that the patient learn how to **NaProTRACK her menstrual cycles**. This allows her to record the various biological markers that key the events of the menstrual cycle. She can do this by learning **the CREIGHTON MODEL FertilityCare™ System.** With a persistent follicular cyst she will have a **prolonged Peak-type mucus build-up** which can be easily observed on her tracking. In the **persistent luteal cyst** she may have a **prolonged luteal phase**. In either case, when the patient presents with pelvic pain and an ovarian cyst, an evaluation of the recordings of the biomarkers can be connected with the symptoms that the patient has an a reasonably exacting diagnosis can be made.

In both cases, the treatment is the same. The use of the **pure hormone progesterone**, usually in an intramuscular form, **will eliminate the pain within an hour** after receiving the hormone and it will help the cyst degenerate at the time of the next menstrual flow. **To prevent these on a long term basis, the cyclic administration of progesterone, in a cooperative fashion with the menstrual cycle can be used**. In cases like this, **oral or vaginal progesterone or now the newer progesterone cream** can also be used. **When using progesterone, however, it must be the natural progesterone**. Progesterone substitutes do not work well and the progesterone skin creams that are present in the health food stores probably do not contain sufficient amounts of progesterone to be helpful.

Thomas W. Hilgers, M.D., Dip. ABOG, ABLS, SRS is the director of the Pope Paul VI Institute for the Study of Human Reproduction, an Institute that is dedicated to research, education and service in the areas of human reproduction. He serves as the Institute's senior medical consultant in obstetrics, gynecology, reproductive medicine and surgery. He is board certified in obstetrics and gynecology and gynecologic laser surgery, and is a member of the Society of Reproductive Surgeons. The co-developer of CREIGHTON MODEL **FertilityCare™ System** *and* **NaPro**TECHNOLOGY™*, he has been named by Pope John Paul II to the Pontifical Academy for Life and with his wife, Susan, to the Pontifical Council for the Family.*

CREIGHTON
M•O•D•E•L
NaProEducation Technology

The symbol on the front cover symbolizes the creation of a new human person. It represents the equation 1 + 1 + 1 = 1. A man, a woman and God all come together to create the new child.

FOR MORE INFORMATION, PLEASE CONTACT:

www.popepaulvi.com

P-BR-21-04

OVARIAN CYSTS

RECURRENT OR OTHERWISE

A FertilityCare™ EDUCATION BROCHURE

Thomas W. Hilgers, M.D.

OVARIAN CYSTS
RECURRENT OR OTHERWISE

Many women suffer from the recurrence of **ovarian** cysts. These can become **quite painful** and when they present themselves, it is common for the physician to recommend either **birth control pills** for their treatment or **surgical intervention** sometimes leading to removal of the ovary. In both cases, these treatments are **generally unnecessary**.

It is helpful to understand the basic workings of the development of the two major types of ovarian cysts: the **persistent follicular cyst** and the **persistent luteal cyst** (luteinized unruptured follicle). In order to understand these two types of functional ovarian cysts (which can become recurrent and create a good deal of discomfort), it is important to understand something about the basic physiology of ovarian function.

With the beginning of the menstrual cycle the ovary generally does not have any cysts on it or they are very small or left over from the previous cycle. However, as **ovulation approaches** there is a cyst that develops on the ovary called **the follicle**. Inside the follicle is located the egg. At the time of ovulation the follicle ruptures and the egg is released. Once the egg is released the follicle then becomes **a corpus luteum**. The corpus luteum produces progesterone and estrogen. These two hormones prevent the further cystic development on the ovary. When these two hormones are no longer produced (approximately 13 days following ovulation) then **menstruation** occurs and the process starts all over again.

PERSISTENT FOLLICULAR CYSTS

With a **persistent follicular cyst** (which is the least comon of the two functional cysts), the growth and development of the follicle is abnormal probably because of **outside stress** and **its hormonal effects**. The follicle may grow to a certain size but does not grow any further and stays a follicle. Sometimes this can go on for several weeks. When it does this, it can cause a considerable amount of discomfort and pain and the woman may present to the doctor with **pelvic pain** (often on one side or the other). **Pelvic ultrasound** will reveal the presence of a cyst. To know whether or not it is a follicular cyst by ultrasound, one also needs to evaluate the lining of the uterus (the endometrium) and if it is in the **proliferative phase** (the preovulatory phase) by ultrasound examination, then, by definition, this is a follicular cyst.

To prevent these on a long term basis, the cyclic administration of progesterone, in a cooperative fashion with the menstrual cycle can be used.

PERSISTENT LUTEAL CYSTS

With the **persistent luteal cyst** (or the luteinized unruptured follicle), the follicle grows and develops to a certain point where it would normally rupture and release the egg. However, at that point, **it does not rupture** and it does become luteinized (that is it causes a corpus luteum to be formed without the follicle rupturing). Progesterone is then produced and eventually the cycle comes to an end. In this case, the unruptured follicle remains on the ovary as a cystic structure and usually increases in size as a woman gets closer and closer to her menstrual flow. This cystic structure can reach **5 to 6 cm. in size** and become **very painful** and it is not uncommon then to present to her physician with **acute abdominal pain**.The persistent luteal cyst is far and away **the most common** of the two functional cysts.

TREATMENTS

Because both of these types of ovarian cysts are related to **abnormal hormone function** as the primary cause, one can realize that **surgical intervention** or treatment of these is **generally not helpful**. In particular, it does not help in the recurrence of these cysts. It may help, of course, in the management of the initial situation but it does not help recurrence of these because surgery does not get to the basic problem that causes these ovarian cysts. Nonetheless, surgical management is often recommended.

One problem that needs to be seriously considered with any type of surgical intervention is whether or not it will lead to an increased risk of **scar formation** around the ovaries. This can occur quite readily particularly if a surgical procedure is performed or the cyst is removed off of the ovary and the ovary is repaired (if this procedure is not done by a physician who is especially skilled in the prevention of adhesions, scar tissue can form and subsequent **infertility** and **other problems** can result).

The **management** of these problems is, actually, **primarily hormonal**. Many physicians will recommend the use of **birth control pills** for this hormonal management, however, that also does **not** get to the underlying problems.
At the **Pope Paul VI Institute**, we recommend