**Johns Hopkins Fertility Center** [1]

By: Khokhar, Aroob

Johns Hopkins Medical Center, located in Baltimore, Maryland, opened in 1889; its associated medical school opened four years later. Today the hospital, a leading research center, contains many departments, including a fertility center that is renowned for taking on difficult cases that have been rejected by other fertility clinics. The fertility center was founded by physician Georgeanna Seegar Jones [6] in 1939 as the Division of Reproductive Endocrinology in the gynecology department. The division expanded once formal training in reproductive endocrinology [7] began in 1973. With the growth of this department came new developments; by 1984 the center was offering a variety of assisted reproductive technologies (ART) for individuals unable to conceive a child naturally. Johns Hopkins gynecology department is ranked second out of 4,800 hospitals by the U.S. News & World Report's annual ranking for America's best hospitals in 2009–2010.

The Johns Hopkins Fertility Center [9] is composed of a team of physicians, nurses, laboratory specialists, and support staff working together to improve chances of pregnancy [8]. The contributing physicians are experts specializing in fertility and infertility [9]. Jairo Garcia [10] is the current director of the in vitro [11] fertilization [12] (IVF) program, Edward Wallach [13] directs the ART programs, Howard Zacur [14] is in charge of the Division of Reproductive Endocrinology & Infertility, Yulian Zhao [15] is the ART laboratory director, and Lisa Kolp [16] is Assistant Professor of Gynecology and Obstetrics. These physicians research with teams of specialists in hopes of discovering additional treatments for infertile individuals. They work together with the remaining staff to diagnose reasons for infertility [9] and help couples seek further treatment with the center.

In order for couples to be considered for treatment at Johns Hopkins, they must be deemed infertile, or unable to conceive after at least twelve months of trying for conception [17]. Both the male and female trying to conceive undergo evaluation to determine the cause of infertility [9]. For males, this involves checking sperm [16] count and motility, observing testosterone levels, and examination of the external genitalia. For females, tests are done to examine the cervix [19], endometrium [20], fallopian tubes [21], peritoneum (the membrane lining the abdominal organs), and ovulation [22] patterns. Conditions that make couples eligible for treatment include failure to ovulate, unexplained infertility [9], repeated pregnancy [8] loss, benign ovarian tumors, endometriosis [23], ovarian cysts, ovarian disease, pelvic mass, cervical mucus problems, male infertility [9], cancer-induced infertility [9], decreased ability to ovulate, and uterine factor infertility [9]. Once the cause is determined, the fertility center furthers the treatment process by offering a variety of options to the couple in order to improve their chances of having a biological child.

Before beginning a procedure, Johns Hopkins Fertility Center [5] offers resources to help their patients physically and mentally prepare for treatment. Depending on the procedure involved, it recommends a variety of preparations to help ensure a healthy pregnancy [8]. It also provides counseling, genetic counseling, and support groups. By supplying these services, the fertility center hopes to assist in relieving the anxiety that most patients endure before a procedure is started.

The treatments offered include IVF, blastocyst culture and transfer [24], gamete intrafallopian transfer (GIFT), intracytoplasmic sperm injection [25] (ICSI), intrauterine insemination (IUI), transmyometrial embryo transfer [26], and zygote intrafallopian transfer [27] (ZIFT). Couples are able to undergo treatment with the woman’s egg [28], but they also have the option of choosing from one of the donor eggs offered by the center if they are unable to produce an egg [28]. Alternative treatments are available to individuals undergoing cancer treatments that can damage eggs and sperm [18], and to people who wish to plan for pregnancy [8] in the future; cryopreservation [29] stores their embryos, ovarian tissue, or sperm [18] for pregnancy [8] later on in life.

Individuals undergoing fertility treatment at Johns Hopkins are diverse. The fertility center stresses the importance of the patient and diagnosis over success; thus accepting couples who have been rejected by treatment centers elsewhere because, for example, the couple is older or the woman has few eggs in her ovaries. Although the center’s ultimate goal is to help a couple have a successful birth, there are factors such as age that do affect the success rate. In 2005, Johns Hopkins ranked about average with its fertility success rate; individuals younger than 35 years had a 25.8% successful birth rate, while people ages 35 to 37 were successful 23.3% of the time, and ages 38-40 and 41 and above had a 6.4% and 7.5% birth rate, respectively. With the help of its teams of specialist and technological advancements, Johns Hopkins Fertility Center [9] has made it possible for many infertile couples to have a baby.

**Sources**

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