REST ASSURED: AMBULATION IMMEDIATELY AFTER EMBRYO TRANSFER DOES NOT COMPROMISE PREGNANCY OUTCOMES

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Background

With evolving practices in fertility care, many clinics no longer require patients to remain reclining after embryo transfer (ET). However, patients often wonder if staying still post-transfer might improve their chances of pregnancy. Our aim was to evaluate whether immediate ambulation versus 10-minute supine reclining following single euploid frozen embryo transfer (FET) impacts clinical pregnancy, live birth, and other key outcomes.

Materials and Methods

This retrospective, time-interrupted series analyzed 1,465 single euploid FETs performed between January 2010 and January 2024 at a single academic fertility center. Before May 2019, patients reclined for 10 minutes post-transfer (REC group, n=376). After a protocol change, patients immediately ambulated following ET (AMB group, n=1,089). Primary outcomes included clinical pregnancy (CP) and live birth (LB) rates, while secondary outcomes included positive human chorionic gonadotropin (hCG), spontaneous abortion (SAB), and biochemical pregnancy (BP) rates. Chi-squared and t-tests were used to compare outcomes between groups, and adjusted odds ratios (adjOR) were calculated using generalized estimating equations (GEE) to control for confounding factors such as oocyte age, body mass index (BMI), race, uterine preparation protocol, anti-Mullerian hormone (AMH) levels, stimulation protocol, and infertility diagnosis.

Results

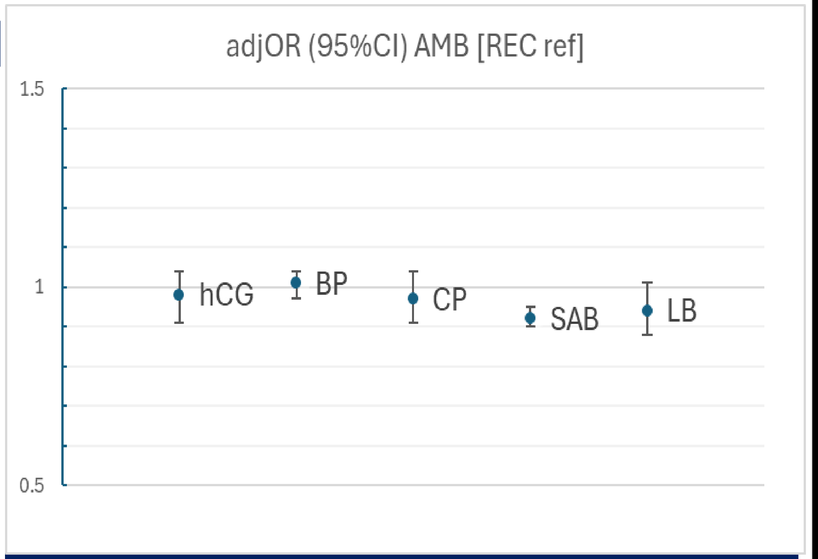
Among the 1,465 FETs included, there were no significant differences in patient characteristics, oocyte age or AMH levels, between the groups. Most patients (76.7%) identified as White, and male factor infertility was the most common diagnosis (40.8%). CP rate was comparable between groups, 56.4% in the REC group and 55.4% in the AMB group (p=0.73). Similarly, LB rates did not differ significantly, at 46.3% in the REC group vs 42.8% in the AMB group (p=0.24). Positive hCG rates were also similar, with 64.6% in the REC group vs 63.7% in the AMB group (p=0.75).

Results

The BP rate was 7.7% in the REC group and 8.1% in the AMB group (p=0.82). However, the SAB rate was significantly lower in the AMB group (4.5%) vs the REC group (10.1%, p<0.001).
After adjusting for confounding factors, there were no significant differences in CP (adjOR = 0.97 [0.91, 1.04]), LB (adjOR = 0.94 [0.88, 1.01]), positive hCG (adjOR = 0.98 [0.91, 1.04]), or BP (adjOR = 1.01 [0.97, 1.04]) between groups. However, the odds of SAB were significantly lower in the AMB group (adjOR = 0.92 [0.90, 0.95]).

Baseline Demographics

	REC (n=376)	AMB (n=1089)	P-value
Oocyte age	35.6	35.6	0.99
BMI	25.3	25.9	0.027
AMH	3.5	3.1	0.057
Race			
AA	11 (2.9%)	20 (1.8%)	0.3
White	294 (78.2%)	830 (76.2%)	
Asian	50 (13.3%)	141 (12.9%)	
Other	21 (5.6%)	98 (9.1%)	



Conclusion

Ambulation immediately after euploid FET results in comparable outcomes for clinical pregnancy, live birth, positive hCG, and biochemical pregnancy rates when compared to reclining for 10 minutes.
Importantly, the SAB rate was significantly lower among those who ambulated immediately post-transfer. These findings provide reassurance that immediate ambulation does not compromise outcomes, supporting clinicians and patients in confidently moving away from reclining post-transfer. Larger studies are recommended to confirm these findings.

Acknowledgements

Dr. Bormann and the MGH Embryology Lab