genes in women with polycystic ovary syndrome. *Molecular Human Reproduction*, 6, 873-876.
- O'Meara, N.M. Blackman, J.D. Ehrmann, D.A. et al., (1993):** Defects in p-cell function in functional ovarian hyperandrogenism. *Journal of Clinical Endocrinology and Metabolism*, 76, 1241-1247.

- Orio F Jr, Palomba S, Cascella T, et al., (2004a):** Early impairment of endothelial structure and function in young normal weight women with polycystic ovary syndrome. *J. Clin. Endocrinol. Metab*; 89:4588-4593.
- Orio F Jr, Palomba S, Spinelli L, et al., (2004b):** The cardiovascular risk of young women with polycystic ovary syndrome: an observational, analytical, prospective case control study. *J Clin Endocrinol Metab*; 89:3696-3701.
- Ovalle F & Azziz R (2002):** Insulin resistance, polycystic ovary syndrome, and type 2 diabetes mellitus. *Fertil*; 77(6): 1095-105.
- Paradisi G, Steinberg HO, Shepard MK, Hook G & Baron AD (2003):** Troglitazone therapy improves endothelial function to near normal levels in women with polycystic ovary syndrome. *J. Clin. Endocrinol. Metab*; 88:576-580.
- Paradisi, G. Steinberg, H.O. Hempfling, A. et al., (2001):** Polycystic ovary syndrome is associated with endothelial dysfunction. *Circulation*, 103, 1410-1415.
- Parsanezhad ME, Alorzi S, Motazedian S & Omrani G (2002):** Use of dexamethasone and clomiphene citrate in the treatment of clomiphene citrate-resistant patients with polycystic ovary syndrome and normal dehydroepiandrosterone sulfate levels: a prospective, double-blind placebo-controlled trial. *Fertil Steril*; 78: 1001.
- Pasquali R & Casimirri F (1993):** The impact of obesity on hyperandrogenism and polycystic ovary syndrome in premenopausal women. *Clin Endocrinol (Oxf)*; 39:1-16.

- Pasquali R, Antenucci D, Casimirri F, et al., (1989):** Clinical and hormonal characteristics of obese and amenorrheic hyperandrogenic women before and after weight loss. *J. Clin Endocrinol Metab*; 68: 173-179.
- Pasquali R, Gambineri A, Biscotti D, et al., (2000):** Effect of long term treatment with metformin added to hypocaloric diet on body composition, fat distribution, and androgen and insulin levels in abdominally obese women with and without the polycystic ovary syndrome. *J Clin Endocrinol Metab*; 85(8):2767-74.
- Pastor, C.L. Griffm-Korf, M.L. Aloji, J.A. Evans, W.S. & Marshall, J.C (1998):** Polycystic ovary syndrome: evidence for reduced sensitivity of the gonadotropin-releasing hormone pulse generator to inhibition by estradiol and progesterone. *Journal of Clinical Endocrinology and Metabolism*, 83, 582-590.
- Peters EJ, Stuart CA & Prince MJ (1986):** Acanthosis nigricans and obesity: acquired an intrinsic defects in insulin action. *Metabolism*; 53: 807-813.
- Pierpoint, T. McKeigue, P.M. Isaacs, A.J. Wild, S.H. & Jacobs, H.S (1998):** Mortality of women with polycystic ovary syndrome at long term follow-up. *Journal of Clinical Epidemiology*, 51: 581-586.
- Pirwany, I.R. Fleming, R. Greer, LA. Packard, C.J. & Sattar, N (2001):** Lipids and lipoprotein subfractions in women with PCOS: relationship to metabolic and endocrine parameters. *Clinical Endocrinology*, 54, 447-453.

- Pollare, T. Lithell, H. & Berne, C (1990):** Insulin resistance is a characteristic feature of primary hypertension independent of obesity. *Metabolism: Clinical and Experimental*, 39, 167-174.
- Polonsky KS, Sturis J & Bell GI (1996):** Non-insulin-dependent diabetes mellitus — a genetically programmed failure of the beta cell to compensate for insulin resistance. *N Engl J Med*; 334:777-783.
- Polonsky KS, Sturis J & Bell GI (1996):** Non-insulin-dependent diabetes mellitus, a genetically programmed failure of the beta cell to compensate of insulin resistance. *N. Engl. J. Med*; 334: 777-783.
- Popovska-Dimova Z & Krstevska B (2006):** The frequency of insulin resistance calculated upon the basis of a fasting glucose to insulin ratio and characteristics of insulin resistant women with polycystic ovary syndrome *Prilozi*; 27(1):87-95.
- Prelevic, G.M. Beljic, T. Balint-Peric, L. & Ginsburg, J (1995):** Cardiac flow velocity in women with the polycystic ovary syndrome. *Clinical Endocrinology*, 43, 677-681.
- Prelevic, G.M. Wood, J. & Okolo, S (1996):** Peripheral blood flow in young women with polycystic ovary syndrome. *Journal of Endocrinology*, 151 (Suppl.), 13.
- Prelevic, G.M. Wurzbarger, M.I. Balint-Peric, L. & Nesic, J.S (1990):** Inhibitory effect of sandostatin on secretion of luteinising hormone and ovarian steroids in polycystic ovary syndrome. *Lancet*, 336,900-903.
- Quon MJ (2001):** Limitations of the fasting glucose to insulin ratio as an index of insulin sensitivity. *J. Clin. Endocrinol. Metab*; 85 : 4615 -4617.

- Reaven, G.M (1988):** Banting lecture 1988. Role of insulin resistance in human disease. *Diabetes*, 37, 1595-1607.
- Rebar R, Judd HL, Yen SS, Rakoff J, Vandenberg G & Naftolin F (1976):** Characterization of the inappropriate gonadotropin secretion in polycystic ovary syndrome. *J. Clin. Invest*; 57(5): 1320-9.
- Rittmaster RS (1991):** Evaluation and treatment of hirsutism. *Infert Reprod Med Clin N Am*; 2: 511-545.
- Rittmaster R (1993):** Treating hirsutism. *Endocrinologist*; 3:211-218.
- Rittmaster RS (1995):** Differential suppression of testosterone and estradiol in hirsute women with the superactive gonadotropin releasing hormone agonist leuprolide. *J Clin Endocrinol Metab*; 67: 654-655.
- Robinson, S. Kiddy, D. Gelding, S.V. et al., (1993):** The relationship of insulin insensitivity to menstrual pattern in women with hyperandrogenism and polycystic ovaries. *Clinical Endocrinology*, 39,351-355.
- Rodin A. Thakkar, H. Taylor, N. & Clayton, R (1994):** Hyperandrogenism in polycystic ovary syndrome. Evidence of dysregulation of 11 beta-hydroxysteroid dehydrogenase. *New England Journal of Medicine*, 330, 460-465.
- Rodin, D.A. Bano, G. Bland, J.M. Taylor, K. & Nussey, S.S (1998):** Polycystic ovaries and associated metabolic abnormalities in Indian subcontinent Asian women. *Clinical Endocrinology*, 49: 91-99.

- Rosen, E.D. & Spiegelman, B.M (1999):** Tumor necrosis factor- α as a mediator of insulin resistance of obesity. *Current Opinion in Endocrinology* 170-176.
- Rosenfield R.L, Barnes, R.B. Cara, J.F. & Lucky, A.W (1990):** Dysregulation of cytochrome P450c 17 α as the cause of polycystic ovarian syndrome. *Fertility and Sterility*, 53, 785-791.
- Rosenfield RL, Barnes RB, Cara JF, et al., (2001):** Dysregulation of cytochrome p450-17 α as the cause of polycystic ovarian disease. *Fertil Steril*; 53: 785-791.
- Rosentfeld, R.L. Barnes, R.B. & Ehrmann, D.A (1994):** Studies of the nature of 17-hydroxyprogesterone hyperresponsiveness to gonadotropin-releasing hormone agonist challenge in functional ovarian hyperandrogenism. *Journal of Clinical Endocrinology and Metabolism*, 79, 1686-1692.
- Rosner W (2001):** An extraordinarily inaccurate assay for free testosterone is still with us. *J Clin Endocrinol Metab*; 86:2903-7.
- Rouru, J. Anttila, L. Koskinen, P. Penttila, T.A. Irjala, K. Huupponen, R. & Koulu, M (1997):** Serum leptin concentrations in women with polycystic ovary syndrome. *Journal of Clinical Endocrinology and Metabolism*, 82, 1697-1700.
- Rubin, R.R. Fujimoto, W.Y. Marrero, D.G. et al., (2002):** The Diabetes Prevention Program: recruitment methods and results. *Controlled Clinical Trials*, 23, 157-171.

- Salpeter SR, Greyber E, Pasternak GA & Salpeter EE (2003):** Risk of fatal and non-fatal lactic acidosis with metformin use in type 2 diabetes mellitus: systematic review and meta-analysis. Arch Intern Med; 163: 2594.
- Sam S & Dunaif A (2003):** Polycystic ovary syndrome: syndrome XX? Trends Endocrinol Metab; 14:365-370.
- Sampson, M. Kong, C. Patel, A. Unwin, R. & Jacobs, H.S (1996):** Ambulatory blood pressure profiles and plasminogen activator inhibitor (PAI-1) activity in lean women with and without the polycystic ovary syndrome. Clinical Endocrinology, 45, 623-629.
- Schachter, M. Balen, A.H. Patel, A. & Jacobs, H.S (1996):** Hypogonadotropic patients with ultrasonographically detected polycystic ovaries: endocrine response to pulsatile gonadotropin releasing hormone. Gynecological Endocrinology, 10, 327-335.
- Schenker JG, Yarkoni S & Granat M (1981):** Multiple pregnancies following induction of ovulation. Fertil Steril; 35: 105.
- Schiavone FE, Rietschel RL, Sgoutas D, et al., (1983):** Elevated free testosterone levels in women with acne. Arch Dermatol; 119: 799-802.
- Schrode K, Huber F, Staszak J, et al., (2000):** Randomized double blind, vehicle controlled safety and efficacy evaluation of eflornithine 15% cream in the treatment of women with excessive facial hair presented at: American Academy of Dermatology Annual Meeting. March 11-14-200 San Francisco, California.
- Serafini P & Labo R (1985):** Increased 5 α -reductase activity in idiopathic hirsutism. Fertil Steril; 43: 74.

- Sheehan MT (2004):** Polycystic Ovarian Syndrome: Diagnosis and Management. Clin. Med. Res. February; 2(1): 13-27.
- Shoham, Z. Conway, G.S. Patel, A. & Jacobs, H.S. (1992):** Polycystic ovaries in patients with hypogonadotropic hypogonadism: similarity of ovarian response to gonadotropin stimulation in patients with polycystic ovarian syndrome. Fertility and Sterility, 58, 37-45.
- Siddle, K. Soos, M.A. Field, C.E. & Nave, B.T (1994):** Hybrid and atypical insulin/insulin-like growth factor I receptors. Hormone Research, 41 (Suppl. 2), 56-64; discussion 65.
- Smith G, Olatunbosun O, Delbaere A, et al., (2003):** Ovarian hyperstimulation syndrome due to a mutation in the follicle-stimulating hormone receptor. N Engl J Med; 349: 760.
- Smith YR, Randolph JR JF, Christman GM, et al., (1998):** Comparison of low-technology and high-technology monitoring of clomiphene citrate ovulation induction. Fertil Steril; 70: 165.
- Speroff L (2005):** Textbook of infertility and Endocrinology. Philadelphia Pa: Williams & Wilkins; 395-401.
- Stades AM, Heikens JT, Erkelens DW, et al., (2004):** Metformin and lactic acidosis: Causes or coincidence? A review of case reports. J. Intern Med; 255: 179.
- Stadtmauer LA, Wong BC & Ochringer S (2002):** Should patients with polycystic ovary syndrome be treated with metformin? Benefits of insulin sensitizing drugs in polycystic ovary syndrome-beyond ovulation induction. Hum Reprod; 17: 3016.

- Stein IF & Leventhal ML (1935):** Amenorrhea associated with bilateral polycystic ovaries. *Am J Obstet Gynecol*; 29: 181.
- Stephoe PC & Edwards RG (1978):** Birth after the reimplantation of a human embryo. *Lancet*; 2: 366.
- Stewart, P.M. Shackleton, C.H. Beastall, G.H. & Edwards, C.R. (1990):** 5 α -Reductase activity in polycystic ovary syndrome. *Lancet*, 335,431-433.
- Stuart CA, Peters EJ, Prince MJ, Richards G, Cavallo A & Meyer WJ (1986):** Insulin resistance with acanthosis nigricans: the roles of obesity and androgen excess. *Metabolism*; 35: 197-205.
- Talbott E, Guzick D, Clerici A, et al., (1995):** Coronary heart disease risk factors in women with polycystic ovary syndrome. *Arterioscler Thromb Vase Biol*; 15:821-826.
- Talbott EO, Zborowskii JV & Boudraux MY (2004):** Do women with polycystic ovary syndrome have an increased risk of cardiovascular disease? Review of the evidence. *Minerva Ginecol*; 56:27-39.
- Tasoula T, Caroline O, Gerard S, et al., (2004):** The Pathophysiology of Polycystic Ovary Syndrome, *Clin Endocrinol* 60(1):1-17.
- Taylor AE (2000):** Insulin-lowering medications in polycystic ovary syndrome. *Obstet Gynecol Clin North Am*; 27(3):583-95.
- Techatraisak, K. Conway, G.S. & Rumsby, G. (1997):** Frequency of a polymorphism in the regulatory region of the 17 α -hydroxylase-17, 20-lyase (CYP17) gene in hyperandrogenic states. *Clinical SL. Endocrinology*, 46, 131-134.

- The Rotterdam ESHRE/ASRM-sponsored PCOS consensus workshop group (2004):*** Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome (PCOS). Hum Reprod. Jan; 19(1):41-7.
- Tiitinen AE, Simberg N, Stenman MH, et al., (1994):*** Estrogen replacement does not potentiate gonadotropin-releasing hormone agonist-induced androgen suppression in the treatment of hirsutism. J Clin Endocrinol Metab; 79: 447-451.
- Tulandi T. Saleh, A, Morris, D. Jacobs, H.S. Payne, N.N. & Tan, S.L (2000):*** Effects of laparoscopic ovarian drilling on serum vascular endothelial growth factor and on insulin responses to the oral glucose tolerance test in women with polycystic ovary syndrome. Fertility and Sterility, 74, 585-588.
- Turner, E.I. Watson, MJ. Perry, L.A. & White, M.C (1992).*** Investigation of adrenal function in women with oligomenorrhoea and hirsutism (clinical PCOS) from the north-east of England using an adrenal stimulation test. Clinical Endocrinology; 36: 389-397.
- Unger, J.W. Livingston, J.N. & Moss, A.M (1991):*** Insulin receptors in the central nervous system: localization, signalling mechanisms and functional aspects. Progress in Neurobiology, 36, 343-362.
- Valazquez EM, Mendoza S, Hamer T, et al., (1994):*** Metformin therapy in polycystic ovary syndrome reduces hyperinsulinemia, insulin resistance, hyperandrogenemia, and systolic blood pressure, while facilitating normal menses and pregnancy. Metabolism; 43: 647-451.

- Vandermolen D.T. Ratts V.S, Evants W.S, Stovall D.W, Kauma S.W. & Nestler J.E (2001):** Metformin increases the ovulation rate and pregnancy rate from clomiphene citrate in patients with polycystic ovary syndrome who are resistant to clomiphene citrate alone. *Fertility and sterility*, 75, 310-315.
- Velazquez E.M. Mendoza S.G, Wang P. & Glueck C.J (1997):** Metformin therapy is associated with a decrease in plasma plasminogen activator inhibitor-1, lipoprotein(a), and immunoreactive insulin levels in patients with the polycystic ovary syndrome. *Metabolism: Clinical and Experimental*, 46; 454-457.
- Venturoli S, Porcu E, Fabbri R, et al., (1988):** Episodic pulsatile secretion of FSH, LH, prolactin, oestradiol, oestrone, and LH circadian variations in polycystic ovary syndrome. *Clinical Endocrinology*, 28; 93-107.
- Vgontzas AN, Legro RS, Bixler EO, et al., (2001):** Polycystic ovary syndrome is associated with obstructive sleep apnea and daytime sleepiness: role of insulin resistance. *J Clin Endocrinol Metab*; 86: 517-520.
- Vital Reyes VS & Tellez Valasco S (2000):** Clomiphene acetate and prednisone: alternative approach for the management of patients with chronic anovulation and clomiphene treatment failure. *Gynecol Obstet Med*; 68: 266.
- Wathen NC, Perry L, Lilford RJ & Chard T (1984):** Interpretation of single progesterone measurement in diagnosis of ovulation and defective luteal phase: observations on analysis of the normal range. *Br Med J*; 288: 782-85.

- Weinstein D & Polishuk WZ (1975):** The role of wedge resection of the ovary as a cause for mechanical sterility. Surg Gynecol Obstet; 141: 417-423.
- Wild R.A, Grubb B, Hartz a, Van Nort JJ, Bachman W. & Bartholomew M (1990):** Clinical signs of androgen excess as risk factors for coronary artery disease. Fertility and Sterility; 54: 255-259.
- Wild S, Pierpoint T, Jacobs H & McKeigue P (2000):** Long-term consequences of polycystic ovary syndrome: results of a 31 year follow-up study. Hum Fertil (Camb); 3: 101-105.
- Wild S, Pierpoint T, McKeigue P. & Jacobs H (2002):** Cardiovascular disease in women with polycystic ovary syndrome at long-term follow-up: a retrospective cohort study. Clinical Endocrinology; 52: 595-600.
- Willis D, Mason H, Gilling-Smith C. & Franks S (1996):** Modulation by insulin of follicle-stimulating hormone and luteinizing hormone actions in human granulosa cells of normal and polycystic ovaries. Journal of Clinical Endocrinology and Metabolism; 81: 302-309.
- Willis D. & Franks S (1995):** Insulin action in human granulosa cells from normal and polycystic ovaries is mediated by the insulin receptor and not the type-1 insulin-like growth factor receptor. Journal of Clinical Endocrinology and Metabolism; 80: 3788-3790.
- Xavier P (2000):** obesity, in Goldman and Bennett (Ed), Cecil textbook of medicine. 21st edition, WB saunders Company, P, 1152.

-
- Yanovaski JA, Culter GB Jr, Chrousos GP & Nieman LK (1998):** The dexamethasone-suppressed corticotropin-releasing hormone stimulation test differentiates mild Cushing's disease from normal physiology. *J Clin Endocrinol Metab*; 83: 348-352.
- Yarali H, Yildiz BO, Demirel A, et al., (2002):** Co-administration of metformin during FSH treatment in patients with clomiphene citrate resistant polycystic ovarian syndrome: a prospective randomized trial. *Hum Reprod*; 17: 289.
- Yen SS, Laughlin G.A. & Morales A.J (1993):** Interface between extra and intraovarian factors in polycystic ovarian syndrome. *Annals of the New York Academy of Sciences*; 687: 98-111.
- Yildiz BO & Chang W (2003):** Polycystic ovarian syndrome and anovulation induction. *Minerva Ginecol*; 55: 425.
- Yokoyama H, Emoto M, Fujiwara S, et al., (2003):** Quantitative insulin sensitivity check index and the reciprocal index of homeostasis model assessment in normal range weight and moderately obese type 2 diabetic patients. *Diabetes Care*; 26: 2426-2432.