

The role of intravenous albumin in the prevention of severe ovarian hyperstimulation syndrome in ART cycles

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Abstract

The objective of this study was to evaluate the effect of albumin on inhibition of severe ovarian hyperstimulation syndrome (OHSS) in women at high risk. A prospective, interventional and randomized study was planned and performed at the IVF department of the Royan Research Center. Ninety high risk patients from moderate to severe OHSS who were undergoing IVF ICSI cycles, were divided in two groups. 57 patients in the study group and 33 in the control group. At the time of oocyte recovery, 50gr human albumin in 500 ml of normal saline (N.S) was injected to the study group. The control group only received 500 ml N.S. All patients in study and control groups were matched for age, number of oocytes, level of Estradiol at the time of hCG injection, duration of Follicular phase, amount of hMG used and the number of the transferred embryos. Of the 57 patients in the study group, one had OHSS, while in the control group, 4 OHSS patient was found in 33 patients (1/8% versus 2% , $p < 0.05$). We conclude that prophylactic infusion of human serum albumin can reduce or mitigate severe OHSS in patients at high risk.

Keywords: IVF, Albumin, OHSS

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