Current Medical Research

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Natural Family Planning
Diocesan Activity Report
SUPPLEMENT

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"The Lack of Interaction between Temafloxacin and Combined Oral Contraceptive Steroids." D.J. Back, J. Tija, C. Martin, E. Millar, T. Mant, P. Morrison, and M. Orme. *Contraception* 43:317-323 April 1991.

A new broad spectrum quinalone antiobiotic, temafloxacin, was tested to see whether it interfered with absorption of oral contraceptives in 12 healthy volunteer women. Studies of estrogen and progesterone did not change between the control and the study cycle indicating that there had been no breakthrough ovulation. Similarly, there was no significant rise in either FSH or LH. Temafloxacin is apparently compatible with oral contraception. The authors note that other drugs which have interfered with oral contraceptive metabolism were rifampicin, an anti-tubucular drug, phenobarbitol, and carbamazepine, an anti-convulsant drug. [Conventional antibiotics, anti-convulsants, especially dilantin derivatives, as well as phenacetin have been found to interfere with the absorption of oral contraceptive pills. Ed.].

"1989 *JAMA* Article Supports Hypothesis Linking Barrier Contraceptive Methods and Preeclampsia DA Grimes." *Contraception Report II:1* 1991 8-9.

Dr. Grimes has reanalyzed Klonoff-Cohen's article reported in the Fall 1990 *Current Medical Research*, and has concluded that the methodology was flawed and that the use of barrier methods did not result in a higher incidence of preeclampsia. Subsequently, a reanalysis of two larger prospective pregnancy studies failed to find any association between the use of barrier contraception and preeclampsia. (Mills JL, Klebanoff MA, Graubard BI, et al. *JAMA* 1991 265:70-73).

"Antisperm Antibodies to Sperm Surface Antigens in Women With Genital Tract Infection." D.S. Cunningham, D.L. Fulgham, D.L. Rayl, K.A. Hansen, and N.J. Alexander. *American Journal of Obstetrics and Gynecology* 1991; 164:791-6.

Women who had a previous genital tract infection had 56% positive response rate to serologic tests for sperm surface antigens. Sixty-nine percent of women with no history of infection but who showed evidence of past pelvic infection when examined laparoscopically, also had circulating antisperm antibodies. Several antibodies were recognized. It is concluded that the infertility which results from pelvic infection may be due to sperm antibodies at least as often as to mechanical barriers such as adhesions.

"Results of a Preventive Program for Congenital Toxoplasmosis." A. Ghidini, M. Sirtori, A. Spelta, and P. Vergani. *The Journal of Reproductive Medicine* April 1991 36:270-273.

Toxoplasma is a protozoan parasite frequently found in cats and in people who handle cats and cat litter. While the infection in the adults is harmless and often subclinical, its occurence during pregnancy can be devasting for the fetus: 5-10% of them die in utero. Of the survivors, 8-15% have early and severe damage: chorioretinitis, cataracts, blindness, microphthalmia (small eyes), microcephaly (small head), hydrocephaly, and mental retardation while another 19% develop mild clinical signs. Long-term follow-up suggests that 85% of asymptomatic infants may develop sequelae in later years. It has been calculated that about half of the women with primary toxoplasmosis infection during pregnancy transmit the infection to their offspring as documented by a rise in fetal or newborn IgM antibody titers. It has been found that if the diagnosis is made during pregnancy, and the mother treated prophylactically with spiramycin, the possibility of fetal infection is vastly reduced. The investigators followed not only maternal serum titers but also repeated ultrasound studies for placental width and the fetal nervous system. They also performed cordocentesis (aspiration of umbilical cord blood by inserting a needle through the uterus, a procedure which is not without risk to the baby). [Not only did they demonstrate a total lack of toxoplasma infection to the fetuses of

the women in their study, but they demonstrated a high degree of reliability for ultrasound studies alone. This should be reassuring to those who either cannot or choose not to perform cordocentesis. Ed.]

"Immunoreactive Inhibin Concentrations in Adult Men: Presence of a Circadian Rhythm." M-A Yamaguchi, H. Mizunuma, K. Miyamoto, Y. Hasegawa, Y. Ibuki, and M. Igarashi. *The Journal of Clinical Endocrinology and Metabolism* March 1991 72:554-559.

Natural Family Planners have known about Inhibin for some time. It is a glycoprotein which is thought to modulate FSH-pituitary release. In the ovary, it is produced by the dominant follicle to prevent other follicles from reaching maturity. Inhibin has also been found in males. The investigators and an Australian group have purified the hormone and established a test through RIA (radioimmunoassay). The levels of inhibin, FSH, LH, prolactin, testosterone, and cortisol were studied throughout a day and night cycle in 5 healthy young males. Serum inhibin levels were relatively low during the evening and night, began to increase early in the morning, and reached a peak between 8 and 10 A.M. This curve was similar to that found for all of the other hormones, including testosterone concentration which remained low between 10 P.M. and 3 A.M., began to rise at 4, reached its peak by 10 A.M. and remained high until 10 P.M. When older men were studied, inhibin declined gradually with age, which may be related to an increase in FSH.

Current Medical Research, a supplement of the **NFP Diocesan Activity Report**, is published quarterly. Dr. Hanna Klaus, M.D. is the editor. This supplement's purpose is to serve the Roman Catholic diocesan NFP programs of the United States through providing them with up-to-date information on research within the field of fertility, family planning, and related issues. The Diocesan NFP teacher should be equipped to understand the various methods of contraception and be able to explain their incompatibility with the practice of the natural methods of family planning.