

Table 2. Pregnancy Outcome Analyzed by Type of Estrogen Used

Estrogen	No. of cycles	Day of ET	No. of pregnancies(%)	Outcome
Premarin	7	13	1 (14%)	aborted
E.V. ^a	6	16	2 (33%)	biochemical
TE2 ^b	11	9-12	9 (82%)	4 biochemical 5 clinical

^aE.V. = estradiol valerate.

^bTE2 = transdermal estradiol.

though a prospectively randomized study would be required to further confirm its efficacy.

Serhal and Craft stated that the receptivity of the endometrium to embryo implantation is not critically dependent upon the precise dose or interrelationship of estrogen and progesterone, but on the secretory change induced by P4 on a proliferative endometrium primed by an adequate dose of estrogen. Leeton et al.⁹ further pointed out that progesterone should be started following 14-18 days of E2 priming of the endometrium. Hence, the so-called ideal "window of transfer" is day 17-19 as suggested by Navot et al. and Rosenwaks.^{10,11} However, we found that implantation could occur as early as day 9, though the endometrial development then may not be conducive to further embryonal development. Further, we observed that the "window of transfer" is not restricted to days 17-19; it is apparently much wider, since we obtained successful pregnancies

as early as day 12 (Table 3).

LH synchronization of cycles between donor and recipient was found not to be a necessity in achieving pregnancy. Theoretically, the use of anonymous excess donor oocytes may curtail the success of IVF-ET since the quality of embryos transferred should be inferior to those obtained in the donors. Contrary to this supposition, pregnancy rates in IVF-ET using donated oocytes were much higher than those using the recipients' own oocytes after standard stimulated cycles of IVF-ET. Perhaps the presence of hyperstimulation, hyperestrogenism, and premature luteinization with their potential deleterious effects on endometrial receptivity may account for the lower pregnancy rates in the currently practiced hyperstimulation-cycles of IVF-ET.

Significant placental steroidogenesis took place approximately 4 weeks after ovulation. Csapo et al.¹² further showed that the shift from ovarian to placental maintenance of pregnancy took place during 50-60 days of gestation. POF being devoid of ovarian function provides an ideal model for investigating this so-called "luteo-placental shift". It was empiric practice to continue exogenous hormonal support until 12 weeks' gestation. However, levels of exogenous estrogen and P4 needed to supplement the pregnancy depend, to a large extent, on the individual's response. Nevertheless, we observed that significant elevation of serum E2 levels took place 5 weeks after ET, and that of P4 followed 1 week later. Hence, discontinuing exoge-

Table 3. IVF of Donated Oocytes--International Experience^a

Author	Cycles of ET	Days of transfer	No. of pregnancies	No. of viable pregnancies
Rosenwaks (1987) Estrace	21	17-19	8 (38%)	6 (29%)
	11	20-24	0 (0%)	0 (0%)
Lutjen et al. (1984)	31	16-18	6 (19%)	4 (13%)
Navot et al. (1986)	8	16-21	2 (25%)	2 (25%)
Levrant	27	17	10 (37%)	4 (15%)
Feichtinger and Kemeter (1985)	4	17	1 (25%)	1 (25%)
Devroey et al. (1987)	31		3 (10%)	2 (7%)
Sauer et al. (1991) Estrace	47	18	25 (53%)	18 (38%)
Navot et al. (1991) TE2	37	17-19	15 (41%)	12 (32%)
Navot et al. (1991) TE2	15	< 16, > 19	0 (0%)	0 (0%)
Serhal & Craft (1991) EV	10		2 (20%)	2 (20%)
Ben-nun et al. (1989) Premarin	12	14-19	4 (33%)	4 (33%)
Tzeng et al. (1992) TE2	11	9-21	9 (82%)	5 (45%)
Total	265	8-24	85 (32%)	60 (23%)

^aFresh oocytes only.