

Intrauterine Devices And Its Effects On Anti-Müllerian Hormone Levels And Egg Quantity

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Abstract

OBJECTIVE: This study sought to investigate how previous intrauterine device (IUD) usage in patients with low Anti-Müllerian hormone (AMH) levels (<1), affects the amount of oocytes retrieved in relation to antral follicle count (AFC).

DESIGN: Retrospective chart review at a private multi-site infertility center.

MATERIALS & METHODS: All IVF and cryopreservation cycle outcomes were reviewed for patients who received treatment between June 2017 and April 2022. Patients were split into two groups, those who self-reported using/having an IUD and patients who reported other or no form of contraception prior to treatment. Data on antral-follicle counts and corresponding number of oocytes retrieved was collected and analyzed to determine if there were any differences between the two patient groups. T-tests and confidence interval analysis were used to analyze the data using R-studio.

RESULTS: A total of 44 patients were included in the study. Average difference in AFC to egg count in the group of patients who reported IUD usage prior or during treatment was 2.8. Average difference in AFC to egg count in the group of patients who did not report IUD usage prior or during treatment was 3.4. There was no statistically significant difference found between these groups ($p > .05$).

CONCLUSIONS: Preliminary data showed no significant difference in average AFC to egg count between patients who reported IUD use prior or during treatment and patients who did not report IUD use prior or during treatment. These results are encouraging for patients searching for types of contraception to use that will not impact their egg count or quality. With more individuals undergoing diagnostic testing and treatment while utilizing IUDs, further research regarding potential effects of IUDs on post-retrieval outcomes in relation to AMH levels and egg quantity is needed.

SUPPORT: None.