

Case Report of Acute Encephalopathy Due to Bilateral Tubo-Ovarian Abscesses Following Frozen Embryo Transfer

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Abstract

OBJECTIVE: To describe a patient with endometriosis who developed acute encephalopathy and sepsis attributed to bilateral tubo-ovarian abscesses (TOAs) after a frozen embryo transfer (FET).

DESIGN: Case Report

MATERIALS & METHODS: A patient with stage IV endometriosis with significant sequelae developed bilateral TOAs following FET resulting in sepsis with acute encephalopathy. TOAs after fertility treatment such as oocyte retrievals or intrauterine inseminations have been documented and are characterized by a more severe clinical presentation than TOAs not associated with fertility treatment¹. TOAs following embryo transfer are rarely reported in the literature and the clinical pregnancy rate following embryo transfer in cycles complicated by TOA is dismal^{2,3}. The complication of sepsis and acute encephalopathy from TOAs adds an additional complexity to the case presented.

RESULTS: The patient is a 40 year old G1P0010 with stage IV endometriosis and a history of two prior exploratory laparotomies for extensive endometriosis excision resulting in a colostomy who underwent in vitro fertilization (IVF) and subsequent FET. Two weeks after her FET, she presented to the hospital with seizure-like activity, altered mental status, abdominal pain, and tachycardia. She was admitted with septic shock and acute encephalopathy attributed to bilateral TOAs identified on CT scan. While hospitalized in the intensive care unit, she was aggressively fluid resuscitated and placed on broad spectrum antibiotics. Interventional radiology placed bilateral percutaneous drains with purulent output that grew *Escherichia coli* in culture. The patient stabilized, transitioned to oral antibiotics, and was discharged home on hospital day five. The embryo transfer was unsuccessful. After sufficient recovery, she underwent another FET with ampicillin, gentamycin and clindamycin prophylaxis. The transfer did not result in pregnancy, however, the patient did not have a recurrent infection.

CONCLUSIONS: Acute encephalopathy resulting from sepsis due to bilateral TOAs is an uncommon complication of FET. Stage IV endometriosis with significant surgical history increased the risk of this rare outcome. A subsequent embryo transfer was safely performed with surgical prophylaxis.

SUPPORT: None.

REFERENCES:

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- 3.** Fouks, Y., et al., Fertility outcomes in patients with tubo-ovarian abscesses after an oocyte retrieval: a longitudinal cohort analysis. Arch Gynecol Obstet, 2019. 300(3): p. 763-769.