43. Does current ovarian endometrioma increase the time for DOR patients to reach

live birth in IVF?

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Abstract

Background: The contents of ovarian endometrioma (OMA) such as inflammatory

mediators, reactive oxygen species, and iron may disrupt normal folliculogenesis and result in

subsequent oocyte apoptosis. Therefore, women with OMA have a potential risk of

diminished ovarian reserve (DOR). The purpose of this study is to compare the in vitro

fertilization (IVF) outcomes and efficiency between DOR patients with and without current

OMA.

Methods: This retrospective case-control study included a total of 493 women with DOR

(serum anti-Müllerian hormone level < 1.1 ng/mL). Ninety patients with OMA (Group A)

underwent 191 IVF cycles and 403 patients without ovarian OMA (Group B) underwent 888

IVF cycles in our center between January 2014 and December 2018. Basal characteristics and

IVF outcomes were compared between Group A and Group B. Time to achieve live birth

were compared between patients with live birth in two groups (Group A1, 31 patients; Group

B1, 132 patients).

Results: Clinical and demographic characteristics of patients were similar respectively

between groups (A vs. B, A1 vs. B1). There were no statistically significant differences in

implantation rate, live birth rate per OPU and per ET cycle and the cumulative live birth rate

per patient and per patient with good-quality embryos between Group A and Group B (P >

0.05). Total time to achieve live birth has no statistically significant difference between

Group A1 and Group B1 (P > 0.05).

Conclusion: For DOR women, presence of endometrioma did not affect the IVF outcomes.

Even the time to get live birth was not prolonged by current OMA.

Keywords: Cumulative live birth rate; Diminished ovarian reserve; In vitro fertilization;

Ovarian endometriomas; Time to achieve live birth.