

Transdermal Estradiol Delivery System Increases Pregnancy Rates of Patients with Premature Ovarian Failure in a Donor Oocyte Program

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Key Words

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ABSTRACT

Premature ovarian failure (POF) affects 1%-3% of the general population. Once regarded as hopelessly sterile, these women can become pregnant through an oocytes donation program by use of assisted reproductive technologies like in vitro fertilization and embryo transfer (IVF/ET) gamete intra-fallopian transfer (GIFT), or transtubal embryo transfer (TET). Even non-surgical transfer of donor oocytes producing successful pregnancies has been reported. However, issues like receptivity of the endometrium, the window of transfer, and timing of the luteo-placental shift remain controversial.

Ten women with POF underwent a total of 23 treatment cycles of IVF-ET with donor oocytes. The mean age of these women was 36.4 years (range 27-45 years). Endometrial proliferation was stimulated with oral conjugated estrogen (Premarin), estradiol valerate, or transdermal estradiol (Estraderm), while secretory transformation was achieved via progesterone in oil intramuscularly and/or via micronized progesterone vaginal suppositories (Utrogestan). Fresh excess oocytes from anonymous donors undergoing IVF-ET were fertilized by spermatozoa of the recipient's husband. Embryos at the 4-8-cell stage were transferred to the recipient's uterus 48-72 h after insemination on day 8 to day 21 of the cycle. A total of 6 clinical pregnancies (excluding 6 biochemical pregnancies) were obtained producing a pregnancy rate of 50% per transfer, and 3 were multiple, com-