OBJECTIVE: To evaluate whether methotrexate (MTX) compromises ovarian reserve and future reproductive outcome in women undergoing assisted reproductive technology (ART), when it is used as first-line treatment for ectopic pregnancy (EP). DESIGN: Prospective, observational study. SETTING: University-affiliated private IVF unit. PATIENT(S): Twenty-five women undergoing IVF-ICSI who were treated with MTX (1 mg/kg IM) for an EP after ART. INTERVENTION(S): Evaluation of reproductive outcome and serum anti-Müllerian hormone (AMH) levels. Serum AMH was evaluated before administering MTX and≥1 week after the resolution of the EP. Reproductive outcome was evaluated by comparing subsequent IVF-ICSI cycles after EP resolution. MAIN OUTCOME MEASURE(S): Serum AMH levels, cycle length, gonadotropin dose required, peak serum E(2) level, oocytes collected, and embryos obtained. RESULT(S): Serum AMH levels before MTX were not statistically significantly different from those after treatment (3.7 +/- 0.3 ng/mL vs. 3.9 +/- 0.3 ng/mL). Patients undergoing a subsequent cycle after systemic treatment for EP had similar cycle durations (10.3 vs. 10.8 d), gonadotropin requirements (2,775 vs. 2,630.3 IU), peak E(2) levels (1,884.3 vs. 1,523.6 pg/mL), number of oocytes retrieved (12.1 vs. 10.5), and total number of embryos obtained (7.1 vs. 6.5). CONCLUSION(S): Single-dose
MTX is a safe first-treatment choice that does not compromise future reproductive outcomes in women who are diagnosed with EP after ART.