

REFERENCES

- Abdullah H I , Barber RJ, Leonard T, et al. Timed acolyte collection in assisted conception program using GnRH analogues. Hum Report. 1989 ; 4: 927-30.
- Abma JC, Chandra A, Mosher WD, Peterson LS, Piccinino LJ. Fertility, family planning, and women's health: new data from the 1995 National Survey of Family Growth. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 1997. (Vital and Health Statistics, series 23).
- Abusheikha N, Lass A, Akagbosu F, Brinsden P, How useful is cervical dilatation in patients with cervical stenosis who are participating in an in vitro fertilization-embryo transfer program? The Bourn Hall experience, Fertil Steril 72:610,1999.
- Agonist to treat poor responder entering an in vitro fertilization program. Hum Reprod. 1987;2: 655-56.
- Aids to Obstetrics and Gynaecology, Fourth edition (ed.) G. M. Stirrat. 1997
- Akoun A, Lemay A, Brunet C, Hebert J, Secretion of monocyte chemotactic protein-1 by cytokine-stimulated endometrial cells of women with endometriosis. Le groupe d'investigation en gynecologic, Fertil Steril 63:322, 1995.
- Albano C, Smits C, Comus M, et al. Comparison of different doses of gonadotropin - releasing hormone antagonist cetrorelix during controlled ovarian hyperstimulation. Fertil Steril. 1997 ; 67 : 917-22.
- Alikani M, Cohen J, Tomkin G, Garrisi GJ, Mack C, Scott RT, Human embryo fragmentation in vitro and its implications for pregnancy and implantation, Fertil Steril 71:836, 1999.
- al-Shawaf T, Dave R, Harper J, Linehan D, Riley P, Craft I, Transfer of embryos into the uterus: how much do technical factors affect pregnancy rates?, J Assist Reprod Genet 10:31, 1993.
- American Society for Reproductive Medicine , Society for Assisted Reproductive Technol practice committee report :

- Preimplantation genetic diagnosis . Birmingham, Ala: America for Reproductive Medicine; June, 2001.
- American Society for Reproductive Medicine, Guidelines on number of embryos transferred, Birmingham, Alabama, 1999.
- American Society for Reproductive Medicine, Guidelines on number of embryos transferred, Birmingham, Alabama, 2004.
- American Society for Reproductive Medicine. Frequently asked questions about infertility. Birmingham, AL: American Society for Reproductive Medicine, 2004. Available at and embryo transfer, Hum Reprod 11:1687, 1996.
- Anderson, E, Albcrtni, D.F. (1976): Gap junction between the oocyte and companion follicle cells in the mammalian cells. J.ccll Biol . 71:680
- Antoin J, M . Which stimulation for poor responders ? Critical study of results and methods of research . Contracept. Fertil Steril. 1996 ; 24 (5) : 386-90.
- Assisted reproductive technology in the United States ;1997 results generated from the American Society for Reproductive Medicine /Society for Assisted Reproductive Technology Registry . fertil steril 2000;74:641-53.
- Augood C,Duckitt k, templeton AA. Smoking and female infertility : a systematic review and meta-analysis . Hum Reprod 1998,Vol 13:-1539 .
- Avery SM , embryo cryopreservation in Brinsden PR (ed.). A text book of in vitro fertilization & assisted reproduction , Newyork, london : parthenon publishing , 1999: 211-217.
- Baarends WM, Uilenbroek JT, Kramer P, Hoogerbrugge JW, van Leeuwen EC, Themmen AP and Grootegoed JA (1995) Anti-müllerian hormone and anti-müllerian hormone type II receptor messenger ribonucleic acid expression in rat ovaries during postnatal development, the estrous cycle and gonadotropin-induced follicle growth. Endocrinology 136, 4951-4962.[Abstract]
- Balaban B, Urman B, Alatas C, Mercan R, Mumcu A, Isiklar A, A comparison of four different techniques of assisted hatching, Hum Reprod 17:1239, 2002.
- Bancsi LF, Broekmans FJ and te Velde ER (1997) Predictive value of serum inhibin-B for ART outcome? Fertil Steril 68, 947-948.[Medline]

- Bancsi LF, Broekmans FJ, Mol BW, Habbema JD and te Velde ER (2003) Performance of basal
- Bancsi LF, Huijs AM, den Ouden CT, Broekmans FJ, Looman CW, Blankenstein MA and te velde ER (2000) Basal follicle-stimulating hormone levels are of limited value in predicting ongoing pregnancy rates after invitrofertilization. *Fertil Steril* 73, 552 - 557.
- Barnhart K and Osheroff J (1998) Follicle stimulating hormone as a predictor of fertility. *Curr Opin Obstet Gyneco* 10,227-232.
- Barnhart K and Osheroff J (1999) We are overinterpreting the predictive value of serum follicle-stimulating hormone levels. *Fertil Steril* 72, 8-9.
- Barri PN, Martinez F, Carolen B, et al. Managing non responders fertility and reproductive medicines proceeding of the 16th world congress on fertility and sterility. San Fransco. 1998; October 4-9 PP: 127-137.
- Barros C., Yangimachi R. (1971): Induction of the zona reaction in golden hamster eggs by cortical granule material. *Nature*, 233: 268-9
- Baruffi, R., Mauri, A., Petersen, C., Ferreira, R., Coelho, J. and Franco, J. Bedford I M; calirn HC and Cooper, G.W. (1973): The maturation of the spermatozoa in the human Epididymis. *J. Reprod. Fertil, Suppl.* 18:19.
- Bellver J; Rossal LP , Bosch E, Zuniga A ,Corona JT , Melendez f, et al. Obesity and the risk of spontaneous abortion after oocyte donation *fertil steril* 2003;79:1136-40
- Beral V, Doyle P. MRC Working Party on Children Conceived by In Vitro Fertilization: births in Great Britain resulting from assisted conception. 1978-1987. *BMJ* 1990; 300
- Bergh T, Ericson A, Hillensjo T, Nygren K-G, Wennerholm U-B. Delivery and children born after in-vitro fertilization in Sweden 1982-95. *The Lancet* 1999. 354
- Bernard A, fuller BJ. Cryopreservation of human oocytes: a review of current problems and perspectives. *Hum repord Update* 1996;2:193-207.

- Biervliet FP, Lesny P, Maguiness SD, Robinson J, Killick SR, Transmyometrial embryo transfer and junctional zone contractions, *Hum Reprod* 17:347, 2002.
- Botta G, Grudzinskas G, Is a prolonged bed rest following embryo transfer useful?, *Hum Reprod* 12:2489, 1997.
- Brinsden PR. Oocyte recovery and embryo transfer techniques for in vitro fertilization in Brinsden PR (ed.) *H textbook of in vitro fertilization and assisted reproduction*, Newyork, London: Parthenon publishing 1999; 171-184.
- Broe Kmans FJ, Scheffer GJ, Bancsi LF, et al. Ovarian reserve tests in infertility practice and normal fertile women. *Maturitas*. 1998; 30(2): 205-14.
- Bukman A and Heineman MJ: Ovarian reserve testing and the use of prognostic models in Patients with subfertility. *Hum Reprod Update*, 2001; 7, 581-590.[Abstract/Free Full Text] .
- Bukulmez O and Arici A: Assessment of ovarian reserve. *Curr Opin Obstet Gynecol* 16, 231-237.[ISI][Medline]
- Burger HG, Groome NP and Robertson DM: Both inhibin A and B respond to exogenous follicle-stimulating hormone in the follicular phase of the human menstrual cycle. *J Clin Endocrinol Metab* 1998 ; 83,4167-4169. [Abstract/Free .Full .Text] .
- Buyalos RP, Daneshmand S and Brzechffa PR: Basal estradiol and follicle-stimulating hormone predict fecundity in women of advanced reproductive age undergoing ovulation induction therapy. *Fertil Steril* , 1997; 68, 272-277.[CrossRef] [ISI][Medline]
- Cahill DJ, Fox R and Thomas PH: Spurious elevation of follicle-stimulating hormone. *Acta obstet Gynecol Scand*, 1992; 71,388-389. [ISI] [Medline]
- CDC, American Society for Reproductive Medicine, and Society for Assisted Reproductive Technology.: Assisted reproductive technology success rates. Atlanta, GA: US Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion; 2004.
- CDC, American Society for Reproductive Medicine, Society for Assisted Reproductive Technology, and RESOLVE. 1995 assisted reproductive technology success rates. Atlanta, GA: US Department of Health and Human Services, CDC, National Center for Chronic Disease Prevention and Health Promotion; 1997.

- Chang M.C: Fertilization of rabbit ova in vitro *Nature*, 1959; 184: 466.
- Chao KH, Chen SU, Chen HF, Wu MY, Yang YS, Ho HN,: Assisted hatching increases the implantation and pregnancy rate of in vitro fertilization (IVF)-embryo transfer (ET), but not that of IVF-tubal ET in patients with repeated IVF failures, *Fertil Steril* 67:904, 1997.
- Chao, K., Chen, S., Chen, H., Wu, M., Yang, Y. and Ho, H.: Assisted hatching increases the implantation and pregnancy rate of in vitro fertilization-embryo transfer but not that of IVF-tubal embryo transfer in patients with repeated IVF failures. *Fertil. Steril.*, 1997; 67, 904 -908.[ISI][Medline]
- Chung WS, Sohn JH , Park YY .Is obesity an underlying factor in erectile dysfunction ? *Eur Urol* 1999;36:68-70
- Clark AM , Roberts BG .Maximizing weight loss in the over weight infertile patient :a prospective randomized controlled trial .16th Annual meeting of ESHRE 2000,Bologna , Italy , 2000. Abstract No. O-162*Hum Reprod* 2000;15 (Abstract book):65-66.
- Clark AM Ledger W, Galletly C, Tomlinson L, Blaney F, Wang X, et al . weight loss results in significant improvement in pregnancy and ovulation rates in anovulatory obese women .*Hum Reprod* 1995;10:2705-12.
- Clark AM, Thomley B, Tomlinson L, Galletley C, Norman RJ. Weight loss in obese infertile women results in improvement reproductive outcome for all forms of fertility treatment . *Hum Reprod* 1998;13:1502-5.
- Clausson B, Cnattingius S. Axelsson O. Preterm and term births of small for gestational age infants: a population-based study of risk factors among nulliparous Women . *Br JObster Gynecol* 1998;105:1011-7.
- Clermont (1963): The cycle of the seminiferous epithelium in man. *Am.J. Anat.*, 112:35.
- Cohen J., Alikani, M., Trowbridge, J. and Rosenwaks, Z. (1992) Implantation enhancement by selective assisted hatching using zona drilling of human embryos with poor prognosis. *Hum, Reprod.* 7. 685-688.[Abstract]

- Cohen J, Alikani M, Trowbridge J, Rosenwaks Z, Implantation enhancement by selective assisted hatching using zona drilling of human embryos with poor prognosis, *Hum Reprod* 7:685, 1992.
- Cohen J, Alikani M, Trowbridge J, Rosenwaks Z. Implantation enhancement by selective assisted hatching using zona drilling of embryos with poor prognosis. *Human Reproduction*, 7, 685-688, 1992.
- Alikani M, Cohen J, Tomkin G, Garrisi GJ, Mack C, Scott R: Human embryo fragmentation in vitro and its implications for pregnancy and implantation. *Fertility and Sterility*, 71, 836-842, 1999.
- Cohen J, DeVane GW, Elsner CW, Kort HI, Massey JB, Norbury SE, Cryopreserved zygotes and embryos and endocrinologic factors in the replacement cycle, *Fertil Steril* 50:61, 1988.
- Cohen J, Elsner, C, Kort ,H, Malter ,H; Massey, J; Mayer MP, Wiemer K. Impairment of the hatching process following IVF in the human and improvement of implantation by assisting hatching using micromanipulation. *Human Reproduction*, 5, 7-13, 1990.
- Cohen J, Inge KL, Suzman M, Wiker SR, Wright G, Videocinematography of fresh and cryopreserved embryos: a retrospective analysis of embryonic morphology and implantation, *Fertil Steril* 51:820, 1989.
- Cohen J, Jones HW Jr. How to avoid multiple pregnancies in assisted reproductive technologies [Review]. *Semin Reprod Med* 2001;19:269--78.
- Cohen, J., Elsner, C., Kort, H., Maker, H., Massey,.), Maycr, M.P. and Wcimcr, K. (1990) Impairment of the htaching process following IVF in the human and improvement of implantation by assisted hatching using micromanipulation. *Hum. Reprod.*, 5 7-13,[ISI] [Meclline].
- Collins J. An international survey of the health outcomes of IVF and ICSI. *Hum Reprod Update* 2002;8:265--77.
- Confino E, Rawlins R, Binor Z, Radwanska E, The effect of the oviduct, uterine, and in vitro environments on zona thinning in the mouse embryo, *Fertil Steril* 68:164, 1997.

- Cook CL, Siow Y, Taylor S and Fallat ME (2000) Serum mullerian-inhibiting substance levels during normal menstrual cycles. *Fertil Steril* 73, 859-861 [CrossRef][ISI] [Medline].
- Coroleu B, Carreras O, Veiga A, Martell A, Martinez F, Belil I, Hereter L, Barri PN, Embryo transfer under ultrasound guidance improves pregnancy rates after in- vitro fertilization, *Hum Reprod* 15:616, 2000.
- Corson SL, Gutmann J, Batzer FR, Wallace H, Klein N and Soules MR (1999) Inhibin-B as a test of ovarian reserve for infertile women. *Hum Reprod* 14,2818-2821. [Abstract/Free Full Text].
- Creus M, Penarrubia J, Fabregues F, Vidal E, Carmona F, Casamitjana R, Vanrell JA and Balasch J (2000) Day 3 serum inhibin B and FSH and age as predictors of assisted reproduction treatment
- Dal Prato L, Borini A, Cattoli M, Bonu MA, Sciajno R, Flamigni C, Endometrial preparation for frozen-thawed embryo transfer with or without pretreatment with gonadotropin-releasing hormone agonist, *Fertil Steril* 77:956, 2002.
- Damario MA, Goudas VT, Session DR, Hammitt DG, Dumesic DA, Crinone 8% vaginal progesterone gel results in lower embryonic implantation efficiency after in vitro fertilization-embryo transfer, *Fertil Steril* 72:830, 1999.
- D'Angelo A, Amso NN, Embryo freezing for preventing ovarian hyperstimulation syndrome: a Cochrane review, *Hum Reprod* 17:2787, 2002.
- De Koning CH, Popp-Snijders C, Schoemaker J and Lambalk CB: Elevated FSH concentrations in imminent ovarian failure are associated with higher FSF and LH pulse amplitude, response to GnRH. *Hum Reprod* 15, 1452-1456.[Abstract/Free Full. Text].
- De Kretser, D, Mand Kerr, J.B: The cytology of the Testis. In: Knobil, E and Neill, J.D (eds.): *Physiological and Reproduction*, haven Press, New York, 1994; P. 1177-1230.
- De Neubourg D, Gerris J, Mangelschots K, Van Royen E, Vercruyssen M, Elseviers M, Single top quality embryo transfer as a model for prediction of early pregnancy outcome, *Hum Reprod* 19:1476, 2004.

- de Vet A, Laven JS, de Jong FH, Themmen AP and Fauser BC: Antimullerian hormone serum levels: a putative marker for ovarian aging. *Fertil Steril*, 2002; 77, 357-362. [CrossRef][ISI] [Medline]
- de Ziegler D, Cornel C, Bergeron C, Hazout A, Bouchard P, Frydman R, Controlled preparation of the endometrium with exogenous estradiol and progesterone in women having functioning ovaries, *Fertil Steril* 56:851, 1991.
- Derom R, Vlietinck R, Derom C, Thiery M, Van Maele G, Van den Berg H. Perinatal mortality in the East Flanders Prospective Twin Survey: preliminary results. *Eur J Obstet Gynecol Reprod Biol* 1991;41:25--6.
- Diedrich K, Diedrich C, Santos E, et al. Suppression of the endogenous luteinizing hormone surge by the gonadotropin releasing hormone antagonist cetrorelix during ovarian stimulation. 1994; 9: 788-91
- Dumesic DA, Damario MA, Session DR, Famuyide A. Lesnick TG, Thornhill AR and McNeilly
- Eddy E. M. (1996): The germ live and development *Deo Genet*, 19: 4,287-289.
- Edi-Osagie E Hooper L, Seif MW, The impact of assisted hatching on live birth rates and outcomes of assisted conception: a systematic review, *Hum Reprod* 18:1828,2003.
- Edirisinghe WR, Ahnonkitpanit V, Promviengchai S, Suwajanakorn S, Pruksananonda K, Chinpilas V, Virutamasen P, A study failing to determine significant benefits from assisted hatching: patients selected for advanced age, zonal thickness of embryos, and previous failed attempts, *J Assist Reprod Genet* 16:294, 1999.
- Egbase PE, al-Sharhan M, al-Othman S, al-Mutawa M, Udo EE, Grudzinkas JG, Incidence of microbial growth from the tip of the embryo transfer catheter after embryo transfer in relation to clinical pregnancy rate following in-vitro fertilization
- Elder k, and Dale B. Oocyte retrieval and Embryo culture. In: in vitro fertilization. Elder k, and Dale B. (eds) 2nd edit, Cambridge university press, United Kingdome. 2000; p. 151-53.
- Elder K, and Dale B. Producing gametes. In: In Vitro Fertilization. Elder k, and Dale B. (eds), 2nd edit, Cambridge university press. U.K. 2000; p. 8-32.

- Englert Y, Puissant F, Camus M, Van Hoeck J, Leroy F, Clinical study on embryo transfer after human in vitro fertilization, *J In Vitro Fert Embryo Transf* 3:243, 1986.
- Engmann L, Maconochie N, Tan SL, Bekir J, Trends in the incidence of births and multiple births and the factors that determine the probability of multiple birth after IVF treatment, *Hum Reprod* 16:2598, 2001. / 596. American Society for Reproductive Medicine, Guidelines on number of embryos transferred, Birmingham, Alabama, 1998.
- ESHRE Capri Workshop Group. Multiple gestation pregnancy. *Hum Reprod* 2000;15:1856--64.
- ESHRE Capri Workshop Group. Prevention of twin pregnancies after IVF/ICSI by single embryo transfer. ESHRE campus course report. *Hum Reprod* 2001;16:790--800.
- Estes SJ, Laky DC, Hoover LM, Smith SE, Schinfeld JS, Somkuti SG, Successful pregnancy resulting from cryopreserved pronuclear and cleaved embryos thawed and cultured to blastocysts, refrozen and transferred. A case report, *J Reprod Med* 48:46, 2003.
- Evans NP, Nahl GE, Cartey A, et al. How much of the gonadotropin-releasing hormone (GnRH) surge is required for generation of the Luteinizing hormone surge in the ewe? Duration of the endogenous GnRH signal. *Endocrinology*, 1996; 137 (11): 4730 - 7.
- Fanchin R, Harmas A, Benaoudia F, Lundkvist U, Olivennes F, Frydman R, Microbial flora of the cervix assessed at the time of embryo transfer adversely affects in vitro fertilization outcome, *Fertil Steril* 70:866, 1998.
- Feldberg D, Ashkenazi J, Dicker D, et al. Ovarian cyst formation: a complication of gonadotrophin releasing hormone analogue agonist therapy. *Fertil Steril*. 1987; 51: 42-45.
- Fedorcsakp, Storing R, Dale PO, Tanbo T, Ayholm T. Obesity is a risk factor for early pregnancy loss after IVF or ICSI. *Acta Obstet Gynecol scand* 2000;97:43-8.
- Ferraretti AP, Gianaroli L, Magli C, Fortini D, Selman HA, Feliciani E, Elective cryopreservation of all pronucleate embryos in women at risk of ovarian hyperstimulation syndrome: efficiency and safety, *Hum Reprod* 14:1457, 1999.

- Fleming J, and Catts JRT. Induction of multiple follicular growth in normally menstruating women with endogenous gonadotropin suppression. *Fertil Steril*. 1986; 45:226-230
- follicle-stimulating hormone in the prediction of poor ovarian response and failure to become pregnant after in vitro fertilization: a meta-analysis. *Fertil Steril* 79, 1091-1100.[CrossRef.[ISI],[Medline].
- Fong CY, Bongso A, Ng SC, Kumar J, Trounson A, Ratnam S, Blastocyst transfer after enzymatic treatment of the zona pellucida: improving in-vitro fertilization and understanding implantation, *Hum Reprod* 13:2926, 1998.
- Fong, C., Bongso, A., Ng, S., Anan Kumar, J., Trounson, A. and Ratnam, S. Blastocyst transfer after enzymatic treatment of the zona pellucida: improving in-vitro fertilization and understanding implantation. *Hum. Reprod.*, 1998; 13, 2926-2932. [Abstract / Free Full Text] .
- Fong, C., Bongso, A., Sathananthan, H., Ho, J. and Ng, S. Ultrastructural observations of enzymatically treated human blastocysts: zona free blastocyst transfer and rescue of blastocysts with hatching difficulties. *Hum. Reprod.*, 2001; 16,540-546 [Abstract / Free Full Text] .
- Forman RG, Frydman R, Egan D, et al. Severe ovarian hyperstimulation syndrome using agonist of gonadotropin-releasing hormone for in vitro fertilization. European series and a proposal for prevention. *Fertil Steril*. 1990; (53): 502-509.
- Frattarelli JL, Bergh PA, Drews MR, Sharara FI and Scott RT: Evaluation of basal estradiol levels in assisted reproductive technology cycles. *Fertil Steril*, 2000; 74, 518-524. [CrossRef] [ISI] [Medline].
- Frenczy and Richard, R.M., : The female reproductive System 'Dynamics of scan and electron microscopy, New York, Wiley. 1974.
- Fried G, Remaues K, Harlin J, Krog E, Csemiczky G, Aanesen A and Tally M: Inhibin B predicts oocyte number and the ratio IGF-I/IGFB1M may indicate oocyte quality during ovarian hyperstimulation for in vitro fertilization. *J Assist Reprod Genet* 2003; 20, 167 - 176. [CrossRef] [ISI] [Medline].
- Gabrielsen A, Lindenberg S, Petersen K, The impact of the zona pellucida thickness variation of human embryos on pregnancy outcome in relation to suboptimal embryo

- development. A prospective randomized controlled study, *Hum Reprod* 16:2166, 2001.
- Gabrielsen, A., Bhatnager, P., Petersen, K. and Lindenberg, S. Influence of zona pellucida thickness of human embryos on clinical pregnancy outcome following in vitro fertilization treatment. *J. Assist. Reprod Genet.*, 2000; 17, 323-328. [ISI][Metiline]
- Garcia JE, Jones G S, Acosta AA, et al. Human Menopausal gonadotrophin-releasing hormone agonist and human chorionic gonadotropin follicular maturation for oocyte aspiration: phase I and II. *Fertil Steril*. 1983; 39:167-79.
- Garside WT, Loret de Mola JR, Bucci JA, Tureck RW, Heyner S, Sequential analysis of zona thickness during in vitro culture of human zygotes: correlation with embryo quality, age, and implantation, *Mol Reprod Dev* 47:99, 1997.
- Geva TL, Caldcron I, Madachlan V, et al. Endocrinology of IVF In: *In Vitro Fertilization*, Trounson, A.D., Gardner, D.K., 2nd edit, CRC press. London, New York. 2000; pp: 35-66.
- Glatstein IZ, Pang SC, McShane PM, Successful pregnancies with the use of laminaria tents before embryo transfer for refractory cervical stenosis, *Fertil Steril* 67:1172, 1997.
- Gonzalez P, Maluul S, Ciuffard I, et al. The use of progestins for programming assisted reproductive cycle and gonadotropin releasing hormone agonist flare-up protocols in older patients *Fertil Steril*. 1995; 63(2): 249-51.
- Gorrill MJ, Kaplan PF, Patton PE, Burry KA, Initial experience with extended culture and blastocyst transfer of cryopreserved embryos, *Am J Obstet Gynecol* 180:1472, 1999.
- Gosden RG: Follicular status at the menopause. *Hum Reprod*, 1987; 2, 617 - 621 .[Abstract] .
- Goudas VT, Hammitt DG, Damario MA, Session DR, Singh AP, Dumesic DA, Blood on the embryo transfer catheter is associated with decreased rates of embryo implantation and clinical pregnancy with the use of in vitro fertilization-embryo transfer, *Fertil Steril* 70:878, 1998.
- Graham MC, Hoeger KM, Phipps WR. Initial IVF-ET experience with assisted hatching performed 3 days after retrieval followed by day 5 embryo transfer. *Fertil Steril*. 2000 Oct; 74(4):668-71.

- Graham, M., Hoeger, K. and Phipps, W. (2000) Initial IVF-ET experience with assisted hatching performed 3 days after retrieval followed by day 5 embryo transfer. *Fertil. Steril*, 74, 668- 671.[ISI].
- Granberg M, Nilsson L, Hamberger L. couples ' willingness to pay for IVF /ET . *Acta Obstet Gynecol Scand* 1995;74;199-202
- Grifo J, Hoffman D, McNamee PI. We are due for a correction...and we are working to achieve one. *Fertil Steril* 2001;75:14.
- Groutz A, Lessing JB, Wolf Y, Azem F, Yovel I, Amit A, Comparison of transmyometrial and transcervical embryo transfer in patients with previously failed in vitro fertilization-embryo transfer cycles and/or cervical stenosis, *Fertil Steril* 67:1073, 1997.
- Groutz A, Lessing JB, Wolf Y, Yovel I, Azem F, Amit A, Cervical dilatation during ovum pick-up in patients with cervical stenosis: effect on pregnancy outcome in an in vitro fertilization-embryo transfer program, *Fertil Steril* 67:909, 1997.
- Gruijters MJ, Visser JA, Durlinger AL and Themmen AP: 2003.
- Guttmacher AF. The incidence of multiple births in man and some of the other unipara. *Obstet Gynecol* 1953;2:22--35.
- Guzick DS; Wing R Smith D Berga SL, Winters SJ . Endocrine consequences of weight loss in obese ; hyperandrogenic , anovulatory women . *fertile steril* 1994;61:598-604
- Hafez, E.S.E,: Human ovulation Mechanism, Prediction, Detection and Induction, Amsterdam, North Holland, Publishing CO 1979.
- Hamilton-Fairly D, Kiddy D Watson H, Paterson C, Franks S . Association of moderate obesity with a poor pregnancy outcome in women with polycystic ovary syndrome treated with low dose gonadotrophin . *Br J Obstet Gynaecol* 1992;99:128-31
- Handyside, A.H., Kontriogianni, E.H., Hardy, K. et al: Pregnancies from biocides human preimplantation embryos sexed by Y specific DNA amplification nature, 1990; 344,768-770.
- Hardy, K. Martin, K.L. Lesse, H. et al: human preimplantation development in vitro is not adversely affected by biopsy at the 8-cell stage. *Hum Reprod.*, 1990; 5,:708-714.
- Harper, J.C.: Preimplantation diagnosis inherited disease by embryo biopsy an update of the world figures J . *Assist. Reprod. Genet.*, 1996;13,90-95.
- Hartman G.G: How large is the mammalian egg? *Q. Rev. Biol*, 1929' 4:58h

- Hartmem, J.F. and Gwalkin, R. B.L: Allocation of sites on the mammalian sperm surface following capacitation. *Nature* , 1971; 234: 479
- Hearn-Stokes RM, Miller BT, Scott L, Creuss D, Chakraborty PK, Segars JH, Pregnancy rates after embryo transfer depend on the provider at embryo transfer, *Fertil Steril* 74:80, 2000.
- Hellebaut S, De Sutter P, Dozortsev D, Onghena A, Qian C, Dhont M, Does assisted hatching improve implantation rates after in vitro fertilization or intracytoplasmic sperm injection in all patients? A prospective randomized study, *J Assist Reprod Genet* 13:19, 1996. .
- Hellebaut, S., De Sutter, P., Dozortsev, D., Onghena, A., Qian, C. and Dhont, M.: Does assisted hatching improve implantation rates after in vitro fertilization or intracytoplasmic sperm injection in all patients? A prospective randomized study. *J. Assist. Reprod. Genet.*, 1996; 13, 19 22.[ISI][Medline].
- Henne MB, Milki AA, Uterine position at real embryo transfer compared with mock embryo transfer, *Hum Reprod* 19:570, 2004.
- Hershlag A, Paine T, Cooper GW, Scholl GM, Rawlinson K, Kvapil G, Monozygotic twinning associated with mechanical assisted hatching, *Fertil Steril* 71:144,1999.
- HFEA Report 2005. Human Fertilisation and Embryology Authority. United Kingdom
- Hogerzeil HV, Spiekerman JCM, de Vries JWA, se Schepper G. A randomized trial between GIFT and ovarian stimulation for the treatment of unexplained infertility and failed artificial insemination by donor . *Hum Reprod* 1992;7:1235-9.
- Hogue CJ. Successful assisted reproductive technology: the beauty of one. *Obstet Gynecol* 2002;100(5 Part 1):1017--9.
- Hsieh YY, Huang CC, Cheng TC, Chang CC, Tsai HD, Lee MS, Laser-assisted hatching of embryos is better than the chemical method for enhancing the pregnancy rate in women with advanced age, *Fertil Steril* 78:179, 2002.
- Huges EG,Brennan BG.Does cigarettes smoking impair natural or assisted fecundity ? *fertil steril* 1996,66:679-89
- Huges EG ,Lamont DA , Beecroft ML , Wilson DMC , Brennan BG, Rice SC . Raudomized trial of a 'stage -of-change' oriented

- smoking cessation intervention in infertile and pregnant women. *Fertile Steril* 2000;74:498-503.
- Hugues JN, and Cedrin-Durnerin. Revising gonadotrophin releasing hormone agonist protocol and management of poor ovarian responses to gonadotrophin. *Hum Reprod Update*. 1998;8:83-101.
- Hull MG, north K, Tayloi H, farrow A, ford WC. Delayed conception and active and passive smoking. the Avon Longitudinal Study of Pregnancy and Childhood study team. *fertile Steril* 2000;74:725-33.
- Human fertilization and Embryology Authority. code of practice. 6th ed. London: HFEA:2004.
- Hurley VA, Osborn JC, Leoni MA, Leeton J. Ultrasound-guided embryo transfer: a controlled trial, *Fertil Steril* 55:559, 1991.
- Hurst BS, Tucker KE, Awoniyi CA, Schlaff WD, Assisted hatching does not enhance IVF success in good-prognosis patients, *J Assist Reprod Genet* 15:62, 1998.
- Insler V, Lunenfeld B. Application of GnRH analogues in the treatment of female infertility. In: *GnRH Analogues The State of The Art*. Lunenfeld, B., Insler, V., (eds). Parthenon, New York. 1993;p: 37-48.
- Jain T, Missmer SA, Hornstein MD, Trends in embryo-transfer practice and in outcomes of the use of assisted reproductive technology in the United States, *N Engl J Med* 350:1639, 2004. V600.
- Salha O, Dada T, Levett S, Allgar V, Sharma V, The influence of supernumerary embryos on the clinical outcome of IVF cycles, *J Assist Reprod Genet* 17:335, 2000.
- Jansen TK, scheike T, Keiding N, Schaumburg l, grandjeanp. fecundability in relation to body mass and menstrual cycle patterns *Epidemiology* 1999;10:422-8
- Jensen TK, Henriksen TB, Hjollund NH, Scheika T, Kolstad H, Giwercman A, et al. Adult and prenatal exposures to tobacco smoke as risk indicators of fertility among 430 Danish couples *Am J. Epidemiol* 1998,148:962-7
- Joesbury KA, Edirisinghe WR, Phillips MR, Yovich JL. Evidence that male smoking affects the likelihood of a pregnancy following IVF treatment : application of the modified cumulative embryo score *Hum Reprod* 1998;13:1506-13.

- Kan AK, Abdalla HI, Gafar AH, Nappi L, Ogunyemi BO, Thomas A, Olojo OO, Embryo transfer: ultrasound-guided versus clinical touch, *Hum Reprod* 14:1259, 1999.
- Karanade V, and Gleicher N. A rational approach to the management of low responders in in vitro fertilization and management of poor ovarian responses to gonadotrophin *Hum. Reprod.* 1999; 14: 1744-48.
- Karanade V, Morris R, Rinehart J, et al. Limited success using the "flare" protocol in poor responders in cycles with low basal follicle stimulating hormone levels during in vitro fertilization. *Fertil Steril.* 1997;67: 900-903.
- Karanade VC, Morris R, Chapman C, Rinehart J, Gleicher N, Impact of the physician factor" on pregnancy rates in a large assisted reproductive technology program: do too many cooks spoil the broth?, *Fertil Steril* 71:1001, 1999.
- Kato O, Takatsuka R, Asch RH, Transvaginal-transmyometrial embryo transfer: the Towako method; experiences of 104 cases, *Fertil Steril* 59:51, 1993.
- Kattera S, Shrivastav P, Craft I, Comparison of pregnancy outcome of Pronuclear- and multicellular-stage frozen-thawed embryo transfers, *J Assist Reprod Genet* 16: 358, 1999.
- Khan I, Staessen C, Devroey P, Van Steirteghem AC, Human serum albumin versus serum: a comparative study on embryo transfer medium, *Fertil Steril* 56:98, 1991.
- Kiely JL, Kleinman JC, Kiely M. Triplets and higher-order multiple births: time trends and infant mortality. *Am J Dis Child* 1992;146:862--8.
- Kleinman JC, Pierre MP Jr, Madans JH, Land GH, Schramm WF. The effects of maternal smoking on fetal and infant mortality. *Am J Epidemiol* 1988;127:274-82.
- Klien NA, Bullaglia DE, Fajimoto, VR et al. Reproductive aging: accelerated ovarian follicular development associated with a monotropic FSH rise in normal older women. *J. Clin Endocrinol Metab.* 1996;81: 1038-45.
- Klingmuller D, Diedrich K, Sommar L. Effects of GnRH antagonists Cetorelix in normal women. *Gynecol Endocrinol.* 1993;7:2.

- Klonoff-Cohan H, Natarajan L, Marrs R, Yee B . Effects of female and male smoking on success rates of IVF and gamete intra-fallopian transfer . Hum reprod 2001;16:1382-90.
- Koci K, Lachman M, Mayer Z, Mrazek M, Jarolimkova K, Tepla O, et. al. (MASA, TESA, TESE +ICSI :results of the first 50 cases) . (Czech) . Ceska Gynekol 1998;63:13-9.
- Kort HL , Massey JB Witt MA , Mitchell-leef D, Durrance MH . Roudebush WE . Sperm chromatin integrity is related to body mass index ::men presenting with high BMI scores have higher incidence of sperm DNA fragmentation Abstract no. P-333 fertil steril 2003;80Suppl3,S232.
- Kort HL, Massey JB , Elsner CW , Toledo AA, Mitchell –Leef D , Roudebush WE. Men with high body mass index values Abstract no . P-355. Fertil steril 2003;80 Suppl 3;S238.
- Kovacs GT, Which factors are important for successful embryo transfer after in-vitro fertilization?, Hum Reprod 14:2679, 1999.
- Kovas GT , Machlan V, Brehny S. what is the probability of conception for couples entering an IVF program? Aust N Z J Obstet Gynaecol 2001;41:207-9.
- Kunzle R, Mueller MD, Hanggi W, Birkhauser MH , Drescher H ,Bersinger NA .Semen Quality of male smokers and non smokers in infertile couples . fertil steril 2003;79:287-91.
- Lalwani S, Timmreck L, Friedman R, Penzias A, Alper M, Reindollar RH, Variations in individual physician success rates within an in vitro fertilization program might be due to patient demographics, Fertil Steril 81:944, 2004.
- Land JA, Yarmolinskay MI, Dumoulin JC, et al. High dose human menopausal gonadotropin stimulation in poor responders doesn't improve in vitro fertilization outcome. Fertil Steril. - 1996;65: 961-65.
- Lanzendorf SE, Nehchiri F, Mayer JF, Oehninger S, Muasher SJ. A prospective, randomized, double-blind study for the evaluation of assisted hatching in patients with advanced maternal age.Hum Reprod. 1998 Feb;13(2):409-13.
- Lass A, Abusheikha N, Brinsden P, Kovacs GT, The effect of a difficult embryo transfer on the outcome of IVF, Hum Reprod 14:2417, 1999.
- Lass A, Investigation of infertile couples for assisted conception. In: In Vitro Fertilization and Assisted Reproduction,

- Brinsden, P.R., (eds) 2nd edit, Parthenon. London. 2000;PP: 13-26.
- Lavie O, Margalioth EJ, Geva-Eldar T, Ben-Chetrit A, Ultrasonographic endometrial changes after intrauterine insemination: a comparison of two catheters, *Fertil Steril* 68:731,1997.
- Leong M, Leung C, Tucker M, Wong C, Chan H, Ultrasound-assisted embryo transfer, *J In Vitro Fert Embryo Transf* 3:383, 1986.
- Lesny P, Killick SR, Robinson J, Raven G, Maguiness SD, Junctional zone contractions and embryo transfer: is it safe to use a tenaculum?, *Hum Reprod* 14:2367, 1999.
- Lesny P, Killick SR, Tetlow RL, Robinson J, Maguiness SD, Embryo transfer-can we learn anything new from the observation of Junctional zone contractions?, *Hum Reprod* 13:1540, 1998.
- Lewin A, Schenker JG, Avrech O, Shapira S, Safran A, Friedler S, The role of uterine straightening by passive bladder distension before embryo transfer in IVF cycles, *J Assist Reprod Genet* 14:32,1997.
- Liebaers, W. Issues, K. Sermon, E. Van Assche, C. Staesen, Joris, and A Van Steirtegham, (1997):Manual on Assisted reproduction, Pre implantation genetic diagnosis, (5ed.):P.363-365.
- Lin YP, Cassidenti DL, Chacon RR, Soubra SS, Rosen GF, Yee B, Successful implantation of frozen sibling embryos is influenced by the outcome of the cycle from which they were derived, *Fertil Steril* 63:262, 1995. P.1272
- Lindheim SR, Cohen MA, Sauer MV, Ultrasound guided embryo transfer significantly improves pregnancy rates in women undergoing oocyte donation, *Int J Gynaecol Obstet* 66:281, 1999,
- Lissens, W., Sermon. K. Stassen, C. et al: Review; Preimplantation diagnosis of inherited at disease J. In her . *Metab. Sis.*, 1996; 19, 709-723.
- Loret De Mola JR, Garside WT, Bucci J, Tureck RW, Heyner S, Analysis of the human zona pellucida during culture: correlation with diagnosis and the preovulatory hormonal environment, *J Assist Reprod Genet* 14:332, 1997.
- Loumaye E, Vankrieken L, Depreester, et al. Hormonal changes induced by short term administration of gonadotropin releasing hormone agonist during ovarian hyperstimulation for in

- vitro fertilization and their consequences for embryo development. *Fertil Steril*. 1989; 53: 295-301.
- Loveland JB McClamrock HD, Malinow AM, Sharara FI. Increased body mass index has deleterious effect on in vitro fertilization outcome. *J Assist Reprod Genet* 2001;18:382-6.
- MacNamee MC, and Brinsden PR. Superovulation strategies in assisted conception In: *In Vitro Fertilization and Assisted Reproduction*. Brinsden P.R. (eds) 2nd edit Parthenon, New York, London. 2000 ; PP: 91-102.
- MacNamee MC, and Howles M. The occurrence, characteristics and management of the LH surge in IVF. *Hum Reprod*. 1987; 2:46.
- Magli MC, Gianaroli L, Ferraretti AP, Fortini D, Aicardi G, Montanaro N, Rescue of implantation potential in embryos with poor prognosis by assisted zona hatching, *Hum Reprod* 13:1331,1998.
- Mandelbaum, J. (1996) The effects of assisted hatching on the hatching process and implantation. *Hum. Reprod.*, 11,43-50.
- Mansour RT, Aboulghar MA, Serour GI, Amin YM, Dummy embryo transfer using methylene blue dye, *Hum Reprod* 9:1257, 1994.
- Mansour RT, Aboulghar MA, Optimizing the embryo transfer technique, *Hum Reprod* 17:1149, 2002.
- Mantoudis E, Podsiadly BT, Gorgy A, Venkat G, Craft IL, A comparison between quarter, partial and total laser assisted hatching in selected infertility patients, *Hum Reprod* 16:2182, 2001.
- Manual on Assisted Reproduction. Rabe, I, Diedrich, K., Strowitzki, T, (eds). 2nd edit Springer-Verlag Berlin Heidelberg. New York. 2000;PP: 79-132.
- Marshburn PB, Sloan CS, Hammond MG. semen quality and association with coffee drinking, cigarette smoking, and ethanol consumption. *fertil steril* 1989;52:162-5.
- Martikainen H, Orava M, Lakkakorpi J, Tuomivaara L, Day 2 elective single embryo transfer in clinical practice: better outcome in ICSI cycles, *Hum Reprod* 19:1364,2004.
- Martin JA, Hamilton BE, Sutton PD, Ventura SJ, Menacker F, Munson ML. Births: final data for 2002. *National Vital Stat Rep* 2003;52:1--113.

- Martin JA, Park MM. Trends in twin and triplet births: 1980--97. *National Vital Stat Rep* 1999;47:1--16.
- Meldrum DR, Chetkowski R, Steingold KA, de Ziegler D, Cedars MI, Hamilton M, Evolution of a highly successful in vitro fertilization-embryo transfer program, *FertilSteril*48:86, 1987.
- Meldrum DR, Wisot A, Hamilton F, Gutlay-Yeo AL, Marr B, Huynh D, Artificial agonadism and hormone replacement for oocyte donation, *Fertil Steril* 52:509, 1989.
- Milki AA, Hinckley MD, Behr B. Comparison of blastocyst transfer to day 3 transfer with assisted hatching in the older patient. *Fertil Steril*. 2002 Dec;78(6):1244-7.
- Minaretzis D, Alper MM, Oskowitz SP, et al. Gonadotrophine-releasing hormone antagonist versus agonist administration in women undergoing controlled ovarian hyperstimulation cycle performance and in-vitro steroidogenesis of granulosa lutein cells. *Am. J. Obstet. Gynecol*, 1995; 172:1518-25.
- Molloy D, Doody ML, Breen T, Second time around: a study of patients seeking second assisted reproduction pregnancies, *Fertil Steril* 64:546, 1995.
- Moore 1988: Figure I. The developing human clinically oriented Embryology 4th edts. Philadelphia, Saunders.
- Muasher SJ, Kruithoff C, Simonetti S, Oehninger S, Acosta AA, Jones GS, Controlled preparation of the endometrium with exogenous steroids for the transfer of frozen-thawed pre-embryos in patients with anovulatory or irregular cycles, *Hum Reprod* 6:443, 1991.
- Murdoch AP , Harris M . Gamete intrafallopian transfer (GIFT) compared with intrauterine insemination in the treatment of unexplained infertility. *Br J Obstet Gynaecol* 1991;98:107-11.
- Nabi A, Awonuga A, Birch H, Barlow S, Stewart B, Multiple attempts at embryo transfer: does this affect in-vitro fertilization treatment outcome?, *Hum Reprod* 12:1188,1997.
- Nakayama T, Fujiwara H, Yamada S, Tastumi K, Honda T, Fujii S, Clinical application of a new assisted hatching method using a piezo-micromanipulator for morphologically low-quality

- embryos in poor-prognosis infertile patients, *Fertil Steril* 71:1014, 1999.
- Navot D., Bergh P. Preperation of the human endometrium for implantation . *Ann NY Acad Sci* 1999,622:212-219.
- Navot D., Bergh P. Preperation of the human endometrium for implantation . *Ann NY Acad Sci* 1999,622:212-219.
- Nazari A, Askari HA, Check JH, O'Shaughnessy A, Embryo transfer technique as a cause of ectopic pregnancy in in vitro fertilization, *Fertil Steril* 60:919, 1993.
- Neveu S, Hedon B, Bringer J, et al. Ovarian stimulation by a combination of gonadotropin releasing hormone agonist and gonadotropins for in vitro fertilization. *Fertil Steril.* 1987; 47: 639-43.
- Nichols JE, crane MM, Higdon HL, Miller PB, Boone WR. Extremes of body mass index reduce in vitro fertilization pregnancy rates. *Fertile stril* 2003;79:645-7.
- Nikolettos N, Al-Hassni 5, Felberbaum R, et al. Gonadotropin - releasing hormone antagonist protocol a novel method of ovarian stimulation in poor responders. *Eur J Obstet Gynecol Reprod Biol.* 2001; 97(2): 202-7.
- Obruca A, Strohmer H, Sakkas D, Menezo Y, Kogosowski A, Barak Y, Feichtinger W, Use of lasers in assisted fertilization and hatching, *Hum Reprod* 9:1723, 1994.
- Oehninger S, Mayer J, Muasher S, Impact of different clinical variables on pregnancy outcome following embryo cryopreservation, *Mol Cell Endocrinol* 169:73, 2000.
- Olivennes DL. LH and GnRH antagonists. *J. Gynecol Obstet Biol Reprod*, 2002 ; 31 : 25-7.
- Olivennes F, Franchin R, Bouchord. Gonadotropin hormone-releasing hormone (GnRH) agonist in-patient pretreatcd with GnRH antagonist. *Fertil Steril.* 1996; 66:151-3.
- Ozturk O, Templeton A. Multiple pregnancy in assisted reproduction techniques. In: Vayena E, Rowe PJ, Griffin PD, eds. *Current practices and controversies in assisted reproduction: report of a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction"* held at WHO Headquarters in Geneva, Switzerland, September 17--21, 2001. Geneva, Switzerland: World Health Organization; 2002: 220--34.

- Palmstierna M, Murkes D, Csemiczky G, Andersson O, Wramsby H, Zona pellucida thickness variation and occurrence of visible mononucleated blastomers in preembryos are associated with a high pregnancy rate in IVF treatment, *J Assist Reprod Genet* 15:70, 1998.
- Paulson RG, Sauer MV, Lobo A. Embryo implantation after human in vitro fertilization :Importance of endometrial receptivity . *fertil sterile* 2003;53:870-874.
- Paulson RG, Sauer MV, Lobo A. Embryo implantation after human in vitro fertilization :Importance of endometrial receptivity . *fertil sterile* 2003;53:870-874.
- Paulson RG, Sauer MV, Rogerio A, Lobo A. Factors affecting embryo implantation after human in vitro fertilization : A hypothesis . *Am J Obstet Gynecol* 1990;163:2020-2023.
- Paulson RG, Sauer MV, Rogerio A, Lobo A. Factors affecting embryo implantation after human in vitro fertilization : A hypothesis . *Am J Obstet Gynecol* 1990;163:2020-2023.
- Pillicer A, and Miro F. Steroidogenesis in vitro of human granulosa lutein cells pretreated in vivo with gonadotropin releasing hormone analogues. *Fertil Steril*. 1990; 54: 590-96.
- Poindexter AN, 3rd, Thompson DJ, Gibbons WE, Findley WE, Dodson MG, Young RL, Residual embryos in failed embryo transfer, *Fertil Steril* 46:262, 1986.
- Porcu E, Fabbri R, Seracchioli R, Ciotti PM, Magrini O, Flamigni C. Birth of a healthy female after intracytoplasmic sperm injection of cryopreserved human oocytes . *fertil sterile* 1999;68:724-6.
- Porcu E, Fabbri R, Ciotti PM. Cycles of human oocyte cryopreservation and intracytoplasmic sperm injection :results of 112 cycles Abstract no. O-004. *fertil sterile* 2000;72(3) :S2 .
- Prapas Y, Prapas N, Hatziparasidou A, Prapa S, Nijs M, Vanderzwalmen P, Vlassis G, Jones EE, The echoguide embryo transfer maximizes the IVF results, *Acta Eur Fertil* 26:113, 1995.
- Psychoyos A. the implantation window . Basic and clinical aspects . In: Mori T , Aono T , Tominaga T, Hiroi M (eds) . perspectives on assisted Reproduction . Ares Serono Symposia 2000-4:57-62.
- Psychoyos A. the implantation window . Basic and clinical aspects . In: Mori T , Aono T , Tominaga T, Hiroi M (eds) . perspectives

- on assisted Reproduction . Ares Serono Symposia 2000-4:57-62.
- Remohi J, Gutierrez A, Cano F, Ruiz A, Simon C, Pellicer A, Long oestradiol replacement in an oocyte donation programme, Hum Reprod 10:1387, 1995.
- Reynolds MA, Schieve LA, Jeng G, Peterson HB, Wilcox LS. Risk of multiple birth associated with in vitro fertilization using donor eggs. Am J Epidemiol 2001;154:1043--50.
- Reynolds MA, Schieve LA, Martin JA, Jeng G, Macaluso M. Trends in multiple births conceived using assisted reproductive technology, United States, 1997--2000. Pediatrics 2003;111(5 Part 2):1159--62.
- Rizk B. The outcome of assisted reproductive technology. In A textbook of In Vitro Fertilization and Assisted Reproduction, Second edition (ed.) P. R. Brinsden. 1999
- Rogers PAW , Murphy CR. Uterine receptivity for implantation; Human studies in blastocyst implantation. In: Yoshinaga K (ed). Blastocyst Implanation. Adams Publishing Groub,1999:231-246
- Rogers PAW , Murphy CR. Uterine receptivity for implantation; Human studies in blastocyst implantation. In: Yoshinaga K (ed). Blastocyst Implanation. Adams Publishing Groub,1999:231-246
- Rombauts L, and Wood C. Oocyte retrieval In: In Vitro Fertilization, Trounson, A., Gardner, D., (eds) 2nd edit, C.R.C. press. New York. 2000; pp: 67-84.
- Ron El R, Herman A, Golan A, et al. Ultra short luteinizing hormone releasing hormone agonist protocol in ovarian hyperstimulation for IVF. Absracts of the 2nd Joint ESCO-ESMRE, Meeting, Milan. 1990; 114-115.
- Rosenlund B, Sjoblom P, Hillensjo T, Pregnancy outcome related to the site of embryo depostion in the uterus, J Assist Reprod Genet 13:511,1996.
- Sadler, T. W.: Gametogenesis In: Medical Embryology, Saddler T.W. " ed. Williams & Williams, Baltimore, London, 1993; p. 3-10.
- Salat—Baroux, Alvonere S, Antion JM, et al . Comparison between long and short protocols of LHRH agonist in the

- treatment of polycystic ovary disease by in vitro Fertilization. *Hum-Repord.* 1988; 3: 535-93.
- Salumets A, Tuuri T, Makinen S, Vilska S, Husu L, Tainio R, Suikkari AM, Effect of developmental stage of embryo at freezing on pregnancy outcome of frozen-thawed embryo transfer, *Hum Reprod* 18:1890, 2003.
- Schieve LA, Ferre C, Peterson HB, Macaluso M, Reynolds MA, Wright VC. Perinatal outcomes among singleton infants conceived through assisted reproductive technology in the United States. *Obstet Gynecol* 2004;103:1144--53.
- Schieve LA, Meikle SF, Ferre C, Peterson HB, Jeng G, Wilcox LS. Low and very low birthweight in infants conceived with use of assisted reproductive technology. *N Engl J Med* 2002;346:731--7.
- Schieve LA, Meikle SF, Peterson HB, Jeng G, Burnett NM, Wilcox LS, Does assisted hatching pose a risk for monozygotic twinning in pregnancies conceived through in vitro fertilization?, *Fertil Steril* 74:288, 2000,
- Schieve LA, Meikle SF, Peterson HB, Jeng G, Burnett NM, Wilcox LS. Does assisted hatching pose a risk for monozygotic twinning in pregnancies conceived through in vitro fertilization?, *Fertil Steril* 2000;74:288-2000.
- Schieve LA, Peterson HB, Meikle SF, et al. Live-birth rates and multiple-birth risk using in vitro fertilization. *JAMA* 1999;282:1832-8.
- Schieve LA, Peterson HB, Meikle SF, Jeng G, Danel I, Burnett NM, Wilcox LS, Live-birth rates and multiple-birth risk using in vitro fertilization, *JAMA* 282:1832, 1999. [Bibliographic Links](#)
- Schieve LA, Reynolds MA. What is the most relevant standard of success in assisted reproduction? Challenges in measuring and reporting success rates for assisted reproductive technology: What is optimal? *Hum Reprod* 2004;19:778-12.
- Schieve LA, Wilcox LS, Zeitz J, et al. Assessment of outcomes for assisted reproductive technology: overview of issues and the US experience in establishing a surveillance system. In: Vayena E, Rowe PJ, Griffin PD, eds. Current practices and controversies in assisted reproduction: report of a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction" held at WHO Headquarters in Geneva,

- Switzerland, September 17--21, 2001. Geneva, Switzerland: World Health Organization; 2002: 361--76.
- Schmutzler AG, Rieckmanni O, Sushama V. Ideal oocyte morphology depends on estradiol level. Hum Reprod (13) abstract Book 1 (from the 13th annual meeting of ESHRE Gothenburg Sweden). 1998; PP: 184-202.
- Schmutzler RK, Reichert C, Diedrich, K, et al. Combined GnRH agonist /gonadotropin stimulation for in-vitro fertilization. Hum Reprod. 1988; 3 1 (supp 12): 29-83.
- Schoolcraft, W., Schlenker, T., Gee, M., Jones, G.S. and Jones, H.W.Jr: Assisted hatching in the treatment of poor prognosis in vitro fertilization candidates. Fertil. Steril., 1994; 62, 551-554.[ISI] [Medline]
- Schooper, B., Ludwig, M., Edenfeld, J., Al-Hasani, S. and Diedrich, K. Possible applications of lasers in assisted reproductive technologies. Hum. Reprod., 1999; 14 (Suppl.1), 186-193. [Abstract/Free FullText]
- Scott RT, and Navot D. Enhancement of ovarian responsiveness with micro doses of gonadotropin releasing hormone agonist during ovulation induction for in vitro fertilization. Fertil Steril. 1994;61:880.
- Seifer DB, Gardener AC, Massorlien L, et al. Differential secretion of dimeric inhibin in cultured luteinized granulosa cells as a function of ovarian reserve. J. Clin Endocrinol Metab. 1997; 81:736-39.
- Senat MV, Ancel PY, Bouvier-Colle MH, Breart G. How does multiple pregnancy affect maternal mortality and morbidity? Clin Obstet Gynecol 1998;41:78--83.
- Senn A, Vozzi C, Chanson A, De Grandi P, Germond M, Prospective randomized study of two cryopreservation policies avoiding embryo selection : the pronucleate stage leads to a higher cumulative delivery rate than the early cleavage stage, Fertil Steril 74:946,2000.
- Shabanowitz, R.B, Ort, R. and M.C: Characterization of a human zona pellucida from fertilized and unfertilized eggs, J. Reprod. Fertil Steril , 1988; 82:151-55.
- Sharif K, Afnan M, Lashen H, Elgendy M, Morgan C, Sinclair L, Is bed rest following embryo transfer necessary?, Fertil Steril 69:478, 1998.

- Sharif K, Afnan M, Lenton W, Bilalis D, Hunjan M, Khalaf Y, Transmyometrial embryo transfer after difficult immediate mock transcervical transfer, *Fertil Steril* 65:1071, 1996.
- Sheen TC, Chen SR, Au HK, Chien YY, Wu KY, Tzeng CR, Herniated blastomere following chemically assisted hatching may result in monozygotic twins, *Fertil Steril* 75:442, 2001.
- Shulman A, Ben-Nun I, Ghetler Y, Kaneti H, Shilon M, Beyth Y, Relationship between embryo morphology and implantation rate after in vitro fertilization treatment in conception cycles, *Fertil Steril* 60:123, 1993.
- Silber, SJ., Nagy, Z.R., Liu, et al: Conventional in vitro fertilization versus intracytoplasmic sperm injection for patients requiring microsurgical sperm aspiration. *Hum. Report.*, 1994; 9, 1705-1709.
- Simon A, Hurwitz A, Pharhat M, Revel A, Zentner BS, Laufer N, A flexible protocol for artificial preparation of the endometrium without prior gonadotropin-releasing hormone agonist suppression in women with functioning ovaries undergoing frozen-thawed embryo transfer cycles, *Fertil Steril* 71:609, 1999.
- Simon A, Hurwitz A, Zentner BS, Bdolah Y, Laufer N, Transfer of frozen-thawed embryos in artificially prepared cycles with and without prior gonadotrophin-releasing hormone agonist suppression: a prospective randomized study, *Hum Reprod* 13:2712, 1998.
- Sitikkdri AM, Maclachlor V, Koistlnen R, et al. Double blind placebo control study: human biosynthetic growth hormone for assisted reproductive technology. *Fertil Steril.* 1996; 65: 800.
- Stassen C. Coonen,E., Van Assche, E et al.: Preimplantation diagnosis diagnosis for X and Y normally in embryo from three Klinefelter patients. *Hum. Reprod.*, 1996; 11,1650-1653.
- Steirteghem AC, Selective transfer of cryopreserved human embryos with further cleavage after thawing increases delivery and implantation rates, *Hum Reprod* 12:1513, 1997.
- Strandell A, Bergh C, Lundin K, Selection of patients suitable for one-embryo transfer may reduce the rate of multiple births by half

- without impairment of overall birth rates, *Hum Reprod* 15:2520, 2000.
- Sundstrom P, Wramsby H, Persson PH, Liedholm P, Filled bladder simplifies human embryo transfer, *Br J Obstet Gynaecol* 91:506, 1984.
- Testart J, Formun R, Balaisch — AHart J, et al. Embryo quality and uterine receptivity in in vitro fertilization cycles with-without agonists of gonadotropin releasing hormone. *Hum Reprod*. 1989; 4: 198-201.
- Templeton A, Morris JK, Reducing the risk of multiple births by transfer of two embryos after in vitro fertilization, *New Engl J Med* 339:573, 1998.
- Testart J, Lassalle B, Belaisch-Allart J, Forman R, Hazout A, Fries N, Frydman R, Human embryo freezing, *Ann N Y Acad Sci* 541:532, 1988.
- Tomas C, Tikkinen K, Tuomivaara L, Tapanainen JS, Martikainen H, The degree of difficulty of embryo transfer is an independent factor for predicting pregnancy, *Hum Reprod* 17:2632, 2002.
- Tournaye H, Verheyen G, Albano C, Camus M, Van Landuyt L, Devroey P, et al. Intracytoplasmic sperm injection versus in vitro fertilization : a randomized controlled trial and a meta-analysis of the literature. *fertil steril* 2002;78:1030-7.
- Tournaye H, Camus M, Ubaldini et al. (1996): Is there still an important role for tubal transfer procedures. *Human reproduction*; 11(9) :1815.
- Trounson A, Mohr L, Human pregnancy following cryopreservation, thawing and transfer of an eight-cell embryo, *Nature* 305:707, 1983. [Bibliographic Links](#)
- Trounson AO, Teaton JF, Wood EC, et al. Pregnancies in human by fertilization in vitro and embryo transfer in the controlled ovulatory cycle. *Science*. 1981; 212: 681-82.
- Tucker, M., Luecke, N., Wilker, S. and Wright, G. (1993) Chemical removal of the outside of the zona pellucida on day 3 human embryos has no impact on implantation rate. *J. Assist. Reprod. Genet.*, 10, 187-191. [ISI][Medline]
- Tur-Kaspa I, Yuval Y, Bider D, Levron J, Shulman A, Dor J, Difficult or repeated sequential embryo transfers do not adversely affect in-vitro fertilization pregnancy rates or outcome, *Hum Reprod* 13:2452, 1998.

- Urbancsek J, Rabe T, and Strowitzki T. Ovarian stimulation for in vitro fertilization: past and present In: Manual on Assisted Reproduction. Rabe,T., Diedrich, K., Strowitzki (eds). 2^m edit, Springer, London. 2000; pp: 165-196.
- Urbancsek J, Rabe T, Grunwald K, et al. Analysis of hormonal changes during combined buserlin / hMG treatment. Hum Reprod. 1991; 5:675-81.
- Urbancsk J, and Withans T. The midlutc al buserlin administration is superior to early follicular phase administration in combined GnRH analogues and gonadolropin stimulation for controlled ovarian hyperstimulation. Fertil Steril. 1996; 65:966-71.
- US Census Bureau. Geographical mobility: 2002 to 2003. Washington, DC: US Census Bureau; 2004.
- US Census Bureau. Table PR-EST2002-01--Population estimates for Puerto Rico: April 1, 2000 to July 1, 2002. Washington, DC: US Census Bureau, 2002. Available at US Census Bureau. Table ST-EST2002-01--State population estimates: April 1, 2000 to July 1, 2002. Washington, DC: US Census Bureau; 2003. Available at useful?, Hum Reprod 12:2489, 1997.
- Vahratian A, Schieve LA, Reynolds MA, Jeng G, Live-birth rates and multiple-birth risk of assisted reproductive technology pregnancies conceived using thawed embryos, USA 1999-2000, Hum Reprod 18:1442, 2003.
- Vahratian A, Schieve LA, Reynolds MA, Jeng G. Live-birth rates and multiple-birth risk of assisted reproductive technology pregnancies conceived using thawed embryos, USA, 1999-2000. Hum Reprod 2003;18:1442.
- Van der Elst J, Van den Abbeel E, Vitrier S, Camus M, Devroey P, Van: variables affecting success, Fertil Steril 76:863, 2001.
- Velasco G, Isaza V, Vidad C, et al. Human ovarian steroid secretion in vivo: effects of GnRH agonist versus antagonist (cetorelix). Hum Reprod. 2001; 16(12): 2533-9.
- Vernaeve V, Tournaye H, Osmanagaoglu K, Verheyen G, Van Steirteghem A, Devroey P. intracytoplasmic sperm injection with testicular spermatozoa is less successful in men with nonobstructive azoospermia than in men with obstructive azoospermia . fertil steril 2003;79:529-33.

- vine MF ,Margolin BH ,Morrison HL , Hulka BS . cigarette smoking and sperm density : a meta-analysis .fertil steril 1994,61:35-43
- Visser DS, Fourie FL, Kruger HF, Multiple attempts at embryo transfer: effect on pregnancy outcome in an in vitro fertilization and embryo transfer program, J Assist Reprod Genet 10:37, 1993.
- Waterstone J, Curson R, Parsons J, Embryo transfer to low uterine cavity, Lancet 337:1413, 1991.
- Wildt L, Diedrich K, Al Hassani S, et al. Ovarian hyperstimulation for in vitro fertilization controlled by GnRH agonist administration in combination with HMG. Hum Reprod. 1986; 1:15-19.
- Wittermer C, Ohl J, Bailly M , Bettahar-Lebugle K, Nisand I Does body mass index of infertile women have an impact on IVF procedure and outcome? J Assist Reprod Genet 200;17:547-52.
- Wood EG, Batzer FR, Go KJ, Gutmann JN, Corson SL, Ultrasound-guided soft catheter embryo transfers will improve pregnancy rates in in-vitro fertilization, Hum Reprod 15:107, 2000.
- Woolcott R, Stanger J, Ultrasound tracking of the movement of embryo-associated air bubbles on standing after transfer, Hum Reprod 13:2107, 1998.
- Woolcott R, Stanger J, Potentially important variables identified by transvaginal ultrasound-guided embryo transfer, Hum Reprod 12:963, 1997.
- world health organization .physical status : the use and Interpretation of Anthropometry. World health organization technical report series 854.Geneva:world health organization ,1995.
- World Health Organization. Recommendations. In: Vayena E, Rowe PJ, Griffin PD, eds. Current practices and controversies in assisted reproduction: report of a meeting on "Medical, Ethical and Social Aspects of Assisted Reproduction" held at WHO Headquarters in Geneva, Switzerland, September 17--21, 2001. Geneva, Switzerland: World Health Organization; 2002: 381--96.
- Wright V, Schieve LA, Vahratian A, Reynolds MA. Monozygotic twinning associated with day 5 embryo transfer in pregnancies conceived after IVF. Hum Reprod 2004;19:1831--6.

- Yanagimachi R 1990: Capacitation and acrosome reaction In. Asch, R; Bialameceda, J.P and Johanston (editors). Gamete Physiology, Secone symposia, USA, Normal, Massachusettes, PP 31-4-2.
- Yang, W.H.; Lin, L.L; Wang, J.R and Chang, M. (1971). Sperm penetration through zona pellucida and perivitelline space in the hamster. J. exp. Zool., 179:191.
- Yanushpolsky EH, Ginsburg ES, Fox JH, Stewart EA, Transcervical placement of a Malecot catheter after hysteroscopic evaluation provides for easier entry into the endometrial cavity for women with histories of difficult intrauterine inseminations and/or embryo transfers: a prospective case series, Fertil Steril 73:402, 2000.
- Yokota Y, Yokota H, Yokota M, Sato S, Araki Y, Birth of healthy twins from in vitro development of human refrozen embryos, Fertil Steril 76:1063, 2001.
- Yovich JL, Turner SR, Murphy AJ, Embryo transfer technique as a cause of ectopic pregnancies in in vitro fertilization, Fertil Steril 44:318, 1985.
- Zaaddra BM, Seidell JC, Van Noord PA, te Velde ER, Habbema JD, Vrieswijk B, et al. Fat and female fecundity :prospective study of effect of body distribution on conception rates . BMJ 1993;306:484-7.
- Ziebe S, Andersen AN, Andersen AG, Mikkelsen AL, Lindenberg S. Results of intracytoplasmic sperm injection in relation to indication. Acta Obstet Gynecol Scand 1997;76:335-9.
- Zitzmann M, Rolf C, Nordhoff V, Schrader G, Rickert-Fohring M, Gassner P, et al. Male smokers have a decreased success rate for in vitro fertilization and intracytoplasmic sperm injection . Fertil Steril 2003;79Suppl 3:1550-4.
- Zona thinning with noncontact diode laser in patients aged <37 years with no previous failure of implantation: a prospective randomized study. J. Assist. Reprod. Genet., 17, 557-560. [ISI] [Medline].