

cant difference. I am saying only that in the available clinical information to date, there is nothing to support the claim that estrogens start cancer in women.

As a matter of fact, I might point out that a case can be made in the other direction. We know that certain women who have irregular hormone production because of ovarian disorders, and whose ovaries produce female hormones in an irregular fashion, and also produce male hormones and other abnormal hormones, are much more likely to develop pathological changes and possible malignancies of the uterine lining. Now, if it is a fact these abnormalities in hormone production are in some way related to these neoplastic changes, it would seem reasonable that the use of an oral contraceptive, which suppresses the abnormal ovarian hormones and produces an absolutely regular, exactly timed ebb and flow of female hormones, might actually be preventing the development of these neoplastic changes.

I want to emphasize that none of this evidence, either pro or con, carries sufficient weight to allow a final decision to be made. In this, I agree with Dr. Hellman and with Dr. Hertz.

The issue is far too important to be left to academic debate. It has been estimated that some 170,000 women—half on pills, half not—would have to be followed for a year to establish a two-fold rise in breast cancer, and about 120,000 women to establish a rise in cancer of the cervix. Such studies have been devised. Other experiments are being devised to test the problem of cancer of the cervix, and I am happy to say that we plan to cooperate with the FDA in utilizing our planned parenthood clinic to provide data for such a study.

One further point. The type of women who come to most of these planned parenthood or other birth-control clinics, have usually had an absolute minimum of medical care. As a matter of fact, all too often these women have never before had a routine pelvic examination and pap test. It is well known that a number of premalignant or early malignant changes are picked up by the routine pap screening of these women, and of the annual or semiannual pap screening, which is routine after the pill is started.

In the sense that improved screening is thereby made possible, this in itself will tend to lower the ultimate number of deaths from cervical cancer, and hopefully will steepen the drop which Dr. Hellman showed exists in the incidence of cervical cancer in this country.

Now I should like to address myself to the problem of thrombosis. I believe we have had unanimous agreement today that the British studies and the Sartwell epidemiological report conclusively prove a relationship between thromboembolic phenomena and the pill. I would like to suggest that to some scientists and to some statisticians the evidence is not quite so convincing.

There are many known causes for thromboembolic disease, the commonest being the birth of a baby. In fact, of all diagnosed cases of this disorder, at least 90 percent are associated with known predisposing factors. The big question is the other 5 to 10 percent for which no cause is apparent.

It has been repeatedly mentioned today that the frequency of this unknown thromboembolic disease, what we call idiopathic thromboembolic disease, has been rising rapidly since 1958 in both men and women; there is a chart here showing the rise in a London population, none of whom were oral contraceptive users.