


Conference Materials

Triggering Ovulation with Progesterone: The Promise and Limitations of a Natural Trigger in ART

Dmitri Dozortsev¹ ^a

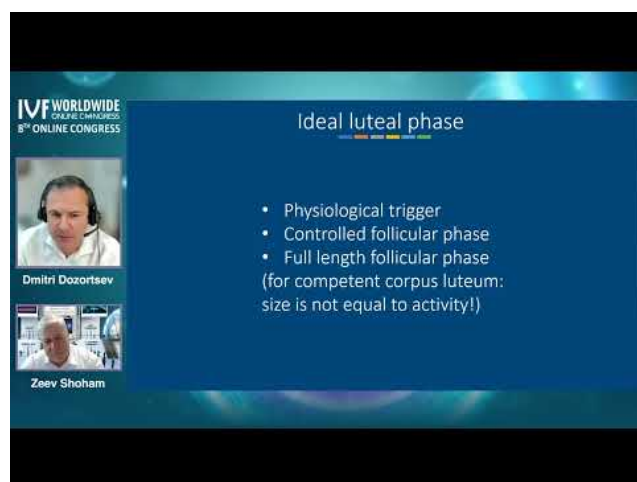
¹ Advanced Fertility Center of Texas 10901 Katy Fwy, Houston, TX 77079, USA

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URL: <https://www.youtube.com/embed/HsxMKERgO-w>

In this comprehensive video discussion titled “Triggering Ovulation with Progesterone: The Promise and Limitations of a Natural Trigger in ART”, Dr. Dmitri Dozortsev delves into the potential and limitations of utilizing progesterone as a natural trigger for ovulation in the context of Assisted Reproductive Technology (ART). The exploration begins with acknowledging the convenience and reproducibility of artificial luteal phase support despite its inability to replicate the intricate complexities of the corpus luteum. Conversely, natural luteal phase support presents its own challenges, including the necessity for artificial triggers and the unpredictability of ovulation. Dr. Dmitri Dozortsev makes a case for the importance of a competent corpus luteum in creating an adequate luteal phase, encompassing a physiological trigger for ovulation, control over the follicular phase, and a sufficiently prolonged cyclic phase to obviate the need for supplementary progesterone. Furthermore, distinct protocols and timing might be imperative for older patients due to the heightened risk of a premature follicular rupture.

The discussion unfolds with an exploration of potential physiological triggers for ovulation. While estradiol has long been contemplated as an ovulation trigger, it has not been shown to induce ovulation in non-menopausal females. At the same time, progesterone was demonstrated to induce ovulation in normally cycling females, but since it has been largely known as an ovulation blocker and for various other reasons, it was not recognized as a true candidate for being a physiological ovulation trigger. Dr. Dozortsev’s recent publication in co-authorship with Dr. Michael P. Diamond and Dr. Antonio Pellicer finally reconciled progesterone’s ability to both block and induce ovulation by recognizing it as a GnRH agonist, clinically similar to Lupron, GnRH receptors agonist. Unlike Lupron, progesterone exerts its effect at the level of the hypothalamus, as would be expected for a physiological ovulation trigger. Understanding the process of follicle growth and the luteinization of granulosa cells, pivotal to initiating ovulation, forms a crucial part of this discourse.

The subsequent segment elucidates the role of progesterone in triggering ovulation. The discussion illuminates how progesterone, as its levels rise and estradiol levels decline, influences LH surge, a necessary precursor to ovulation. A simplified protocol employing diclofenac to control inflammation and 5-10 milligrams of progesterone to trigger ovulation is outlined, supported by enlightening case reports showcasing successful ovulation induction.

Delving further, the discourse expounds upon the advantages and drawbacks of employing progesterone as a trigger for ovulation in ART. The potential benefits are manifold, including a potential reduction in medication needs, improved patient experiences, and cost-effectiveness. However, the limitations lie in the uncertainty regarding adverse pregnancy outcomes and the need for further research and experience in this domain. Dr. Dmitri Dozortsev envisions using a natural trigger like progesterone as a potential future for frozen transfers in ART, aiming for a more physiological approach and eliminating uncertainties associated with traditional triggers.

In conclusion, Dr. Dmitri Dozortsev scrutinizes the initial case reports on triggering ovulation with progesterone,

^a Corresponding author, Dmitri Dozortsev, Email: dozortsev@me.com

acknowledging their limitations while underscoring the necessity for continued research and adaptation of protocols. The discussion emphasizes the significance of timing the trigger and tailoring the approach for different age groups, particularly older patients, to optimize the efficacy and potential of progesterone as a trigger for ovulation in ART.

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