

Anti-Mullerian Hormone as A Prognostic Marker of Intracytoplasmic Sperm Injection Outcome in Patients with Endometriosis

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Of Master Degree in Obstetrics and Gynaecology*

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LIST OF ABBREVIATIONS

AFC	Antral Follicle Count
AFS	American Fertility Society
AMH	Anti-Mulerian Hormone
AMHff	AMH in follicular fluid
AMHR	Anti-Mulerian Hormone Receptor
AMHs	AMH in serum
ART	Assisted Reproductive Techniques
BMI	Body Mass Index
C group	Control group
CA	Cancer Antigen
CCCT	Clomiphene Citrate Challenge Test
COS	Controlled Ovarian Stimulation
E group	Endometriotic group

E2	Estradiol
EFORT	Exogenous FSH Ovarian Reserve Test
FSH	Follicular Stimulating Hormone
GAST	Gonadotrophin Agonist Test
GCT	Granulosa Cell Tumour
GnRH	Gonadotrophin Releasing Hormone
HCG	Human Chorionic Gonadotopin
HRT	Hormonal Replacement Therapy
ICSI	Intra-Cytoplasmic Sperm Injection
IGF	Insulin-like Growth Factor
IL	Interleukin
IVF	In-Vitro Fertilization
LH	luteinizing Hormone
MIS	Mulerian Inhibiting Substance
NGF	Nerve Growth Factor

OHSS	Ovarian Hyper-Stimulation Syndrome
PCO	Poly-Cystic Ovary
PDGF	Platelet Derived Growth Factor
PMDS	Persistent Mullerian Duct Syndrome
POF	Premature Ovarian Failure
SD	Standard Deviation
TNF	Tumour Necrosis Factor

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INTRODUCTION

One of the important issues for in vitro fertilization-embryo transfer (IVF-ET) is to decrease the occurrence of multiple pregnancies without decreasing the success rate. This implies the need to obtain oocytes that are of a good quality for fertilization and implantation (**Hasegawa et al, 2003**).

Endometriosis is a disease defined by the presence of endometrial glands and stroma located outside the uterine cavity. These ectopic implants can be found throughout the pelvis, on and within the ovaries, abutting the uterine ligaments, occupying the rectovaginal septum, invading the intestinal serosa, and along the parietal peritoneum. Endometrial implantation at distant sites such as the pleura, lung, within surgical scars, and along the diaphragm also has been reported (**Boyle and Torrealday, 2008**).

The main clinical symptoms of endometriosis are infertility, dysmenorrhoea, dyspareunia, dyschezia and chronic pelvic pain (defined as pain of greater than 6- month duration and not cyclical in nature) (**Treloar et al., 2005**).

Although many hypotheses exist to explain the condition between endometriosis and infertility, the precise mechanisms by which endometriosis leads to infertility remain unclear. While more extensive endometriosis may simply impair fertility by mechanical means, hypotheses concerning subtler forms of endometriosis have suggested that infertility is impaired due to disruption of ovum transport,