

OVARIAN HYPERSTIMULATION SYNDROME (OHSS) IN A FERTILITY PRESERVATION PATIENT WITH CHRONIC RENAL FAILURE

claman, paul; Xiao, Cheng Wei; Abou Arkoub, Rima; Clark, Edward

Abstract Body

Women with medical illness contraindicating pregnancy now seek IVF egg or embryo freezing for later transfer to a gestational surrogate. We report a case of rapid onset severe ovarian hyperstimulation syndrome (OHSS) associated with acute kidney injury layered over chronic kidney disease.

Case Presentation

A 39-yr with Type 1 Diabetes complicated by nephropathy and retinopathy presented for fertility preservation of embryos. After a poor (only one embryo frozen but no OHSS) outcome with a GnRH antagonist (& Lupron trigger) IVF cycle, a 2nd IVF cycle using a GnRH ag. down regulation protocol (and lower dose rFSH) was used hoping to improve oocyte quality. She had >30 mature follicles at hCG trigger. Cabergoline 0.5 mg Q3days x 4 doses was started for OHSS prevention. Twenty-six eggs were retrieved with 22 mature eggs and 6 fertilized with 3 blastocysts frozen.

Four days post egg retrieval, she presented with tense ascites & ovarian enlargement. After a 4 liter outpatient culdocentesis the ascites re-accumulated quickly and renal functions tests deteriorated. Hospital admission began 7 days after egg retrieval.

In hospital, IV Saline 150ml per hour and 25 % albumin 300 ml/day was given. Her daily Furosemide 60mg po stopped, and amlodipine 10mg was halved. Repeat paracenteses drained a total of 4.7L of fluid with relief of tense ascites and prompt diuresis. She was discharged 5 days after admission. Laboratory tests 3 weeks post discharge showed return of kidney function tests back to baseline.

Discussion

This is the first IVF patient in our experience to so quickly develop severe OHSS and tense ascites only 4 days after egg retrieval.

This case suggests that patients with chronic renal failure may be at more risk for rapid onset severe OHSS where the OHSS may also exacerbate already compromised renal function. Severe OHSS is associated with decreased renal blood flow due both to hemo-concentration from decreased oncotic pressure (transudation of albumin) and tense ascites leading to decreased venous return from the renal veins. Careful management with early paracentesis and IV hydration with monitoring of renal function in hospital led to a successful return to pre-IVF renal function in this patient.