Endomètre et replacement du blastocyste

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Comment Optimiser L'implantation du coté Biologique

Endometrium and Blastocyst replacement

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Embryo Implantation is still the main limiting factor of live birth success after IVF/ICSI despite the observed constant progress over the last 35 years. Indeed, only 15 to 20% of embryos transferred lead to an effective birth. In such context, we developed a diagnostic innovative procedure able to document the immune endometrial state occurring before conception to understand the personalized reasons of the multiple observed embryos implantation failures (IF). A fundamental immune reaction occurs specifically at the time of implantation within the endometrium and participates to the local state of uterine receptivity. Such local immune reaction is essential both to promote embryo adhesion then regulate the invasion phase within the endometrium itself. Disequilibrium of such vital reaction of immune tolerance may promote either defective adhesion or impair the process of embryo invasion. Based on this endometrial immune diagnosis, we may personalize the applied ART strategy to counteract the deleterious mechanism and then promote effective implantation. We will present results in a cohort of 300 patients which previously failed to implant. Deficient endometrial proliferation at the time of implantation was observed in 26% and need to be corrected in all cases. Distinct and specific immune disequilibrium were observed in 85% in these contexts of implantation failures. 29 % failed to implant because mechanism leading to a state of endometrial adhesion did not occur (absence of mobilization of immune cells, immaturity of immune cells, Low Th-2 angiogenic cytokines). Promoting adhesion leads to 54% of ongoing pregnancy at the first next embryo transfer. 56% show the exact opposite pattern with an over-activation of immune cells able to induce

endometrial apoptosis and inadequate recognition of the embryo inducing its rejection. Controlling the local state of over-immune activation leads to ongoing pregnancy in 40% at the next embryo transfer. Testing therapeutically the adequate principle (corticoids, intralipids, and heparins) able to control the local over-immune activation enhances the rate of subsequent birth through an accurate personalization. We will also detail the impact on the subsequent decisions related to the embryo transfer policy (Day-3, Day-3, Day-3 and Day-5). Promoting the initial dialogue between the endometrium and the embryo may increase the mean implantation rate from 30 to 40% in routine.

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