شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Comparison between Agonist trigger with HCG luteal phase supplementation vs HCG trigger with progesterone luteal phase supplementation in Antagonist Controlled hyperstimulation Cycle regarding clinical pregnancy rate

Thesis

Submitted for the partial fulfillment of the M.D degree in
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By

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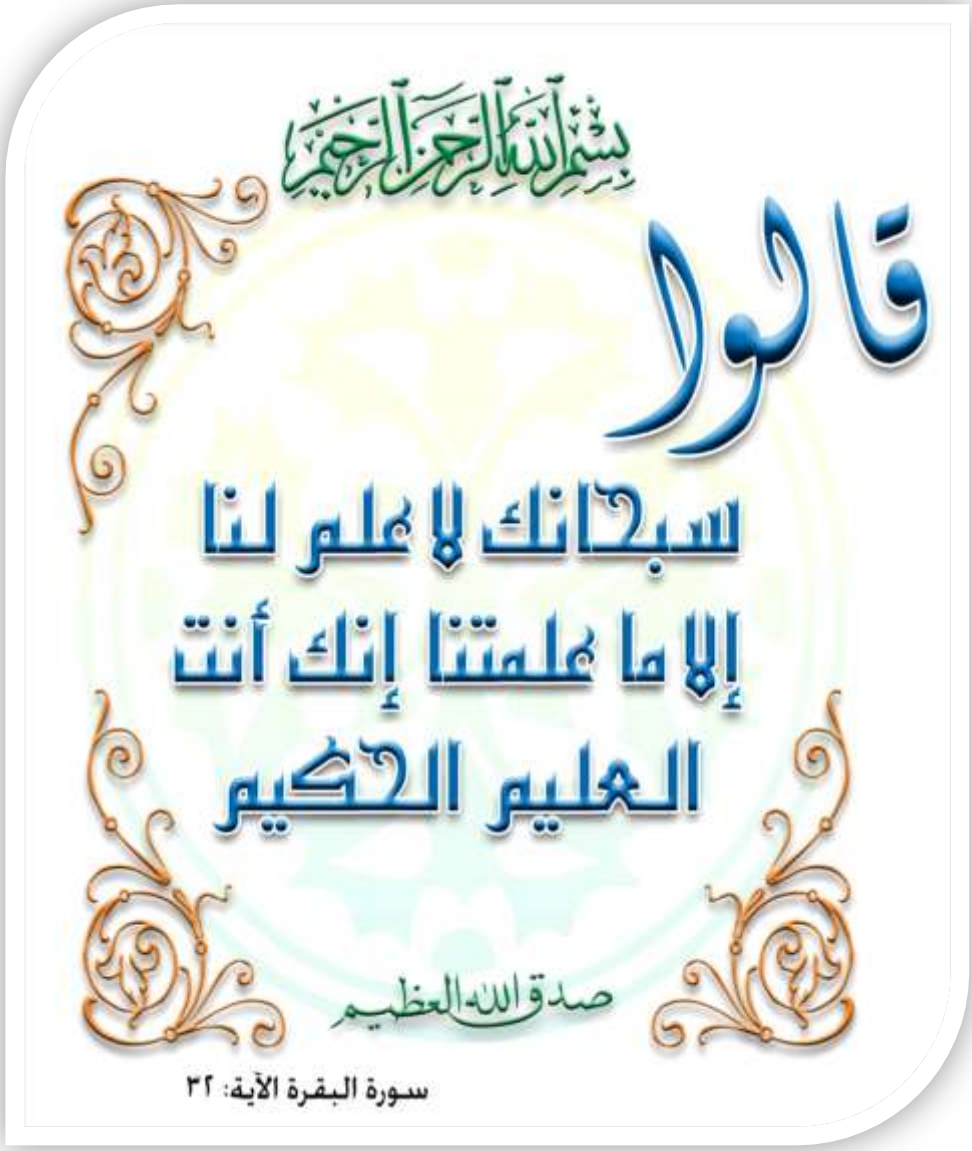
بسم الله الرحمن الرحيم
قالوا
سبحانك لا علم لنا
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العليم الحكيم
صدق الله العظيم
سورة البقرة الآية: ٣٢

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Sherif Mohamed Yehia Soliman

Comparison between Agonist trigger with HCG luteal phase supplementation vs HCG trigger with progesterone luteal phase supplementation in Antagonist Controlled hyperstimulation Cycle regarding clinical pregnancy rate

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For the last two decades, exogenous progesterone administration has been used as luteal phase support (LPS) in connection with controlled ovarian stimulation combined with use of the human chorionic gonadotropin (hCG) trigger for the final maturation of follicles. The introduction of the GnRHa trigger to induce ovulation showed that exogenous progesterone administration without hCG supplementation was insufficient to obtain satisfactory pregnancy rates. This has prompted development of alternative strategies for LPS. Augmenting the local endogenous production of progesterone by the multiple corpora lutea has been one focus with emphasis on one hand to avoid development of ovarian hyper-stimulation syndrome and, on the other hand, to provide adequate levels of progesterone to sustain implantation.

The present study evaluates the use of micro-dose hCG for LPS support and examines the comparison between conventional HCG trigger and progesterone luteal phase support vs Agnosit trigger and HCG microsdose luteal phase support as regards to pregnancy rate.

Methods : 100 patients were recruited for this trial Cases with Polycyctic ovaries were excluded from the study. The study was approved by Ethical committee of Ain Shams university. Patients received Gonal-F (Merck Serono S.p.A., Via delle Magnolie 15, I-70026 Modugno (Bari), Italy.) in a dose ranginging between 150-300 IU for stimulation and the dose was adjusted according to response starting day 6. Premature LH surge was prevented with 0.25 mg of a GnRH antagonist (Cetrotide; Merck international) starting on day 6, when two or more follicles reach a size of 18–20 mm, patients were randamized into 2 groups of 50 each . Trigger of ovulation was done by a single dose of 0.2 mg triptorelin (Decapeptyl®ferring Pharmaceutical company , Germany) and luteal phase support with daily 125 IU HCG injections in Group 1 . Group 2 received A single dose of HCG 10000 IU was given followed by progesterone supplementation with 100mg IM progesterone (Prontogest® IBSA Swisserland) . 2 Embryo were transferred and an ultrasound at 4 weeks after embryo transfer for cases with positive pregnancy test. As regards to clinical pregnancy group 1 had 28 of the 50 (56%) Positive clinical pregnancy while control was 26 of the 50 (52%), the difference was not statistically significant (P>0.68) .No cases of moderate or severe ovarian hyperstimulation were observed during the study. To conclude , Agonist trigger combined with microdose HCG had a comparable pregnancy rate resulst to HCG trigger and conventional progesterone support for luteal support without increasing the risk of ovarian hyper stimulation.

Key words: Agonist trigger, HCG luteal phase supplementation, Antagonist Controlled hyperstimulation Cycle, clinical pregnancy rate

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List of Abbreviations

Abbr.	Full-term
ART	**:** Assisted Reproductive Technologies
ART	**:** Assisted reproductive treatment
CL	**:** Corpus luteum
COH	**:** Controlled Ovulation hyper stimulation
COS	**:** Controlled ovarian stimulation
CPR	**:** Clinical pregnancy rate
DR	**:** Delivery Rate
ET	**:** Endometrial thickness, Embryo transfer
FSH	**:** Follicle-stimulating hormone
GnRH	**:** Gonadotropin-releasing hormone
GnRH-ant	**:** GnRH antagonists
hCG	**:** Human chorionic gonadotropin
hCG	**:** Human chorionic gonadotropin
hMG	**:** Human menopausal gonadotropin
HMG	**:** Human menopausal gonadotropin
ICSI	**:** Intracytoplasmic sperm injection
ICSI	**:** Intra-cytoplasmic sperm injection
IGF	**:** Insulin-like growth factor
IM	**:** Intramuscular
IVF	**:** In vitro fertilization
IVF	**:** In-vitro fertilization

LH **:** Luteinizing hormone

LIF **:** Leukemia inhibitory factor

LPS **:** Luteal phase support

MPA **:** Medroxyprogesterone acetate

OHSS **:** Ovarian hyperstimulation syndrome

OR **:** Oocyte retrieval

P **:** Progesterone

PCOS **:** Polycystic ovary syndrome

pFSH **:** Purified' FSH

PKA **:** Protein kinase A

rhFSH **:** Recombinant human FSH

rhLH **:** Recombinant human LH

SC **:** Subcutaneous

SPSS **:** Statistical package for Social Science

UC **:** Uterine contractions

VEGF **:** Vascular endothelial growth factor

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