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 pregnant becomes older. However, the fertility declines more rapidly 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.

Dehydroepiandrosterone, 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, time-lapse 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 advise 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.

Conflict of Interests
The author has no conflicts of interest to disclose.

References

