

References

1. Stephenson MD. Frequency of factors associated with habitual abortion in 197 couples. *Fertil Steril* 1996; 66:24–9.
2. Hodes-Wertz B, Grifo J, Ghadir S, Kaplan B, Laskin CA, Glassner M, Munné S. Idiopathic recurrent miscarriage is caused mostly by aneuploid embryos. *Fertil Steril*. 2012 Sep; 98(3):675-80.
3. Dumollard R, Duchen M, Carroll J. The role of mitochondrial function in the oocyte and embryo. *Curr Top Dev Biol*. 2007; 77:21-49. Review.
4. Steuerwald N, Barritt JA, Adler R, Malter H, Schimmel T, Cohen J, Brenner CA. Quantification of mtDNA in single oocytes, polar bodies and subcellular components by real-time rapid cycle fluorescence monitored PCR. *Zygote*. 2000 Aug; 8(3):209-15.
5. May-Panloup P, Chretien MF, Malthiery Y, Reynier P. Mitochondrial DNA in the oocyte and the developing embryo. *Curr Top Dev Biol*. 2007; 77:51-83. Review.
6. St John J. The control of mtDNA replication during differentiation and development. *Biochim Biophys Acta*. 2014 Apr; 1840(4):1345-54.
7. Babayev E, Seli E. Oocyte mitochondrial function and reproduction. *Curr Opin Obstet Gynecol*. 2015 Jun; 27(3):175-81.
8. Takeuchi T, Neri QV, Katagiri Y, Rosenwaks Z, Palermo GD. Effect of treating induced mitochondrial damage on embryonic development and epigenesis. *Biol Reprod*. 2005 Mar; 72(3):584-92.
9. Stojkovic M, Machado SA, Stojkovic P, Zakhartchenko V, Hutzler P, Goncalves PB, Wolf E. Mitochondrial distribution and adenosine triphosphate content of bovine oocytes before and after in vitro maturation: correlation with morphological criteria and developmental capacity after in vitro fertilization and culture. *Biol Reprod* 2001; 64:904–909.
10. Nagano M, Katagiri S, Takahashi Y. Relationship between bovine oocyte morphology and in vitro developmental potential. *Zygote* 2006; 14:53–61.
11. Grindler NM, Moley KH. Maternal obesity, infertility and mitochondrial dysfunction: potential mechanisms emerging from mouse model systems. *Mol Hum Reprod*. 2013 Aug; 19(8):486-94.
12. Zhao H, Zhao Y, Li T, Li M, Li J, Li R, Liu P, Yu Y, Qiao J. Metabolism alteration in follicular niche: The nexus among intermediary metabolism, mitochondrial function, and classic polycystic ovary syndrome. *Free Radic Biol Med*. 2015 Sep; 86:295-307.
13. Skov V, Glintborg D, Knudsen S, Jensen T, Kruse TA, Tan Q, Brusgaard K, Beck-Nielsen H, Højlund K. Reduced expression of nuclear-encoded genes involved in mitochondrial oxidative metabolism in skeletal muscle of insulin-resistant women with polycystic ovary syndrome. *Diabetes*. 2007 Sep; 56(9):2349-55.
14. Wood JR, Dumesic DA, Abbott DH, Strauss JF 3rd. Molecular abnormalities in oocytes from women with polycystic ovary syndrome revealed by microarray analysis. *J Clin Endocrinol Metab*. 2007 Feb; 92(2):705-13.

15. Ge H, Tollner TL, Hu Z, Da M, Li X, Guan H, Shan D, Lu J, Huang C, Dong Q. Impaired mitochondrial function in murine oocytes is associated with controlled ovarian hyperstimulation and in vitro maturation. *Reprod Fertil Dev.* 2012; 24(7):945-52.
16. Lessey BA, Lebovic DI, Taylor RN. Eutopic endometrium in women with endometriosis: ground zero for the study of implantation defects. *Semin Reprod Med.* 2013 Mar; 31(2):109-24.
17. Xu B, Guo N, Zhang XM, Shi W, Tong XH, Iqbal F, Liu YS. Oocyte quality is decreased in women with minimal or mild endometriosis. *Sci Rep.* 2015 May 29; 5:10779.
18. Barnhart K, Dunsmoor-Su R, Coutifaris C. Effect of endometriosis on in vitro fertilization. *Fertil Steril* 2002; 77:1148–55.
19. Hsu AL, Townsend PM, Oehninger S, Castora FJ. Endometriosis may be associated with mitochondrial dysfunction in cumulus cells from subjects undergoing in vitro fertilization intracytoplasmic sperm injection, as reflected by decreased adenosine triphosphate production. *Fertil Steril.* 2015 Feb; 103(2):347-52.e1.
20. Mansour G, Sharma RK, Agarwal A, Falcone T. Endometriosis-induced alterations in mouse metaphase II oocyte microtubules and chromosomal alignment: a possible cause of infertility. *Fertil Steril.* 2010 Oct; 94(5):1894-9.
21. Shu J, Xing L, Ding G, Luo Q, Liu X, Yan Q, Sheng J, Huang H. The effect of peritoneal fluid from patients with endometriosis on mitochondrial function and development of early mouse embryos. *PLoS One.* 2013 Dec 26; 8(12):e82334.
22. Ene AC, Park S, Edelmann W, Taketo T. Caspase 9 is constitutively activated in mouse oocytes and plays a key role in oocyte elimination during meiotic prophase progression. *Dev Biol.* 2013 May 1; 377(1):213-23.
23. Van der Stroom EM, König TE, van Dulmen-den Broeder E, Elzinga WS, van Montfrans JM, Haadsma ML, Lambalk CB. Early menopause in mothers of children with Down syndrome? *Fertil Steril.* 2011 Oct; 96(4):985-90.
24. May-Panloup P, Chrétien MF, Jacques C, Vasseur C, Malthiery Y, Reynier P. Low oocyte mitochondrial DNA content in ovarian insufficiency. *Hum Reprod.* 2005 Mar; 20(3):593-7.
25. Carp H, Toder V, Aviram A, Daniely M, Mashiach S, Barkai G. Karyotype of the abortus in recurrent miscarriage. *Fertil Steril.* 2001 Apr; 75(4):678-82.
26. Fragouli E, Spath K, Alfarawati S, Kaper F, Craig A, Michel CE, Kokocinski F, Cohen J, Munne S, Wells D. Altered levels of mitochondrial DNA are associated with female age, aneuploidy, and provide an independent measure of embryonic implantation potential. *PLoS Genet.* 2015 Jun 3; 11(6):e1005241.
27. Zhao H, Zhao Y, Li T, Li M, Li J, Li R, Liu P, Yu Y, Qiao J. Metabolism alteration in follicular niche: The nexus among intermediary metabolism, mitochondrial function, and classic polycystic ovary syndrome. *Free Radic Biol Med.* 2015 Sep; 86:295-307.
28. Słabuszewska-Józwiak A, Ciebiera M, Baran A, Jakiel G. Effectiveness of laparoscopic surgeries in treating infertility related to endometriosis. *Ann Agric Environ Med.* 2015; 22(2):329-31.
29. Jin X, Ruiz Beguerie J. Laparoscopic surgery for subfertility related to endometriosis: a meta-analysis. *Taiwan J Obstet Gynecol.* 2014 Sep; 53(3):303-8. Review.

30. Ben-Meir A, Burstein E, Borrego-Alvarez A, Chong J, Wong E, Yavorska T, Naranian T, Chi M, Wang Y, Bentov Y, Alexis J, Meriano J, Sung HK, Gasser DL, Moley KH, Hekimi S, Casper RF, Jurisicova A. Coenzyme Q10 restores oocyte mitochondrial function and fertility during reproductive aging. *Aging Cell*. 2015 Oct; 14(5):887-95.
31. White YA, Woods DC, Takai Y, Ishihara O, Seki H, Tilly JL. Oocyte formation by mitotically active germ cells purified from ovaries of reproductive-age women. *Nat Med*. 2012 Feb 26; 18(3):413-21.
32. Kjøltrød SB, Carlsen SM, Rasmussen PE, Holst-Larsen T, Mellembakken J, Thurin-Kjellberg A, Haapaniemikouru K, Morin-Papunen L, Humaidan P, Sunde A, von Düring V. Use of metformin before and during assisted reproductive technology in non-obese young infertile women with polycystic ovary syndrome: a prospective, randomized, double-blind, multi-center study. *Hum Reprod*. 2011 Aug; 26(8):2045-53.