Letter to Editor

Exons 1 and 10 Polymorphisms of LHCGR Gene and IVF Success

Dear Editor,

We read the publication on "Evaluation of the Prevalence of Exons 1 and 10 Polymorphisms of LHCGR Gene and Its Relationship with IVF Success" with a great interest (1). Javadi-Arjmand et al. concluded that "It has been revealed that two common SNPs (rs4539842 and rs2293275) in the LHCGR gene are associated with the outcome of IVF in Iranian infertile women (1)". Basically, the polymorphisms of LHCGR gene result in molecular structure change and it can further affect phenotypic expression. Nevertheless, there are other possible genetic polymorphisms that might be associated with outcome of IVF (2). The examples of those polymorphisms are estrogen, progesterone and follicle stimulating hormone receptor polymorphisms (3). It is hard to verify the observed effects of exons 1 and 10 polymorphisms of LHCGR gene in the present report by Javadi-Arjmand et al. (1). Further studies to assess possible confounding effects of those genetic factors are required.

Conflict of Interest

None.

References

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3. Ganesh V, Venkatesan V, Koshy T, Reddy SN, Muthumuthiah S, Paul SFD. Association of estrogen, progesterone and follicle stimulating hormone receptor polymorphisms with in vitro fertilization outcomes. Syst Biol Reprod Med. 2018;64(4):260-5.

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Response to letter to editor

Dear Editor,

We truly appreciate your consideration upon our manuscript: "Evaluation of the Prevalence of Exons 1 and 10 Polymorphisms of LHCGR Gene and Its Relationship with IVF Success". As you know, IVF is a complex procedure and many genetic and environmental factors influence this procedure. Among genetic factors, polymorphisms in some particular genes such as FSH receptor, estrogen, LH receptor gene, *etc*. are important in infertile women undergoing IVF. We have chosen one of these important polymorphisms in LHCGR gene that has not been examined specifically in other studies. In our conclusion part, we have mentioned that among three polymorphisms that we have studied and examined in LHCGR, two of them can be suggested only as predictive factors in IVF outcome. We also have mentioned in our article that to confirm our results, first of all, a larger number of infertile women should be analyzed and next, we or other investigators need to do combined assessment on LHCGR and FSHR polymorphisms. Also, it is very important to carry out such studies in different populations and examine other genes associated with IVF outcome.

Yours Sincerely,

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