

Autologous platelet-rich plasma as a potential new approach in the endometrial response during invitro fertilization cycle: A pilot study

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Abstract

Infertility is a world-wide public health concern. Approximately 13% of couples suffer from fertility. Implant failure occurs despite the efforts of fertility clinics in the area of Assisted Human Reproduction (ART). During ART treatments, some cycles are cancelled due to inadequate endometrial growth. Thin endometrium may be an important factor contributing to lower pregnancy rates with IVF. Pregnancy rates can be increased by increasing the endometrial thickness (ET); the minimum thickness required for implantation is 7 mm. Administration of platelet rich plasma (PRP) is one of the well recommended strategies for the treatment of endometrium and ovary associated infertility. Because of the autologous source of PRP, the minimal risk of disease transmission and immunogenic responses are anticipated in this method. Objective: To evaluate the effectiveness of PRP intrauterine infusion in patients with thin endometrium during the Invitro fertilisation cycle. Methods: In this study, ten patients aged 26 and 40 years, suffering from primary infertility were selected for intrauterine infusion of PRP at RiSSA IVF Centre, Delhi. This study was conducted over an 18-month period from April 2020 to September 2021. In addition to Hormone Replacement Therapy (HRT) treatment cycle, intrauterine infusion of PRP was performed. PRP was prepared from autologous blood by centrifugation, and 1-2 ml of PRP was infused into the uterine cavity on the 10th day of HRT cycle.

Received: May 5, 2022; **Accepted:** May 17, 2022; **Published:** May 27, 2022

Biography

The Lipi Singh is a Regenerative Medicine, USA), MBA Vice President, Advancells Group, India. She is in the third year of her Ph.D. and is a holder of DST-INSPIRE fellowship. She has qualified UGC NET exam twice. The Lipi Singh is a senior research fellow at the Institute of Nuclear medicine and

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