tiveness. The dose of progestin has gradually been reduced from over 9 mg. in the original preparations to 0.5 mg. The dose of estrogen, ethinyl estradiol or its three-methyl-ether, has been reduced from 0.15 mg. in the first marketed product to 0.05 mg. It is not yet possible to draw conclusions concerning the various newer dosage combinations with respect to either efficacy or side effects. The combination product introduced most recently contains 0.5 mg. of a synthetic progestin, norgestrel, and 0.05 mg. of ethinyl estradiol (6).

TABLE 2.—PREGNANCY RATES PER 100 WOMEN PER YEAR

	Method failures	All pregnancies
Oral contraceptives:		
Combined regimen	0.1	0.7
Sequential regimen	0.5	1.4
Intrauterine devices:		
Large lippes loop	[1] 1.9	2.7
Saf-T-Coil	[1] 1.9	2.8
Condom or diaphragm	2.6	
United States clinics:		
Diaphragm used with spermicidal jelly or cream		17.9
Vaginal foam		28.3
Vaginal jelly or cream alone		36.8

[1] Pregnancies with IUD in situ. All rates for IUD's and traditional methods are for the first year of use.

Steroids that are stored in adipose tissue after absorption from the gastrointestinal tract are being investigated for possible one-pill-a-month contraceptive therapy (5). The investigation is aimed at calibrating the oral dose of the combination that will result in a month-long release of steroid from the adipose tissue at a level that will suppress ovulation while maintaining an acceptable pattern of endometrial bleeding. The problem of unpredictable endometrial bleeding has not yet been resolved (12).

Suppression of ovulation: Parenteral preparations

Intramuscular injections of steroids can give a depot effect, adjusted to last a single month or for several months. The most widely studied compound for injectable hormonal contraception is a 6-alpha-methyl-17-alpha-hydroxyprogesterone acetate; several thousands of women have been included in studies in many countries. The regimen investigated most completely is 150 mg. injected every 90 days, although studies are also in progress with semiannual injections of 400 mg. With this procedure, ovulation is generally suppressed through an interference with the midcycle peak of LH (8).

Ovarian follicular development appears, nevertheless, to proceed, so that endogenous estrogen production may not be completely obliterated. The endometrial pattern, however, reveals that the established estrogen-progestin balance is far from normal. As a result, uterine bleeding is unpredictable for women on this regimen. There is considerable variation among patients but by the end of a year the majority of women have atrophic endometria and are amenorrheic. A pregnancy rate below 1 per 100 women per year has been obtained with this procedure. There is, however, considerable delay in the restoration of ovulatory cycles after discontinuation. Delays in ovulation from 12 to 21 months are not uncommon and the time required for the establishment of a regular ovulatory pattern after treatment is still not certain. In order to regulate the pattern after treatment is still not certain. In order to regulate the pattern of endometrial bleeding, some clinicians have employed the periodic administration of estrogen either orally or by injection as an adjunct to injected progestin. Since this procedure requires monthly return visits, or self-administered monthly courses of oral estrogen, it detracts considerably from the method's simplicity.

Hormonal contraception without suppressing ovulation

(a) Oral Preparations-A new type of hormonal contraception is now being investigated in several countries. This innovation in hormonal contraception is continuous low-dosage progestin therapy, which imparts an antifertility effect