

## **P155. In-vitro fertilization (IVF)/ Intracytoplasmic Insemination (ICSI) Outcomes in Endometriosis- Related Infertility: 8 years Results from an Assisted Reproductive Unit**

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**Context:** Endometriosis occurs in up to 30-40% of women with infertility. IVF/ICSI is commonly used to treat women with endometriosis-related infertility. However, the IVF/ICSI outcomes of women with endometriosis are still controversial.

**Objective:** To review the IVF/ICSI outcomes of women with endometriosis-related infertility.

**Methods:** This was a retrospective cohort study carried out in an Assisted Reproductive Unit of a tertiary hospital. Women undergoing IVF/ICSI for endometriosis-related infertility were compared to other women undergoing IVF/ICSI due to factors other than endometriosis. The baseline characteristics, stimulation (total days of stimulation, total dose of gonadotrophins, estradiol level of day of human chorionic gonadotrophins (HCG), number of mature follicles on ultrasound scan (USG)), laboratory (total oocytes retrieved, fertilization rate, number of viable embryos) and reproductive outcomes (implantation, clinical pregnancy and live birth rate) were reviewed.

**Patients:** All women undergoing IVF/ICSI for endometriosis-related infertility throughout January 2008 to December 2016 were reviewed. The control group was those women with infertility due to other factors other than endometriosis.

**Results:** A total of 721 out of 3998 patients (18%) underwent IVF/ICSI for endometriosis-related infertility. Minimal to mild endometriosis was found in 41.3% of the patients while moderate to severe endometriosis in 58.7%. The endometriosis group significantly requires more gonadotrophins, has lower estradiol level on day of ovulation trigger and has less mature follicles on USG, while no differences in laboratory and reproductive outcomes were found. Those with moderate and severe endometriosis were also found to require more gonadotropin, have lower estradiol level on day of ovulation trigger, fewer numbers of mature oocytes on USG and retrieved but no difference in reproductive outcomes. Inconclusive results were found for presence of endometriomas on baseline scan and those with ovarian surgery. Endometriosis ablation performed prior to IVF/ICSI resulted in significantly more mature follicles developed and more mature oocytes retrieved but no effect on reproductive outcomes.

**Conclusion:** Endometriosis does have an effect on IVF/ICSI outcome and its impact may be related to its severity. Surgical treatment of endometriosis prior IVF/ICSI may have an impact on outcome.

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