



Day 4: The Right Day for Embryo Transfer

What is the right day to transfer embryos in an IVF cycle? According to Dr. Jun Tao, IVF and Andrology Laboratory Director, day 4 is the optimal day for embryo transfer.

Dr. Tao, PhD, HCLD, is Board Certified by the American Board of Bioanalysis as a High Complexity Clinical Laboratory Director. He holds a Master's Degree in Embryology and received his Ph.D. in Anatomy and Endocrinology from Indiana University. Dr. Tao completed his fellowship at the Reproductive Biology Laboratory at Methodist Hospital in Indiana and was an Assistant Instructor in the Medical Sciences Program at the University's School of Medicine.

Since joining FTC in the spring of 1999, Dr. Tao has brought tremendous leadership and innovation to the laboratory increasing the success of the IVF program. He introduced the concept of extended embryo culture and after extensive research, determined day 4 as the optimal day for embryo transfer. Day 4 embryos provide signs of advanced development that allows for better selection value than day 3 embryos. The extra day of progesterone preparation of the uterus may also add to increased implantation rates. Research at FTC showed culturing embryos to day 5, or blastocyst stage, generally is not beneficial to pregnancy rates and only added additional costs for an extra day of culturing. There are instances when an extra day in culture is necessary to provide definitive information on the quality of an embryo, but the majority of embryos are best transferred and/or frozen on day 4.

Dr. Tao has also designed and patented an embryo transfer catheter system that has resulted in higher pregnancy rates for IVF patients. Dr. Tao's professional achievements include: the first ICSI pregnancy in Phoenix, the first testicular biopsy combined with ICSI pregnancy in Phoenix, and the first pre-implantation genetic diagnosis (PGD) pregnancy in Arizona.

FTC is honored to have Dr. Tao as part of our outstanding team.



**Jun Tao, PhD., Director
IVF Laboratory**

Inside this issue:

Endocrine News	2
A Point of View	2
The Fertile Path	3
The Enlightened Chemist	3
FAQ's	4
Isabel's Authentic Rice	4
Glendale Office Opens	4

FTC Employee Spotlight

Isabel Martinez, or "Izzy," is one talented woman! She and her family, Jesse 17, Jorge 14, Cassandra 9, and Octavio 4, moved to the valley from Wisconsin in 2007. She is fluent in Spanish and English, and reads and writes poetry in both languages. Her husband, Octavio travels frequently for business, so she keeps her children close by making dinner together. "Cooking with my children is our time to really connect without the distraction of TV." In her spare time, she sketches with pastels, is learning to play drums, and loves to fish. Her biggest catch was a 16 lb catfish! She loves working at FTC because she cannot imagine her life without her children, and feels privileged to help other women to build their families. FTC is pleased to have Isabel on our team, and we will be ready for some homemade tortillas and rice anytime! Thank you, Isabel!



Isabel Martinez joined FTC in April 2007. "Cooking dinner with my children is our time together to really connect, without the distraction of TV." See Isabel's recipe on page 4.



H. Randall Craig M.D.
Medical Director
Board Certified REI

YOU'RE INVITED!!

to our 3rd annual Patient
 Appreciation Celebration.

Mark your calendar for
 November 1st, 2008.

Watch for details as the
 event gets closer.



**More than any other nutrient
 carbohydrates determine your
 blood sugar and insulin levels.**

Endocrine News

Dr. H. Randall Craig

How do I choose between a tubal reversal and IVF ?

Tubal sterilization is the most common means of birth control used in the US. This permanent form of contraception will not allow you to subsequently attempt pregnancy unless you undergo another surgical procedure (tubal ligation reversal or microsurgical reanastomosis) or have an in vitro fertilization (IVF) procedure.

The success of tubal ligation surgery is dependent upon the amount of fallopian tube remaining after the sterilization, and whether the surgery involved the use of cauterly or burning the fallopian tube. Other factors include the quality of the male partner's sperm, female age, and egg quality and quantity.

If the male partner has poor sperm quality (low sperm count or motility), chances for pregnancy are reduced. However, IVF with ICSI can overcome this problem. Pelvic conditions such as endometriosis or any scar tissue in the area of the tubes or ovaries would also reduce the chances for success after tubal reversal surgery. However, IVF pregnancy rates are generally not affected by these conditions, so IVF is a better option in women with significant endometriosis or pelvic scar tissue.

Because the quality and quantity of eggs decline in some women at a relatively young age, testing the "ovarian reserve" is recommended before proceeding with either tubal reversal or IVF. Maternal age is the most influential factor and a major consideration in the decision process. Fertility steadily declines each year after age 34, and dramatically declines after age 38. IVF significantly improves pregnancy rates in older women.

When considering pregnancy after tubal ligation, the majority of women choose IVF over tubal reversal surgery. However, each patient is unique and an informed decision should be made only after a comprehensive physician consultation and thorough review of your medical history.

A Point of View

"Quality" Carbohydrates

What do carbohydrates have to do with fertility?

Information gathered from the Nurses' Health Study showed that more than any other nutrient, carbohydrates determine your blood sugar and insulin levels. When these rise too high, as they do in millions of individuals with insulin resistance, they disrupt the finely tuned balance of hormones needed for reproduction. The ensuing hormonal changes may throw ovulation off-kilter. The glycemic load conveys information about both the amount of carbohydrate in the diet and how quickly it is turned into blood sugar. Eating a lot of easily digested carbohydrates (potatoes, white rice and cold cereals) increases the odds of ovulatory infertility, while eating more slowly digested carbohydrates (whole grains, beans, vegetables, and fruits) decreases the odds. So it is not the amount of carbohydrates but the type of carbohydrates that affects insulin levels.

Balancing fats is also a large factor in keeping the body working properly. Fertility researchers have long known that a woman's body fat and stored energy affect reproduction. Women who don't have enough stored energy to sustain a pregnancy often have trouble ovulating or may stop menstruating altogether. Women who have too much stored energy may be insensitive to the hormone insulin and subject to excess male sex hormones and overproduction of leptin, a hormone that keeps tabs on body fat.

Insulin resistance can be determined with a simple blood test and treatment with medication is quite successful.



The Fertile Path

Dr. Daniel F. Rychlik

When do I consider using donor eggs?

Women who have premature ovarian failure, carry a genetic disorder, suffer from premature menopause, have had unexplained and repeated miscarriages, have had other therapies without success, or are older than 38, may consider donor egg IVF.

The procedure is the same as IVF except that a donor (selected by the recipient) will receive fertility medication to stimulate the production of oocytes in her ovaries. At the same time, the recipient will also receive medications so that her cycle mirrors the donor's cycle. Upon retrieval from the donor, the eggs are fertilized with the partner's sperm, and the appropriate number of resulting embryos are transferred to the recipient's uterus. All remaining embryos are frozen for the recipient's future use. Because donor eggs are younger, and, thus healthier, the chances for pregnancy are increased. Your doctor will always fully explain your options so that you may make an informed decision about donor egg IVF, or any other available care option that may help you achieve pregnancy.



Daniel F. Rychlik M.D.
Associate Medical Director
Board Certified REI

The Enlightened Chemist

Jamie Bataoel, PharmD

Femara (letrozole) to treat infertility

Recently, many patients have been inquiring about the use of Femara (letrozole) for treatment of infertility. Femara is approved for the adjuvant treatment of postmenopausal women with hormone receptor-positive early breast cancer. However, for a number of years, reproductive endocrinologists have been using it for the treatment of ovulatory dysfunction.

Femara works by temporarily decreasing the amount of estrogen in the body, which then stimulates the pituitary gland to release higher amounts of follicle stimulation hormone (FSH). This sends the brain a false message implying that there is an estrogen deficiency in the blood stream. In response, the pituitary gland releases more FSH and luteinizing hormone (LH), which stimulates the follicles (the fluid filled cysts which contain the eggs) to develop in the ovaries. The increased levels of FSH in turn have a beneficial effect on the ovary to allow a follicle, or sometimes more than one follicle, to develop.

Side effects might include hot flashes, visual spots in front of the eyes, headaches and mood changes. Multiple births occur in 5-10% of pregnancies. Excessive enlargement of the ovaries, called ovarian hyper stimulation syndrome (OHSS) may also occur. The risk of OHSS should be discussed with your physician prior to treatment. Symptoms of OHSS include excessive fluid retention and severe abdominal discomfort, nausea, vomiting and weight gain.

If you experience an allergic reaction such as difficulty breathing, closing of the throat, swelling of the lips, tongue or face, or hives, seek emergency medical treatment immediately.



The Apothecary Shop of Tempe is located across the court-yard from the Fertility Treatment Center. The Apothecary Shop has been a leader in preparing customized medications to meet the specific needs of patients and practitioners. Jamie Bataoel, Pharm.D., has been working closely with Dr. Craig and Dr. Rychlik for many years. Feel free to contact Jamie or one of his staff if you have any questions about any medications at The Apothecary Shop of Chandler/Tempe, 480-775-4784, or visit www.theapothecaryshops.com.

Are we meeting your expectations? Please take a moment to participate in our patient survey. The completed surveys may be dropped off in the designated box at the reception area.

Thank you.



PreciousWonders, FTC's egg donation program, offers recipients qualified donors who are bright, talented, and compassionate.

To learn more, contact Emily Jacox,
Egg Donor Coordinator
@ 480-889-1209.

Fertility Treatment Center

2155 E. Conference Dr. Suite 115
Tempe, Arizona 85284
480-831-2445

14861 N. Scottsdale Road, Suite 115
Scottsdale, Arizona 85254
480-998-9876

6320-B W. Union Hills Drive, Suite 2700
Glendale, Arizona 85308
623-385-7350

Mission Statement

"We are dedicated to providing our patients with the latest advancements in medicine, delivered with compassion and service excellence."

FTC is pleased to announce the opening of
our new office in Glendale on
May 1st, 2008.

All office diagnostic and treatment services
will be available.

For additional information or to schedule
an appointment, please call

623-385-7350

Arrowhead Orchards - Building B
6320-B W. Union Hills Drive, Suite 2700
Glendale, Arizona 85308

FAQ's

How do I reach a nurse or physician after hours?

If you have a medical emergency, please dial 911. If you have an urgent issue that requires immediate attention, please call 480-831-2445 and follow the message prompts; "0" will take you to the answering service. One of our physicians or nurse practitioners is always on call.

What about weekends and holidays?

FTC is open everyday except Christmas because we understand the importance of correctly timing your cycle. However, we usually reserve these days for cycle related appointments only; consults and new patient appointments are available Monday through Friday.

When I become pregnant, do I go straight to my obstetrician?

FTC would like to document your pregnancy with a blood test and confirm fetal heart tones with an ultrasound at 6 weeks. Depending on the treatment, you may be monitored up to 10 weeks gestation before returning to your OB.

Isabel's Authentic Rice

Sauté 1 cup white rice
1 TBS oil, 1 minced clove garlic &
1 chopped green onion until golden
brown. Add 2 cups water with 2 tsp
Knorr bullion flavor of your choice,
cover & simmer on medium low heat
for 15 minutes. Chopped
jalapeños, tomatoes, green peppers
& cheese optional.

Comments or questions on this
publication may be directed to:

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