NEWS AND VIEWS

CONTROVERSES IN ASSISTED REPRODUCTION: OOCYTE DONATION

Protocols for Egg Donation

INTRODUCTION

Egg donation forms part of the daily work of the majority of IVF programmes (1,2,3). However, given that women who donate eggs, with the exception of IVF patients, are volunteers with family and/or work commitments, it is very important to simplify as much as possible all aspects related to donation by simplifying and standardizing the protocols which both donating patients and recipients must undergo (4). On the other hand, although embryo freezing avoids the need to synchronize the donor's cycle with the recipient's, the obvious reduction in the number of embryos available after freezing and thawing makes it advisable to synchronize the cycles of donors and recipients, asynchronous cycles being limited to special situations such as second transfers and embryo donation (5).

PROTOCOL FOR SYNCHRONIZATION OF DONORS AND RECIPIENTS

The stimulation protocol which we use for donors consists in inducing pituitary suppression with leuprolide acetate (Procrin, Abbott Laboratories, Madrid, Spain) from Days 20–22 of the previous cycle at a daily dose of 1 mg administered subcutaneously. After 14 days of treatment with the GnRH analogue and without testing the medical hypophysectomy but only ensuring that the patient had menstruated, stimulation with HMG was started at a dose of 225 IU/day (Pergonal, Lab. Serono, Madrid, Spain). The subsequent dose of HMG was determined according to follicular growth and estradiol rise. The recipient started estradiol valerate (Progynova, Lab. Schering, Madrid, Spain) 2 days before the donor started HMG and was given vaginal progesterone 300 mg/day (Utrogestan, Lab. Bessins Isovesco, Paris, France) the day after the donor received 10,000 IU of HCG (Profasi, Lab. Serono, Madrid, Spain) (6) (Fig. 1). We always arranged that the transfer in synchronous cycles should occur on the third day of treatment with progesterone.

Fig. 1. Egg donation: Synchronisation scheme.
### ADVANTAGES OF THE SYNCHRONOUS CYCLE OVER THE ASYNCHRONOUS CYCLE

In applying this synchronous protocol we reduced the number of asynchronous cycles and improved the overall yield of our donation program. We compared retrospectively the results obtained in 70 synchronous cycles of egg donation with those achieved after 70 asynchronous donation cycles which required embryo freezing. Setting out from a similar initial number of embryos (203 in the synchronous cycles and 207 in the asynchronous cycles) in the group which required freezing the number of embryos available to be transferred was reduced to 122 (postthawing survival rate 58.9%) (Table I).

Owing to this percentage of embryo loss the number of transfers was different, with 70 transfers in the synchronous cycles and 52 transfers in the asynchronous cycles. The mean number of embryos replaced in each transfer was 2.86 ± 0.3 embryos in the synchronous cycles and 2.3 ± 0.5 embryos in the asynchronous cycles.

As regards pregnancy, 38 and 16 gestations respectively were obtained, which represents percentage of pregnancy per transfer of 54.2% in the synchronous cycles and 30.7% in the asynchronous cycles. The pregnancy rate per patient was significantly higher in the synchronous cycles, 54.2%, than in the asynchronous cycles, 22.8%.

### PROTOCOL FOR MAINTENANCE PREGNANCY

The luteoplacental shift occurs at about the sixth week for progesterone (7,8). For this reason in pregnant women with a complete absence of ovarian function exogenous steroid replacement must be given until this shift (9,10,11). However we have published (6) a successful triplet pregnancy in a woman in whom three embryos were replaced and, by mistake, hormonal substitution was discontinued on Day 10 after embryo replacement. From a practical point of view our criterion is that if hormonal (Progesterone and βHCG) and echographic monitoring are favorable, substitute hormonal treatment with estrogens can be stopped after 8 weeks, with progesterone treatment maintained for 10 weeks.

### REFERENCES