Fertility & IVF Center of Miami

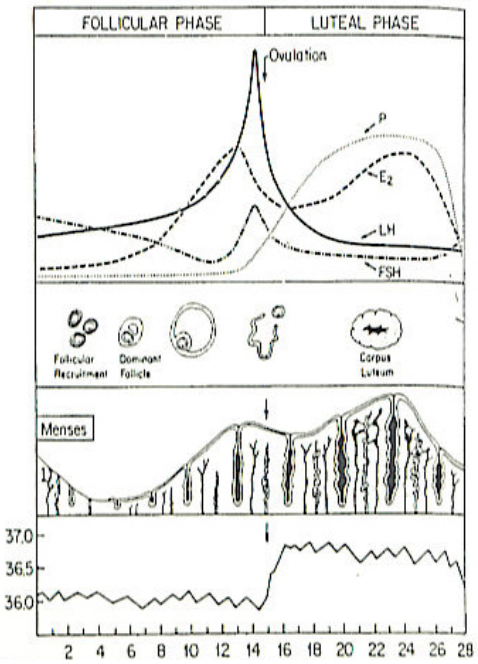
1.866.IVF.BABY

www.miami-ivf.com

Understanding Gonadotropin Therapy

Background:

Gonadotropins are protein hormones produced by the pituitary gland by men and women. They are Follicle Stimulating Hormone (FSH) and Luteinizing Hormone (LH).
In the Female, FSH promotes the maturation of ovarian follicles and the eggs that they contain. The cells, which line each follicle, produce estrogen, which in turn promotes the growth of the uterine lining (endometrium) so as to create a favorable environment for embryo implantation. Estrogen also stimulates the cervical glands to produce clear mucus, through which sperm must pass, in transit to the awaiting egg in the distal end of the fallopian tube. LH is released, in small amounts, in a pulsitile manner up until the time of ovulation when a large amount is released (LH surge). Low concentrations of LH help to promote and sustain the development of the early corpus luteum which is formed from the collapsed follicle following ovulation.

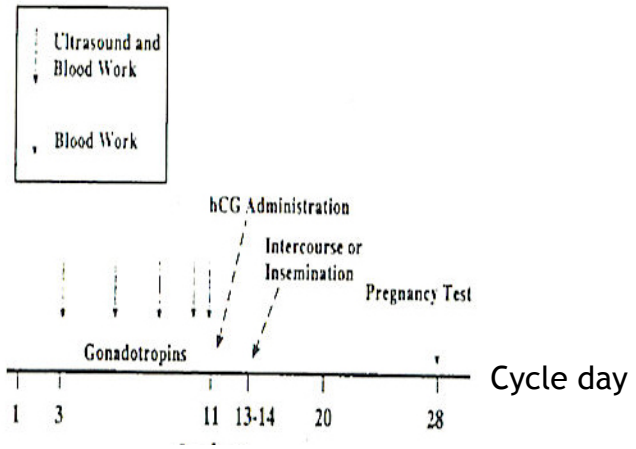


Methodology:

Prior to selecting the most appropriate regimen of gonadotropin therapy, the hormones FSH, LH and prolactin, are measured on the 1st or 2nd day of a menstrual cycle. This enables the doctor to select the most ideal regimen and dosage likely to achieve optimal stimulation.

What are the side effects?

According to the American Society of Reproductive Medicine, the main side effects are as follows:



Ovarian Hyperstimulation (OHSS): occuring in 1 to 5 percent of cycles the chance of OHSS is increased in women with polycystic ovarian syndrome and in conception cycles. When severe, it can result in blood clots, kidney damage, ovarian twisting and chest and abdominal fluid collection. In severe cases, hospitalization is required for monitoring fluid intake and output and instituting appropriate treatment. While not totally preventable, careful monitoring of patients undergoing follicular stimulation should minimize this potentially serious complication. Those patients with grossly exaggerated responses will have their cycles cancelled prior to hCG administration.

Multiple Gestation: up to 20% of pregnancies resulting from gonadotropins are multiple, in contrast to a rate of 1 to 2 percent of the general population.

Ectopic (Tubal) Pregnancy: while ectopic pregnancies occur 1 to 2 percent of the time, in gonadotropin cycles the rate is slightly increased at 1 to 3 percent.

Adnexal Torsion: Less than 1% of the time, the stimulated ovary can twist on itself, cutting off its own blood supply.

Long Term Risks:

According to the American Society for Reproductive Medicine, recent studies suggested a possible link between ovarian cancer and the use of drugs that induce ovulation (Pergonal or Fertinex). Although the data does suggest that infertile women and in particular, women who take infertility drugs, do have a higher risk of ovarian cancer, it is not known whether the drugs themselves are the cause of the increased risk. It is the Center's feeling that all fertitlity drugs need to be used prudently with suitable monitoring, for limited periods of time.

Insurance Questions:

Our administration will be happy to assist you in determining your level of coverage for your prescribed treatment cycle. We would strongly recommend that you contact your insurance company for clarification of benefits prior to initiating treatment.