

644: Instillation of Intraovarian Platelet Rich Plasma for enhancing Reproductive outcome: The Jaslok Experience

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Objective

To evaluate improved reproductive potential utilising intra-ovarian PRP in women with POR, DOR, low AMH, low AFC.

Design

Prospective observational study in Indian women visiting our centre.

Materials and Methods

1. Women with POR, DOR, low AMH (<1.49 ng/ml), diminished antral follicle count ≤ 6 (n=27), poor responders. 2. Age group 29-43 average age: 36yr. 3. Women with menstrual cycles. Informed consent was obtained from the woman undergoing the intraovarian PRP instillation procedure. IRB and Ethics Committee approval was obtained. Preparation and Instillation of PRP: Plasma is separated by centrifugation of 60 ml of blood. Platelet Rich Plasma (PRP) is frozen in liquid nitrogen in small aliquots. The woman undergoes mild or standard ovarian stimulation. At the time of oocyte retrieval or follicular aspiration, 1ml of prepared PRP is instilled via transvaginal ultrasound into the aspirated follicle(s). Instillation of 1 ml of PRP becomes easier when the ovary is mildly stimulated as 1 ml can be accommodated in the follicle. The instillation is to be repeated over 3 cycles.

Results

The end point of the study is: 1) Better quality and quantity of oocytes and embryos to establish pregnancy; 2) Establishment of pregnancy. Of the 27 women who underwent PRP, 25 have yet to complete the 3 cycles of instillation. Of the 27 women, 22 have completed 1 instillation, 2 have completed 2 instillations and 3 have completed 3 instillations. 1 woman aged 29 yrs with an AMH of 1.5ng/ml showed a significant improvement in the quality of embryos as compared to her previous 2 cycles of IVF. She conceived by IVF after completing the instillations and is currently 12 weeks pregnant. 1 woman aged 36 yrs who had undergone 10 failed cycles of IVF, underwent 1 PRP instillation and conceived naturally 3 months later, Of the 27 women, 7 underwent IVF post the PRP instillation, the rest are awaiting completion of 3 instillations. Out of 27 women, 3 are lost to follow up, 2 have completed 3 instillations and others are ongoing.

Conclusions

Although this is a small study, the limited success with this technique is encouraging. This study is a step towards enhancing fertility success rates in women with very few options for pregnancy.

Support

None

Disclosure

None