Complications were few, and only 1.6% of patients had to be hospitalized. Infection was virtually nonexistent, and treatment failures were easily recognized at the 3-month follow-up examination.

Effects of Ethanol Ingestion

McLeod W, Brien J, Loomis C, et al.: Effect of maternal ethanol ingestion on fetal breathing movements, gross body movements, and heart rate at 37 to 40 weeks' gestational age. Am J Obstet Gynecol 145:251, 1983.

The effects of maternal ingestion of 0.25 g/kg of ethanol were studied in 11 consenting subjects who were at 37–40 weeks gestation.

Fetal breathing movements were measured in 11 fetuses on two successive days. Fetuses made breathing movements 38.3 ± 1.8% of the time during the 2.5-hr control period prior to the ingestion of the ethanol, and breathing movements decreased significantly to 1.6 ± 0.6% for the 3-hr interval after the alcohol ingestion ($p < 0.001$). Fetal breathing movements in the six patients in whom blood alcohol levels were measured were virtually abolished within 30 min, correlating with the peak blood-alcohol levels. Breathing movements remained depressed for the entire 3-hr observation period, despite the fact that blood-alcohol levels declined to very low levels after 3 hr.

Fetal gross body movements were not significantly affectd by maternal ingestion of ethanol or plain soda water. Mean fetal heart rates did not change significantly with ingestion of ethanol.

The amount of alcohol given to the mothers was the equivalent of 2 oz of alcohol as a 40% solution (80 proof).

Women Who Regret Sterilization

Leader A, Galan N, George R, Taylor P: A comparison of definable traits in women requesting reversal of sterilization and women satisfied with sterilization. Am J Obstet Gynecol 145:198, 1983.

In light of the apparent increase in the numbers of women requesting reversal of sterilization procedures, these authors sought to identify characteristics of those women likely to become dissatisfied with their infertility so as to aid in the presterilization counseling as well as in the choice of the type of procedure to be done.

A comparison of 159 women referred to the authors' clinic for reversal of tubal sterilization with 160 women who were apparently satisfied with their sterilization was made. Remarriage was the most common cause for regret among women in the group requesting reversal.

A statistically significant difference was found in the mean ages at sterilization (25.0 ± 4.0 for those requesting reversal; 31.2 ± 4.5 for those not requesting reversal). There was no significant difference in the mean numbers of pregnancies between the two groups, but 14 women in the reversal group had no live children prior to sterilization, and 5 women were never pregnant, compared to 1 in the satisfied group.

Most women in the satisfied group stated that the decision in favor of sterilization was made jointly by both partners, whereas more women in the reversal group were likely to have made an individual decision (41.8%) or to have had the decision made for them by their partner (11.9%), from whom all were subsequently divorced.

Most women who requested a reversal regretted their decision for sterilization within one year after the procedure, whereas only 10% of the satisfied women admitted some regrets in the first year. Remarriage and the desire for children in the new relationship was the reason for requesting a reversal procedure in 90% of the women. Only 10 women (6%) requested the reversal subsequent to the death of a child or the birth of an abnormal child.

Of the 159 women requesting reversal, 6 were counseled against it based on their operative histories, 58 withdrew prior to endoscopic evaluation, and 95 underwent this preliminary evaluation. Fifty-seven (60%) were judged to have a reparable condition, and 34 ultimately underwent the procedure. The authors were disconcerted to discover that 40% of the women offered the reversal chose not to take it.

The authors suggest that when women meeting the criteria of the reversal group request sterilization, the potentially most reversible method should be chosen.

Breast Stimulation Used to Ripen Cervix

Elliott J, Flaherty J: The use of breast stimulation to ripen the cervix in term pregnancies. Am J Obstet Gynecol 145:553, 1983.

In this prospective study, 81 low-risk patients at term were given Bishop scores (of cervical ripeness) prior to their assignment to control or treatment groups. Each patient in the treatment group was asked to stimulate her breasts by gentle massage with a warm moist cloth for 1 hr three times a day for a 3-day period. Patients in the control group were asked to avoid any breast stimulation during the study period.

The mean change in the Bishop score for the breast stimulation group was 2.8 ± 1.9, compared with 0.33 ± 1.4 for those in the control group ($p < 0.001$). In addition, 11 of 22 patients (50%) in the breast stimulation group went into labor during the 3-day study period, compared with only 1 of 16 (7%) in the control group ($p < 0.001$).

In a second phase of the study, a crossover trial using 40 additional patients was performed. Significant changes in Bishop scores were obtained for the breast stimulation group. Subsequently, the 9 patients who had undergone 3 days of breast stimulation but had not gone into labor were assigned to the control group, and the 19 previous control patients were assigned to breast stimulation. Again, a highly significant change in the mean Bishop score was observed; however, there was no statistically significant difference in the number of patients who went into labor.

The authors were also able to conclude that the changes in the Bishop scores or the chance of labor were not related to the initial state of the cervix.

New Biodegradable Contraceptive Capsule

Ory S, Hammond C, Yancy S, et al: The effect of a biodegradable contraceptive capsule (Capronor) containing levonorgestrel on gonadotropin, estrogen, and progesterone levels. Am J Obstet Gynecol 145:600, 1983.

This report is a preliminary study of a levonorgestrel-containing subdermal capsule as a possible long-term contraceptive method. Theoretical advantages include: (1) obviating the need for daily compliance; (2) high level of effectiveness; (3) use of doses one-tenth of those required when given orally; (4) lack of suppression of lactation; and (5) fewer

risks than an estrogen-containing compound.

Eight regularly menstruating women were recruited for this 5-cycle study. Ovulation was demonstrated in all 8 by BBT charts and serum progesterone levels in three observation cycles. The capsules were implanted in the fourth cycle, and 7 of the 8 subjects did not ovulate during that cycle. The one women who did ovulate had the capsule inserted through an open incision rather than through a trocar. All but two subjects remained anovulatory in the fifth cycle (after the capsule had been removed). Ovulatory cycles returned in all subjects at the sixth cycle.

Serum levonorgestrel levels rose to a therapeutic level within 3 days of insertion of the capsule, and there was little daily variation (compared with the greater variation seen with daily oral progesterone medication). In all cases, serum levels fell to undetectable values within 3 days of capsule removal.

The capsules were generally well-tolerated, and no significant adverse effects were noted. One subject experienced migration of the pellet and required xeroradiography for its location and removal. Other subjects noted an increase in appetite, mood swings, diarrhea, nervousness, increased fluid retention, nausea, and persistent soreness at the insertion site.

The pellets are designed to biodegrade in 12 months and can contain adequate medication for that length of time. The side effects to be expected with longer use of the pellets are the same as those encountered with oral progestin-only contraceptives.

The authors feel that these capsules appear to be an effective means of suppressing ovulation. Their technique of insertion of the pellet through a large needle trocar over the hip with the patient under local anesthesia was well-tolerated and seemed to be an improvement over insertion in the forearm. These results, say the authors, "would seem to warrant a larger, longer trial of this technique."