

## Natural Cycle IVF

Natural-cycle IVF (NC-IVF) is an excellent means to reduce the risk of multiple pregnancies, eliminating the costs and risks associated with fertility drugs, and reducing the stress and time commitment needed for traditional stimulated IVF. This approach has been espoused by a number of leaders in the field of IVF, including Dr. Robert Edwards, whose pioneering work along with Dr. Patrick Steptoe's led to the birth of the world's first IVF baby, Louise Brown, using NC IVF in 1978.

NC-IVF avoids the use of expensive ovarian stimulation drugs and their associated cost of about \$5,000 per treatment cycle. With NC-IVF the risks of ovarian hyperstimulation, multiple pregnancy, and the issues of cryopreserved extra embryos are avoided as only one embryo is produced. Total cost of Natural Cycle IVF is a fraction of the total cost of a conventional IVF cycle.

However, NC-IVF has its own set of disadvantages. For example, by not using fertility drugs, unexpected premature "LH surging" or ovulation can occur, leading to cancellation of the planned egg retrieval. This occurs in about 10% to 15% of treatment cycles. In such cases, if the fallopian tubes are open, we may recommend converting the treatment to an intrauterine insemination (IUI) cycle which can lead to a possible successful pregnancy. Furthermore, because only one egg and one embryo are produced, the chances for pregnancy are less than with conventional IVF when two or more embryos are transferred. We expect that the "cumulative" pregnancy rate for NC-IVF will be similar to a single cycle of conventional IVF within one to three treatment cycles of NC-IVF.

The best candidates for NC-IVF are patients with regular menstrual cycles who are less than 36 years old and have normal ovarian reserve. Patients with tubal-factor infertility or male factor infertility may be good candidates for NC-IVF before resorting to conventional IVF. Older patients, patients with previous stimulated cycle IVF failures, patients with poor ovarian reserve or unexplained infertility all can be considered for NC-IVF but may experience lower pregnancy rates compared with younger patients with well defined fertility issues and no previous fertility treatments.

Many European fertility centers routinely use NC-IVF with good success rates. For a variety of reasons, the availability of NC-IVF in the United States has been limited. We believe that NC-IVF is an attractive fertility treatment option that is less stressful and less costly that utilizes little to no fertility drugs with good pregnancy rates. In Dr. Gordon's previous clinic younger patients often had pregnancy rates of 25% per successful egg collection and 30-40% pregnancy rate per embryo transfer with NC-IVF. Many patients who had previously failed stimulated IVF and were told that donor egg IVF was their only option have pursued NC IVF. Overall, NC IVF may represent a viable treatment option for many infertile couples (even those with a poor prognosis with Stimulated Cycle IVF).

## SUMMARY

**COST:** About \$12,000

**MEDICATIONS USED:** Daily shots or Lupron, daily shots of Gonal F/Follistim/Menopur, hCG trigger shot, progesterone injections.

**GOAL:** Retrieval of 6-15 mature eggs

**RISKS:** Over response to fertility medications leading to cancellation prior to embryo transfer with freezing of all embryos. Under response to medication with only 1-2 follicles growing.

**BENEFITS:** High pregnancy rates, extra embryos available for embryo cryopreservation (or extra eggs frozen for future use).

### BEST CANDIDATES:

Diagnosed with blocked or damaged Fallopian tubes

Diagnosed with severe endometriosis

Diagnosed with male factor infertility

Diagnosed with unexplained infertility

### OTHER CANDIDATES:

Patients who have failed multiple NC IVF or Mini-Stim IVF treatments

Patients wishing freeze extra embryos