

Comparing 17 α -hydroxyprogesterone caproate and progesterone in oil for luteal phase support in IUI cycles

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Abstract

Introduction: Luteal phase support is practiced routinely in some medical centers in patients undergoing ovulation induction (OI) and intrauterine insemination (IUI) cycles. The purpose of this study was to compare the effects of progesterone in oil with 17- α -hydroxy progesterone caproate (17- HPC) for luteal phase support.

Materials and Methods: This prospective randomized clinical trial was done at Montaserieh Infertility Center in Mashad, Iran, from October 2005 to October 2006. In this study, 162 patients undergoing OI and IUI were randomly treated with either 17-HPC (250 mg/weekly, IM) or progesterone in oil (50mg/daily, IM) until serum β -hCG was evaluated.

In patients with positive β -hCG results (Biochemical pregnancy), the treatment was continued until the 12th week of gestation. The data were analyzed using t-tests, Chi-squared and Fisher's exact test. P-values <0.05 were considered as the level of significance.

Results: The outcomes of IUI in both study groups were compared. No differences were found in the outcome of pregnancies, considering parameters such as biochemical pregnancy (p=0.69), clinical pregnancy (p=0.3) or ongoing pregnancy up to the 20th week (p=0.831). Complications were significantly lower in 17-HPC group (p=0.002) and the patients' satisfaction was significantly higher compared to the other group (p=0.003).

Conclusion: The results of this study confirm that 17-HPC has the same effects as oily progesterone for luteal phase support in patients undergoing OI and IUI cycles and it could be used instead of progesterone in oil, although more studies are needed to support this replacement.

Key Words: 17- α -hydroxy progesterone caproate, Progesterone in oil, Natural progesterone, Intrauterine insemination, IUI, Luteal phase, Support.

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