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Title:

Results with GnRH antagonist protocols are equivalent to GnRH agonist protocols in comparable patient populations.

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Abstract

OBJECTIVE:

To determine whether ovarian stimulation outcome and success rates are equivalent between GnRH agonist and GnRH antagonist regimens when all other variables are held constant.

STUDY DESIGN:

Retrospective analysis. Infertile patients (n = 1,277) < 35 years of age, with normal ovarian reserve, undergoing their first in vitro fertilization cycle with a GnRH antagonist or agonist were included. Outcome variables were analyzed and compared between both groups.

RESULTS:

Of the total number of patients included, 21% (n = 268) underwent stimulation with a GnRH antagonist protocol and 79% (n = 1,009) with an agonist protocol. While the mean number of embryos transferred was similar between both groups, as well as the implantation rate for blastocyst embryo transfers, the implantation rate was noted to be slightly higher for the down-regulation group who underwent a Day 3 embryo transfer (p = 0.01). However, the overall clinical pregnancy, loss and high-order multiple pregnancy rates were constant in both groups.

CONCLUSION:

Although numerous variables were analyzed in our study, the differences noted did not have an impact on our final results as the clinical pregnancy rates were maintained in the antagonist group.