Human Chorionic Gonadotropin (HCG)

Patient Information

Definition:
Human Chorionic Gonadotropin, HCG, is a hormone produced by the placenta. It is the same hormone that home pregnancy tests examine to confirm that a woman is pregnant. HCG is sold under the brand names Ovidrel, Profasi, Novarel, and Pregnyl.

Anatomy/Physiology:
The HCG molecule is made up of two main segments. One segment of the HCG molecule is similar in structure to Luteinizing Hormone (LH). The LH surge is the signal that triggers the release of the egg from the ovary. Many women who are undergoing ovulation induction may not release their own LH surge or the physician will want to time procedures, such as insemination or in vitro fertilization, more accurately by simulating the actual LH surge. HCG is close enough in shape to LH to fool the ovary into thinking that a real LH surge has taken place stimulating the ovary to release the egg about 24 to 36 hours later.

Indications:
HCG is given to women to simulate the LH surge and induce ovulation. The medication may also be given to particular men with pituitary deficiencies to stimulate sperm production. The medication is also given to infant boys to stimulate the descent of an undescended testicle.

Contraindications:
HCG should not be used with males with early puberty or prostate problems. An allergy to HCG is exceedingly rare, but is also a contraindication to taking the medication.

Administration:
The medication is administered by injection. Ovidrel is the most common brand name prescribed because it requires no mixing. If you have been prescribed another form of HCG and mixing is required, you will be provided with our written patient information form for Mixing and Injecting HCG. You will be instructed to inject the HCG at a site and time designated by your physician.

Complications:
Headache, irritability, restlessness, depression, fatigue, swelling, early puberty, breast development in the male and pain at the injection sites are rare complications of the drug. Since this medication is the same as a hormone that is naturally produced by the human body, it has relatively few side effects.

Common Questions:
How soon can I check a pregnancy test after taking the medication?
It takes about 10 days for the HCG to clear from the system, so a pregnancy test should not be done any earlier than this 10-day period. Your physician will instruct you as to when a pregnancy test should be obtained.