A Basic Overview of Infertility

What is infertility?
Infertility is a disease or medical condition of the reproductive system caused by a variety of diagnoses affecting about ten percent of the reproductive age population. Not only is it a physical problem affecting an individual’s ability to procreate, but it also often causes extreme emotional turmoil and stress that has been compared to the levels experienced by people suffering from AIDS or cancer. For many of those affected, infertility is a major life crisis.

What Causes Infertility?
Female and male factors each account for about 40% of the causes of infertility. It is also quite common for both partners to simultaneously have issues. About 10% of cases are classified as unexplained.

Common female infertility conditions include abnormal ovulation, fallopian tube dysfunction, uterine or pelvic pathologies, endometriosis, polycystic ovarian syndrome and advanced maternal age. Common male factor reasons include sperm, anatomical or hormonal problems and previous testicular injuries, to name a few.

How is Infertility Diagnosed?
It is recommended that couples seek the advice of an infertility specialist, most of whom are board-certified reproductive endocrinologists, after they have attempted one year of unprotected intercourse if the woman is under 35 years of age, six months of trying if the woman is over 35 years old, or if they have experienced two or more recurrent miscarriages.

The diagnostic process generally includes blood hormonal tests and a hysterosalpingogram (HSG) for the female and a semen analysis for the male. The HSG determines if there are blockages in the Fallopian tubes or abnormalities of the uterus. Depending on the female’s or male’s medical history, the workup also may include other tests or even surgery.
**How is Infertility Treated?**
Most physicians recommend starting with less intensive, simpler treatment options like the oral drug ovulation medications before moving to intrauterine inseminations (IUI) with injectable hormone medications called gonadotropins. IUIs involve placing prepared sperm into the uterus during ovulation.

Only a small percentage of infertility patients need assisted reproductive technologies such as in vitro fertilization (IVF). During IVF, egg and sperm are combined in the laboratory to develop into embryos that are transferred to the female’s uterus three to five days after fertilization. Depending on the patient’s condition and past attempts with ART, a reproductive endocrinologist may also recommend advanced laboratory techniques like preimplantation genetic diagnosis (PGD) for embryo genetic screening, or intracytoplasmic sperm injection (ICSI), where one sperm is directly injected into the egg to force fertilization. ICSI is often used for severe male factor infertility.

Although IVF has become increasingly successful, it still may not work for certain categories of patients for a variety of reasons, including poor egg quality in older female patients. For those individuals, third party family building may be an excellent option.

**What is Third Party Family Building?**
Third party family building involves egg donation, sperm donation, surrogacy and embryo donation. As its name implies, one or more of those third parties must be involved for a successful pregnancy and delivery.

Embryo donation has become an increasingly utilized third party option as both embryo donors who have finished their family building seek meaningful options for their frozen embryos and embryo recipients search for cost-effective methods for experiencing pregnancy, childbirth and parenthood.