A R T®
ASSISTED REPRODUCTIVE TECHNOLOGY

ART works℠

Shared Risk Program Offers Financial Opportunities for Patients Requiring IVF Therapy

"Infertility was the most stressful experience I have ever been through. It hurt so badly; I was desperate to be a mother. The Shared Risk Program gave us peace in knowing that we had a plan. We had three chances of IVF to achieve our pregnancy. After we didn't get pregnant from the first cycle, knowing we had two more chances took the stress off."

Lisa Stevens, Montgomery, AL

The ART Program Shared Risk Program is designed for those couples who are considering in vitro fertilization at the risk of expending financial resources that may be necessary for other options such as adoption. Unlike some other centers, our Shared Risk Program guarantees that, should a qualifying couple not achieve a 20-week pregnancy, a refundable portion of the program fees will be returned to the couple so that alternatives can be pursued. The Program does not guarantee a successful outcome, but instead, is a unique plan that limits the financial risk if a 20-week pregnancy is not achieved.

The program includes as many as three IVF cycles over a 12-month period. The Program is considered successful if it results in an ongoing pregnancy greater than 20 weeks gestational age. A completed IVF cycle is defined by the retrieval of all available eggs followed by transfer of all embryos (fresh or frozen), if any.

In order to be eligible for the Shared Risk Program, a couple needs to meet all the requirements of our regular fee for services IVF program. The couple must not have had a previous IVF cycle with poor response to stimulation.

"This Program was an answer to our prayers. I went back to my support group and told them about it. Being able to have my monitoring in Montgomery and retrieval and transfer a short drive away in Birmingham made it so much easier. We will definitely do it again."

Lisa Stevens

For additional information and to find out if you qualify, please call our Billing and Insurance Department at 205-803-1955 or 1-800-264-0625.

Male Factor Fertility

Infertility can be attributed to male factors in about 40% of the infertile population. This has been recognized for quite some time. As early as 200 BC in Greece, men were encouraged to eat more and avoid hot baths to improve a man's fertility potential. The initial evaluation of semen analysis parameters does not always predict success.

Historically, evaluation of the male focused on prediction of fertilization. Traditional tests include semen analysis, hamster egg penetration tests, acrosome reactions and strict morphology. With the development of intracytoplasmic sperm injection (ICSI), fertilization potential may not provide the answer needed. Virtually all males' sperm can fertilize with ICSI; so, does that mean all males now have equivalent reproductive potential? Clinical experience has taught us that some sperm may contribute to decreased pregnancy rates even though fertilization is readily and consistently attained with IVF.

So what can provide us information about male reproductive competence? This question has generated research into other potential causes of reproductive failures in males. Concerns about microdeletions of the Y chromosome breakdown of the chromatin within the DNA and

susceptibility to reactive oxygen species have all been evaluated. Also, there has been a re-evaluation of more traditional testing parameters such as sperm penetration assay (SPA) to see if there is any predictive value beyond correlation with fertilization.

Although information is growing and management protocols are evolving, there are still no definite answers. Certainly continued research is needed to provide further information on testing for male infertility and the impact it should have on treatment options.

Sperm Penetration Assay (SPA) and Direct Sperm Antibody (DAB) Testing

The SPA evaluates the ability of the sperm to complete certain processes necessary to achieve fertilization using specially treated hamster eggs. The SPA correlates with pregnancy outcome in both infertility and in vitro fertilization treatment. The DAB evaluates the presence of anti-sperm antibodies on sperm. The presence of sperm antibodies correlates to reduced fertility in humans and can cause the SPA to be falsely abnormal.

Both the SPA and the DAB are valuable tests in the evaluation of the male partner of an infertile couple. Studies from our Program have identified changes in the SPA with sperm preparation techniques. In fact, of abnormal SPAs repeated with a different preparation technique, 67% corrected to normal with a chymotrypsin preparation. This explains why doctors have previously found discrepancies in outcome studies. We are currently testing a new gradient preparation for the 33% that did not correct to normal with chymotrypsin. Thus far, 56% corrected to normal with the gradient preparation.

Semen collection for the SPA is available at all ART Program sites – Birmingham, Huntsville and Montgomery, while collection for the DAB is available at Birmingham only. Please speak with our Scheduling Coordinator to schedule an appointment.

Preimplantation Genetic Diagnosis (PGD)

Preimplantation Genetic Diagnosis (PGD) involves genetic testing of embryos in "at risk" couples undergoing In Vitro Fertilization (IVF). Candidates for PGD include advanced maternal age (≥35), advanced paternal age (≥40), repeated IVF failure and repeated pregnancy loss. Couples with a history of single gene disorders (such as cystic fibrosis or sickle cell), balanced translocations and abnormal numbers of chromosomes may benefit medically from PGD, however, not all disorders can be diagnosed with PGD.

PGD is performed prior to embryo transfer so that only unaffected embryos are transferred. During PGD, one or two cells are removed "biopsied" from an embryo around the 8-cell stage on day 3 of culture. The cell is then prepared ("fixed") and shipped to a laboratory that specializes in genetic testing. Meanwhile, the embryo is returned to normal culturing conditions in the laboratory. Results from the genetic testing are usually available on day 4 or 5 with embryo transfer scheduled at the blastocyst stage on day 5 of culture.

PGD was first performed in 1989. Since that time, approximately 1,000 babies have been born worldwide using this technique. The main benefits to PGD are a reduction in the rates of miscarriage, multiple birth and delivery of a child with certain genetic abnormalities. There may be an increase in implantation rates and potentially, delivery rates. A risk associated with PGD is incidental damage to the embryo (<1%). Misdiagnosis can occur in two ways. Historically, there is a 3.5% chance that an affected embryo is diagnosed as unaffected and a 10% chance that an unaffected embryo is diagnosed as affected (genetic testing by FISH based on 9 chromosomes). On average, 20-40% of biopsied embryos are expected to be unaffected. However, in up to 20% of cycles, only affected embryos are identified, resulting in none available for transfer. Genetic counseling by a certified genetics counselor is required for all PGD cycles. Genetic testing on the cell(s) is performed at a laboratory specializing in this area. The genetic testing laboratory, as well as the ART Program, requires a signed informed consent prior to cycling for PGD.

The Embryology Laboratory of the ART Program of Alabama is pleased to announce that PGD is now an available option during IVF. Our first pregnancy with PGD occurred in August 2003, with an expected delivery May 2004. Should you feel you are a candidate for PGD, please speak with our Scheduling Coordinator to schedule an appointment with your physician to discuss PGD.

Egg Donor Program

The ART Program of Alabama continues to offer an Egg Donation Program. This program is designed to allow a woman with healthy eggs to donate some of her eggs to an infertile couple who might otherwise be unable to have a family.

The first egg donor pregnancy occurred in 1984. Since then, over 5,000 babies have been born in the U.S. as a result of donor eggs. Experience and studies have shown that offspring of donor eggs are generally healthy children with no greater risk of

birth defect than all children in the general population.

Who Can Be an Egg Donor?

The criteria for egg donation are understandably strict. In order to donate, a woman must be between the ages of 19 and 32. She must have two normal ovaries and regular menstrual cycles. She must not smoke or use other drugs. The donor must be comfortable with injections, as the ovulation medications are by injection. The donor must agree to physical and psychological screening provided at no cost to her. There are two types of egg donors, anonymous and known or related.

- Anonymous egg donors wish to keep their identity confidential. The anonymous egg donor is comfortable with the understanding that her donation is totally anonymous. She will not know the outcome of her donation nor will she meet or learn the names of the recipient of her eggs.
- Known donors are women known by or related to the recipient. This type of egg donation involves free exchange of information between the donor and the recipient couple. A psychological consultation is required due to the emotional issues that may arise when donor and recipient are acquainted.

Who Would Want Donated Eggs?

The recipients of donated eggs are married couples with little or no chance of having their own child. The most common reason a couple seeks an egg donor is because the woman's ovaries have stopped producing eggs too soon. She may have had her ovaries removed as a result of disease like endometriosis, cancer, benign tumors or pain. The recipient woman may carry a genetic trait that she does not want to risk passing on to a child.

Male factor infertility does not rule out the use of an egg donor. Testicular Epididymal Sperm Aspiration (TESA) and Intracytoplasmic Sperm Injection (ICSI), two of the newest treatments for male infertility may be used in combination with a donated egg. TESA involves taking sperm from the epididymis or testicle of the man and injecting the sperm (ICSI) into the egg of the woman. This procedure is done in the laboratory. Even when donated sperm is required, an egg donor may be useful.

In the past, couples with severe egg or sperm dysfunction had only two options: adoption or remaining childless. Today, egg donation, TESA and ICSI provide a third option: an opportunity for the couple to experience pregnancy and childbirth together.

Frequently Asked Questions

Q: "I've had my tubes tied. Can I still be an egg donor?"

A: Yes. As long as you have two normal, healthy ovaries, you can be an egg donor. Your tubes are not necessary.

Q: "How can I expect to feel when I take the medicines?"

A: The medicines you will take to induce egg production are injections. Most women tolerate these "shots" very well, but some women experience headaches, mood swings, bloating or cramping or stinging at the injection site. Symptoms are usually mild. Egg donors are closely monitored to avoid serious problems.

Q: "Does it hurt when the eggs are taken?"

A: The egg retrieval is done in the office. The donor is sedated using IV (in the vein) medicines. There is no incision or stitches. The majority of all IVF patients, including egg donors, report minimal, if any, discomfort during the procedure.

Q: "Will I use up all my eggs if I donate them now?"

A: No, you will not use up all your eggs. Women are born with far more eggs than they can ever use in their lifetime.

Q: "Will donating eggs reduce the chance of me getting pregnant later in my life?"

A: There is no scientific evidence that donating eggs can decrease your chances of pregnancy.

Q: "Will I get paid for my eggs?"

A: You are not paid for your eggs, but you are reimbursed for the time you invest in the process. If you complete the screening and are accepted as a donor you can expect to receive $3,000 for the first cycle donation reimbursement. If you continue as a donor, you may expect $3,500 for the second donation reimbursement and $4,000 for the third, fourth and fifth cycle donation reimbursement. Payment is made at the completion of each donation cycle.

Q: "How much time does being an egg donor take?"

A: Usually up to 5 visits are needed to complete the screening process. After you are accepted as a donor and matched with a recipient, approximately 8-10 visits over an 8-week period are needed to complete one full donation cycle.

For more information about the Egg Donor Program, please call 205-313-5539. You can also log on and visit our website at www.eggdonorAL.com.

IVF Successes

January 2001 – December 2002

All Patients, All Protocols

- Cycles Started 371
- Cancelled Cycles 40
- Retrievals 331
- Transfers 326
- Clinical Pregnancies 149
    - Rate/cycle start 40%
    - Rate/retrieval 45%
    - Rate/transfer 46%
- ICSI Pregnancy Rate/retrieval 43%

❖ Excludes women over 40 years of age.
❖ Excludes egg recipient cycles.
❖ Excludes cryobanking.
❖ Excludes gestational carrier cycles.

TESA (Testicular Epididymal Sperm Aspiration) Successes

January 2001 – December 2002

All Patients, All Protocols

- Cycles Started 25
- Cancelled Cycles 4
- Retrievals 21
- Transfers 20
- Clinical Pregnancies 13
    - Rate/cycle start 52%
    - Rate/retrieval 62%
    - Rate/transfer 65%

❖ Excludes cryobanking.
❖ Excludes gestational carrier cycles.

Egg Donor Program Results

January 2001 – December 2002

All Patients, All Protocols

- Cycles Started 71
- Cancelled Cycles 8
- Transfers 62
- Clinical Pregnancies 24
    - Rate/cycle start 34%
    - Rate/transfer 39%

❖ Excludes cryobanking.
❖ Excludes gestational carrier cycles.

Support Groups

ALABAMA

MOST (Mothers of Supertwins). MOST is for couples experiencing multiple births. There is a quarterly newsletter available, as well as "new mother" packets mailed to expectant or just delivered mothers. For more information, please contact Heather Sasser, regional coordinator for Northern Alabama at 256-350-2399 or Lynn Dias, regional coordinator for Southern Alabama at 334-343-2086. Or, visit their web site at www.mostonline.org.

BIRMINGHAM

RESOLVE® of Alabama, an infertility discussion group meets bi-monthly for educational meetings on the fourth Tuesday of each month at 6:30 p.m. The Discussion Group of chapter members meets the second Tuesday of each month at 6:30 p.m. Both meetings are held at Dawson Memorial Baptist Church in Homewood. For more information, please call 969-8803.

Mothers of Twins meets at Baptist Montclair Medical Center in the Nursing Auditorium on the first Tuesday of each month from 7:00-9:00p.m. Contact Edna Rush at 205-871-5558 for more information

Birmingham Area Mothers of Multiples
www.bamom.org

HUNTSVILLE

RESOLVE® discussion group meets monthly. Call national Resolve office at 617-623-0744 or visit at www.resolve.org for more information.

Marvelous Multiples is a series of prenatal educational classes held at Huntsville Hospital Women's Center. Contact 256-265-7296 for more information.

MONTGOMERY

RESOLVE® meets monthly. Call national Resolve office at 617-623-0744 or visit at www.resolve.org for more information.

Helpful WEB sites:

www.asrm.org
www.INCIID.org
www.resolve.org
www.obgyn.net
www.fertilethoughts.net

To add additional support groups or more information to this list, please contact Monica Hawk at the ART Program, 205-870-9784 or 1-800-476-9784. You may also e-mail us at artprogramAL@artprogramAL.com.