Severe ovarian hyperstimulation despite prophylactic albumin administration at the time of oocyte retrieval in a cycle of controlled ovarian hyperstimulation.

- **Objective:** To report the occurrence of two cases of severe ovarian hyperstimulation (OHSS) despite the administration of 30 grams intravenous albumin at the time of oocyte retrieval. Two previous reports involving 12 patients did not describe a single case of OHSS in patients receiving prophylactic intravenous albumin. We describe the experience of our institution where two patients were hospitalized with severe OHSS despite receiving prophylactic albumin therapy.

- **Design:** Two consecutive patients undergoing a cycle of controlled ovarian hyperstimulation for IVF with peak estradiol greater than 4500 pg/ml received 30 grams intravenous albumin (200 ml of 25% albumin solution) at the time of oocyte retrieval. Two patients developed OHSS despite prophylactic albumin administration.

- **Setting:** The Division of Reproductive Endocrinology at the M.I. Sinai Medical Center, New York.

- **Interventions:** 30 grams intravenous albumin was administered over 30 minutes at the time of oocyte retrieval.

- **Main outcome measures:** Outcomes included the accumulation of interstitial fluid such as ascites, pleural effusions, and generalized edema. The other outcome variables included degree of hyperstimulation, renal insufficiency, and thromboembolic complications.

- **Results:** Two patients developed severe OHSS, requiring hospitalization, despite administration of intravenous albumin. The peak estradiol of the two patients were 4993 and 7180 pg/ml. Both patients developed OHSS despite prophylactic albumin administration on intense OHSS (OHSS) despite the administration of 30 grams intravenous albumin at the time of oocyte retrieval. Two patients developed OHSS despite prophylactic albumin administration.

- **Conclusion:** Due to the small sample size, the differences were not statistically significant. However, the results suggest that ProLone is at least as potent as hMG.

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**DOES INTENSIVE PROPHYLAXIS OF SEVERE OHSS AFFECT THE PREGNANCY RATE OF IN VITRO FERTILIZATION AND EMBRYO TRANSFER?**

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Ovarian hyperstimulation syndrome (OHSS) is a severe iatrogenic complication of ovulation induction in otherwise healthy young women. The aim of this study was to evaluate whether intensive prevention of this complication affected the pregnancy rate of in vitro fertilization and embryo transfer (IVF-ET). In order to reduce the incidence of this complication, we introduced several prophylactic strategies since October 1992. These strategies included (a) individual adjustment of a daily dose of hMG to young patients, (b) one day earlier injection of hCG when a large number of growing follicles was observed, (c) cancellation of hCG administration in the patients with a remarkably large number of growing follicles, (d) use of pure FSH, instead of hMG, in patients with polycystic ovarian syndrome. The results of IVF-ET before and after the introduction of these strategies were compared (864 cycles during the period from October 1988 to September 1992, Phase I, versus 649 cycles from October 1992 to July 1994, Phase II). Incidence of severe OHSS was remarkably decreased from Phase I to Phase II (3.4 versus 0.6%, p<0.001). Although the number of recovered oocytes in the Phase II was significantly lower than that in the Phase I (6.7±4.6 versus 7.6±5.3, p<0.001, mean ± SD), the pregnancy rates did not differ between the two phases (23.3 versus 23.9%). We concluded that intensive prophylaxis of OHSS did not affect pregnancy rate of IVF-ET.