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Title:

A MATURE CYSTIC TERATOMA ON THE OVARY DOES NOT ALTER IN VITRO FERTILIZATION SUCCESS RATE

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Introduction:

Patients who undergo surgical excision of a dermoid-cyst prior to in vitro fertilization may be at risk of resection of healthy ovarian tissue. Our objective was to analyze ovarian reserve, response to stimulation, and IVF success rates in patients with a dermoid-cyst versus those who underwent a cyst removal prior to undergoing IVF.

Methods:

The retrospective cohort analysis included patients who underwent IVF with fresh blastocyst transfer from 2005 to 2018. Patients with a history of oophorectomy and/or donated oocytes were excluded. Patients were segregated into 3 cohorts: (group 1: Resected dermoid-cyst, group 2: Present dermoid-cysts, and group 3: a matched control group). Comparative statistics and an adjusted multivariable logistic regression were used to analyze collected data.

Results:

119 patients were included, 54.6% (n=65) had an active dermoid-cyst during IVF cycle(s) while 45.4% (n=54) underwent cystectomy prior to treatment. 352 patients were included as a control. Demographic characteristics, ovarian reserve, stimulation parameters and pregnancy rates were comparable among cohorts. After controlling for age, BMI, AMH, endometrial thickness, blastocysts transferred and cyst size, no association was found with the odds of implantation (OR 1.56 P0.58), clinical pregnancy (OR 2.52,P0.63) ongoing pregnancy (OR1.3,P0.84) pregnancy loss (OR 0.76, P0.84) or multiple pregnancy rates (OR 0.6,P0.84) among patients with a dermoid-cyst.



Conclusions:

The presence or removal of an ovarian dermoid cyst did not adversely influence ovarian reserve or IVF success. Clinicians can be reassured that the presence of a dermoid cyst is not a barrier to assisted reproduction treatment success.

Support:

None