

Clomiphene Citrate Improves Sperm Quality and Fertility in Hypogonadal, Oligospermic Males.

K. M. Silverberg, R. A. Ormand, L. J., Hansard, T. C. Vaughn

Texas Fertility Center, Austin, TX.

Although clomiphene citrate has been used empirically in males with oligospermic, to our knowledge, its use has never been prospectively evaluated using both endocrinologic and semen analysis parameters in Hypogonadal, oligospermic men. The purpose of this study was to evaluate the effect of daily clomiphene citrate on serum FSH, LH and testosterone levels, as well as sperm concentration, motility, and morphology in hypogonadal, oligospermic males.

Design: Prospective trial of clomiphene citrate 25 mg/day for a minimum of 90 days.

Materials and Methods: Twenty-four men with hypogonadal oligospermia received clomiphene citrate 25 mg/day for a minimum of 90 days. FSH, LH, and testosterone levels as well as semen analysis were then repeated in order to determine the effectiveness of the clomiphene treatment. Clomiphene was continued until either the couple conceived or infertility therapy was discontinued.

Results: Using the paired t-test, mean FSH levels increased significantly during clomiphene treatment (2.9 vs. 4.9 mIU/mL, $p = 0.01$), as did LH levels (3.6 vs. 6 mIU/mL, $p < 0.001$), and testosterone levels (259.8 vs. 556.2 ng/dL, $p < 0.001$). In addition, the mean sperm concentration rose significantly (29.6 M/n& vs. 65 M/n& $p < 0.05$), as did sperm motility (33.3% vs. 47.7%, $p < 0.01$). There was no significant increase in normal sperm morphology. Fourteen couples conceived while on treatment.

Conclusion: Clomiphene citrate represents a viable alternative for the treatment of hypogonadal oligospermia.