



Assisted Reproductive Technologies (ART) Overview

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In 1978, thanks to the efforts of Drs. Edwards and Steptoe, Louise Brown was born – the first baby born with the technique known as In-Vitro Fertilization with Embryonic Transfer. Since then IVF has been widely used to treat infertile couples. Thanks to the knowledge and observation of the process of fertilization through Assisted Reproductive Technologies it has become possible to offer this option to couples. The advantages of In-Vitro Fertilization are:

1. Fertility is verified.
2. Natural selection of the developed embryos occurs in 3 to 5 days.
3. Easy transfer of the embryos to the uterine cavity.
4. Biopsy of the Blastomeres allow for genetic testing.

Practically the only disadvantage is the influence of external factors. In time, the number of pregnancies have increased significantly due to the fact that better methods are being used to induce ovulation, correlate levels of hormones through

ultrasonographic findings, and the retrieval of eggs, along with better means to cultivate them.

The 10th World Congress for In-Vitro Fertilization and Assisted Reproduction with 775 registered clinics in more than 30 countries declared that in 1995 there were 141,190 transfers, with an average pregnancy rate of 20.4%, of which 14.9% resulted in live births. This is significantly less than what the United States reported for that same year, at 29.4% rate of pregnancies, with 23.7% resulting in live births.

At the IECH Fertility Center in 1995, 91 patients underwent and In-Vitro Fertilization procedure. There was a 31% pregnancy rate, with 22% resulting in live births.

IVF 1995		
	Number	Clinical Pregnancy
Worldwide	141,190	21.0%
USA	21,675	29.4%
IECH	91	30.7%

Pregnancy rates for the last three years, at our Institute are:

AÑO	2002	2003	2004
Pregnancy rate	28.5%	39%	55%

Today there are different techniques, each one designed for a specific problem: Conventional In-Vitro Fertilization (IVF), Intracytoplasmic Sperm Injection (ICSI), Percutaneous Sperm Aspiration (PESA), Testicular Sperm Extraction (TESE),

Assisted Hatching (AH), and even Cryopreservation of sperm, eggs, and embryos.

Medical training and technology throughout the years, have allowed centers such as the Institute of Human Conception in Monterrey, certified by the Latin American Network of Assisted Reproduction (Red Latino Americana de Reproducción Asistida), to offer better services and better results for couples experiencing infertility.