



ENDOMETRIOSIS: A DRAWBACK IN ASSISTED REPRODUCTION TECHNOLOGY?

Neves A (PT) [1], Sousa A (PT) [2], Cortesão P (PT) [3], Matias S (PT) [4], Almeida-Santos T (PT) [5]

Context: Endometriosis has a high prevalence among infertile women and has long been associated with low ovarian reserve and poor assisted reproduction technology (ART) outcomes. However, recent studies suggested that endometriosis might be associated with similar outcomes comparing to other causes of infertility.

Objective: To evaluate whether the ovarian reserve and reproductive outcomes are impaired among women with ovarian endometriomas undergoing ART.

Methods: A retrospective cohort study was conducted in a portuguese ART centre in a University hospital between January 2012 and June 2017.

Patients: The study group included women with ovarian endometriomas (Group A) and the control group were women with tubal factor infertility without endometriosis (Group B). Exclusion criteria were: male factor, previous adnexal surgery and endocrine disorders.

Interventions: For each patient, we analyzed the parameters of ovarian reserve (FSH, antimullerian hormone – AMH – and antral follicle count - AFC) and the first fresh in vitro fertilization (IVF) cycle. The outcomes between both groups were compared.

Main outcome measures: The primary outcome was clinical pregnancy. The secondary outcomes were FSH, AMH, CFA, rate of cancelled cycles, number of mature oocytes retrieved and fertilization rate.

Results: A total of 159 patients were enrolled in the study (Group A, n=32; Group B, n=127). There was no difference between the mean age, FSH, AMH and AFC between both groups. The duration of infertility was significantly lower in group A ($2,19 \pm 1,11$ years vs. $2,97 \pm 1,90$ years, $p=0,004$). No significant differences were found in relation to the number of mature oocytes ($6,31 \pm 4,76$ vs. $6,24 \pm 4,39$), fertilization rate ($74,68\% \pm 24,73$ vs $71,28\% \pm 31,18$) or rate of cancelled cycles [$34,4\%$ (n=11) vs $34,6\%$ (n=44)] between groups A and B. Finally, the clinical pregnancy rate was also similar between the groups [$25,0\%$ (n=8) vs $21,3\%$ (n=27), $p=n.s.$].

Conclusions: Neither the parameters of ovarian reserve analyzed nor the outcome of ART were different between women with ovarian endometriomas and those with tubal factor infertility. Patient counselling should take into account the recent evidence for a favourable reproductive outcome in patients with

[1] Centro Hospitalar e Universitario de Coimbra, [2] Centro Hospitalar e Universitario de Coimbra, [3] Centro Hospitalar e Universitario de Coimbra, [4] Centro Hospitalar e Universitario de Coimbra, [5] Centro Hospitalar e Universitario de Coimbra

endometriosis undergoing ART.