

# Assisted Reproductive Technologies

By Ashley Erikson

Motherhood is an experience that no one has to miss out on, even if biological factors are interfering. At Austin Fertility & Reproductive Medicine, the physicians are able to offer services of a state-of-the-art in vitro fertilization (IVF) lab called "Westlake IVF", used for assisted reproductive technologies (ART). Dr. Sharhryar Kavoussi explains what those technologies are and what steps to take when considering treatment by a fertility specialist.

## WHEN SHOULD A COUPLE CONSIDER SEEING A FERTILITY SPECIALIST?

Women who are under the age of thirty five who have been trying to get pregnant for one year and are still having a regular cycle should consider coming in to see a fertility specialist. For women who are over thirty five years of age, it is recommended that they come to see a fertility specialist if they have been trying to get pregnant for six months without success.

## WHAT IS THE INITIAL EVALUATION THAT IS PERFORMED?

A detailed medical and reproductive history is the first step. Next, we recommend a series of fertility tests. Blood tests and ultrasounds give information about a woman's egg quality and number. A hysterosalpingogram, which is a dye test with x-ray, is performed to evaluate whether or not the fallopian tubes are open and if the uterus has a normal shape. A semen analysis for the husband/male partner is always recommended as well. These tests help us determine which method of treatment is best to proceed with in order to help the couple achieve a successful pregnancy.

## WHAT ARE REASONS BEHIND NEEDING ASSISTED REPRODUCTIVE TECHNOLOGIES (ART)?

There are various reasons for which ART is recommended for a couple, including a woman having endometriosis or blocked fallopian tubes, the husband/male partner having low semen analysis parameters, and unexplained infertility.

## WHAT TREATMENTS ARE DONE TO ASSIST WITH ACHIEVING PREGNANCY IF PATIENTS CHOOSE TO UNDERGO IVF?

Medications are used to assist the woman in growing multiple eggs within a cycle, after which they are 'harvested,' or retrieved, by the doctor. The eggs are then placed with the husband/male partner's sperm in our state-of-the-art IVF lab, and we can see how many fertilize and turn into embryos that begin to grow. The embryos that grow well and have the best chance of resulting in a successful pregnancy are then placed back into the uterus (embryo transfer).

## ARE THERE DIFFERENT TYPES OF ART PROCEDURES A WOMAN MAY HAVE?

Yes, with conventional in vitro fertilization, the sperm and egg are placed next to one another in the lab and the sperm fertilizes the egg on its own. With intracytoplasmic sperm injection (ICSI), the sperm is actually placed into the egg by the embryologist. With either of these options, the embryo is then placed into the uterus and the woman takes estrogen and progesterone to help the embryo implant in the uterus and increase the chance of pregnancy. In some cases the embryologist will perform 'assisted hatching' prior to embryo transfer. This involves using a laser to open the covering of the embryo to increase the chance of a successful implantation leading to pregnancy.



## WHAT CAN I EXPECT TO FEEL DURING THE PROCEDURES?

The egg retrieval procedure lasts roughly 15-20 minutes and is done in an office setting with IV conscious sedation. Patients will wake up with mild cramping. For embryo transfer, the patient is fully awake and can expect it to feel a lot like a pap smear exam, with some more mild cramping and some pressure during the process. Westlake IVF is unique since the IVF lab and procedure rooms are located within our office setting which was designed with patients' comfort/familiar surroundings in mind.

We take care of patients on a one-on-one level and can answer any questions for someone who is interested in having assisted reproductive technologies. We encourage anyone who thinks they are interested in an evaluation and treatment to visit [www.austinfertility.com](http://www.austinfertility.com) and set up a consultation.

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Dr. Sharhryar Kavoussi M.D. is board certified in Reproductive Endocrinology & Infertility.