

cause thromboembolism?" In the words of a Medical Research Council Subcommittee: "The sum of evidence . . . is so strong that there can be no reasonable doubt." It remains to be seen what impact, if any, these findings have on the prescribing habits of physicians.

Although the blood-vessel abnormalities have received the greatest publicity, other potentially serious complications of the pill have been reported. In 1964, some Finnish scientists reported abnormal liver function in seven post-menopausal women who consented to take oral contraceptives for a month.

Despite dissents from some experts and manufacturers, there has now been convincing confirmation of this phenomenon in different parts of the world, including the United States, and involving women in their twenties as well as older females. Particularly at risk of developing jaundice are those rare women who develop the unexplained "jaundice of pregnancy," which is probably also attributable to hormonal changes. It is not reassuring to learn that mestranol, present in most oral contraceptives, can cause severe liver damage and even liver cancers in rats taking the drug in high doses for prolonged periods.

Others have observed decreased tolerance for glucose in some women taking oral contraceptives, with "chemical diabetes," a phenomenon again reminiscent of what occurs during pregnancy. Whether this is related to the changes in blood concentration of adrenal or thyroid hormones that occur in women on the pill is not clear.

A few letters have appeared in the British journals describing strange muscle pains or symptoms of neuritis associated with the taking of oral contraceptives. The bleeding is thought to be due to overgrowth of the lining of the small intestine. American doctors have seen dilatation of the ureters in women taking oral contraceptives.

Gynecologists have occasionally observed severe uterine bleeding in women who have stopped the pill after prolonged cyclic therapy for contraceptive purposes. The bleeding is thought to be due to overgrowth of the lining of the uterus secondary to disturbance of normal feedback mechanisms among the ovary, the hypothalamus, and the pituitary. Other gynecologists have been troubled by the development of an "obstinate" form of vaginitis due to the yeast *Monilia* in women taking oral contraceptives, curable in many cases only after the pills are discontinued.

Psychiatrists have been upset by the unpredictable mental effects of the pills. Some women on them claim an increase in sexual desire and pleasure, but others become frigid, a situation reversible by stopping the pills and using mechanical devices. Dr. William Masters, co-author of *Human Sexual Response*, said that when referring physicians or marriage counselors ask him to see a woman for secondary frigidity, his first question is: "Has she been taking the pill?" There has been an increasing awareness of depressive reactions, with crying spells or suicidal ideas, in women taking these hormones. Some believe that the pills can make a latent depressive state overt or aggravate an existing melancholia. Remission may not follow promptly on withdrawal of the drug. (However, it must also be stressed that some women such as those who suffer from severe premenstrual tension, may be helped remarkably by oral contraceptives.)

Fears about the long-range effects of oral contraceptives on fertility have ranged from apprehension about ultimate infertility when the pills are stopped after years of use to the possibility that oral contraceptives, by preventing ovulation, may prolong the period of potential childbearing so that pregnant fifty- and sixty-year-old grandmas will be possible. One Canadian physician has even suggested the possibility of a new specialty of "geriatric obstetrics" to care for such aged parents. There are no convincing data at present to support either notion, although both American and Australian physicians have suggested that some women may suffer long-term interruption of their ovulatory cycling as a result of the pill, with prolonged failure of menstruation (and infertility) after stopping the medication. Proponents of the pill promptly labeled the reports "misleading" and the conclusions "unwarranted."

In view of all the side effects reported with the pill, and the clear evidence that some 10 to 25 per cent of women refuse to go on with oral contraceptives because of dissatisfaction of one sort or another, it is confusing to have their enthusiasts deny such defects. In April 1966, *The New York Times* ran a "gee-whiz" type of article about the pill entitled "Three Men Who Made a Revolution." In it, Dr. Gregory Pincus commented on the medical advertising for