



RMA OF MICHIGAN NEWS BLAST



RMA of Michigan's Second Annual Baby Reunion



RMA of Michigan held their second Baby Reunion on September 22 at Clawson Park. Former patients who had successful treatment were invited back with their families to reconnect with the staff that helped them conceive. Close to 400 people attended the event despite the weather being a bit chilly. Attendees were treated to a BBQ lunch of hot dogs and hamburgers. Families enjoyed playing on the playground and a pirate was on hand to make balloon animals for the kids.



The staff was thrilled with the turnout. Dr. Wolf stated, "Since this was our second year having the event we weren't sure if it would be as popular as the first year. We are glad that so many patients wanted to come again." Dr. Miller added, "We look forward to having the event each year so we get a chance to reconnect with the patients."



RMA of Michigan Now Offers New Strategies For Miscarriages, Failed IVF Cycles

Chromosomal abnormalities of embryos accounts for approximately 60% of miscarriages in women - particularly beyond 35 years of age. With recent revolutionary advances in genetic testing, it has now become possible to more reliably screen embryos for chromosomal abnormalities through a technique known as **Comprehensive Chromosome Screening (CCS)**. This technique is especially useful in situations where a woman has suffered multiple miscarriages or has had multiple failed IVF cycles without an obvious explanation. This technique involves removing a few cells from early developing embryos and subjecting those biopsied cells to quantitative real-time polymerase chain reaction (qPCR). This highly precise and reliable technique allows for study of all 23 pairs of chromosomes. Only those embryos with normal numbers of chromosomes are selected for implantation into the uterus.

Our experience with this technique has consistently shown that when early developing embryos are subjected to this screening procedure, the resulting normal embryos lead to significant increase in implantation rates, and potential for delivery of a normal baby.

Cancer and Fertility Preservation

There are approximately 800,000 reproductive-aged men and women who have been diagnosed with cancer and over 60% are expected to survive. The lifetime probability of developing cancer is 50% for men and 30% for women. The first concern of any cancer patient is curing the cancer, but once they have achieved that goal quality of life issues like fertility become a concern. Unfortunately, the life-saving cancer treatments can affect future fertility by destroying the sperm or eggs and the uterus in some cases. The most severe damage comes from high dose radiation to the ovaries or testicles. Also, chemotherapeutic cancer drugs like cyclophosphamide, mechlorethamine and melphalan can be destructive depending on dose and number of cycles. In some cases it is possible for sperm and egg pro-

duction to return to near normal levels. For men new sperm is produced every day while on the other hand women were born with a set number of eggs that cannot regenerate. The bottom line is a certain percentage of men and women will become sterile after having their cancer treatment. The good news is that there are several options that may help preserve fertility before treatment.

Men can have semen samples frozen at a sperm bank or a local fertility center before they start treatment. If sperm counts are normal inseminations can be done or if they are low or very low either in vitro fertilization (IVF) or intracytoplasmic sperm injection (ICSI) can be done. Women can undergo an IVF cycle if time allows. Embryos created by IVF are frozen

and can be stored for years. If radiation will be localized to the pelvis then the ovaries can be surgically repositioned so they are out of the field of radiation or placed behind the uterus for protection. Of course, factors such as time, expense, availability of sperm and delay due to cancer treatment can limit options. Oncologists/Radiologists are encouraged to talk to their patients who are of reproductive age before they begin treatment so that they know ahead of time what their options are. The patient can always contact a reproductive endocrinologist on their own as well. When a cancer patient contacts our office for an appointment they are considered an emergent patient and are seen within two days.

Ovarian Reserve Testing

A woman's fertility potential declines with age due to declining egg quality and numbers. As a woman ages there is a decreased ability to become pregnant and an increased rate of miscarriage. Although the ability to have a live birth decreases in all women as they become older, the precise age when women can no longer conceive varies. Approximately one-third of couples in which the female partner is age 35 or older will have problems with fertility. There are several tests that may be useful in assessing fertility potential (ovarian reserve) in women, which include the following, Day 3 Levels of FSH and Estradiol, Clomiphene Citrate Challenge Test, Antral follicle count and response to Gonadotropins.

These tests are helpful in foreseeing a woman's response to fertility treatment and the chance of her success compared to other women of the same age. In younger women, abnormal test results suggest that fertility potential is declining. However, these tests alone cannot predict conception. It is also important to note that some younger women with normal test results will have difficulty conceiving.

Women who are older than 40 years of age with abnormal test results have a small chance of becoming pregnant naturally and after ovulation induction. These women will be counseled about the use of donor eggs or embryos, because the chances of pregnancy are primarily related to the quality of the donated eggs. Unfortunately, even with a normal ovarian reserve test, older women could have difficulty achieving a pregnancy. Furthermore, the results may vary from cycle to cycle. An abnormal test, however, generally indicates that fertility potential has diminished.