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How Can We Increase the Success of In Vitro Fertilization?

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Today, when the women are located in work life more often, the age of getting pegnant becomes older. However, the fertility declines more rapid by the age of 35. In addition, ovarian reserve and response decrease with progressive aging. Every passing day, the couples referred to centers for assisted reproductive technologies increase and in vitro fertilization (IVF) is an expensive treatment for both the couples and the country. We encounter more failed IVF cycles and repeated implantation failure especially in older aged women. Therefore, clinicians try new therapies to improve reproductive success.

Dehydroepiandrostenedione, growth hormone, antioxidants including coenzyme Q10 (CoQ10) can be used as adjuvants to increase ovarian response. In addition, immunotherapy, corticosteroids, aspirin, heparin, uterine artery vasodilators are used for implantation success. Multiple sequential imaging of the dividing embryos without bringing them out of the incubator, timelapse monitoring of embryo, pre-implantation genetic screening are the techniques to select the best embryo that will implant to the uterus. Embryo glue (an adhesive compound) is one of the pro-implantation procedures. Although some studies found higher live birth rates after using embryo glue, others don't support their efficacy in improving clinical pregnancy rates (1-3).

Acupuncture is one of the complementary alternative therapy of traditional Chinese medicine. It gains popularity day after day. Infertile women have more psychologic stress during infertility treatment and acupuncture improves their emotional distress (4). While several trials found a significant improvement in pregnancy rates (5,6) some others did not advice acupuncture on day of embryo transfer (7,8).

In conclusion, further research studies are warranted to clarify the true effectiveness and safety of these interventions.

Ethical Issues

Not applicable.

Assoc. Prof. Dr. Zehra Kurdoglu was born in 1978. In 2001, she graduated from Hacettepe University Faculty of Medicine. She completed his specialty in Obstetrics and Gynecology at Gazi University, Faculty of Medicine, Department of Obstetrics and Gynecology between 2001 and 2006. Between the years of 2014-2018, she worked between Training and Beautiful Harvite.



in Ankara Training and Research Hospital, Department of Obstetrics and Gynecology and during that time, she was sent to Division of Minimally Invasive Gynecology and Research in the Department of Obstetrics and Gynecology of the University of Texas Medical Branch at Galveston, Texas, USA by the Ministry of Health and was trained on robotic surgery by Assoc. Prof. Dr. Gökhan Sami Kılıç. In 2018, she started to work at Yildirim Beyazıt University Faculty of Medicine, Department of Obstetrics and Gynecology. At national and international level, she has published 100 scientific papers, has written 1 book chapter and has received over 700 citations for her articles. She was a member of the editorial board of Van Medical Journal, Turkish Journal of Obstetrics and Gynecology, Turkiye Klinikleri Gynecology Obstetrics, Eastern Journal of Medicine. At present, she is a member of the editorial board of International Journal of Women's Health and Reproduction Sciences and Crescent Journal of Medical and Biological Sciences.

Conflict of Interests

The author has no conflicts of interest to disclose.

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