

malignant possibly could have been removed simply because she visited her physician and had the premalignancy removed. This is what happens with carcinoma in situ of the cervix.

It is entirely possible, I believe, that carcinoma of the cervix can be completely eradicated, never will occur, for the same reason.

Mr. DUFFY. Doctor, we had some witnesses indicate earlier with varying degrees of association with this concept, oral contraceptive pills may inhibit breast cancer in certain females—apparently there are some studies which support this conclusion. Would this evidence or would this be further evidence of that fact perhaps?

Dr. KISTNER. I don't think so. I know of no evidence that the estrogen or progesterone will inhibit breast cancer. I don't know the cause of breast cancer and I don't know how to inhibit it. If I did I would try it.

Mr. DUFFY. I just think it is curious that somebody has told us that apparently breast cancer in women on the pill does not occur with the frequency one would expect.

Dr. KISTNER. I don't know the answer. This is true, I mean my own experience in 16 years of dealing with the pill, I have seen one patient who is on the pill who had cancer of the breast. Why didn't I see more? I don't know and in this advisory committee there was only one patient. Why, I don't know. I just don't know.

I will go back to the New England Journal of Medicine statement, the facts merely indicate that oral contraceptives have an impact on breast physiology and anatomy. They do not establish any clear association with breast cancer itself. Certainly the most important aspect of mammary carcinoma is its prevention. At present, the only effective method is early diagnosis by examination combined with radiologic techniques to improve detection of small lesions. A pill user should have the benefit of these procedures.

Now, the last type of cancer I will speak about is endometrial and the one I have been particularly interested in. Cancer of the endometrium or lining of the womb may be produced in experimental animals by the administration of large doses of estrogen for prolonged periods of time. But Arthur T. Hertig, emeritus professor of pathology at Harvard Medical School, has said "No convincing evidence is available to show that estrogen stimulation alone," I would emphasize *alone*, "will produce endometrial cancer." As I said, I believe the estrogen must be there as the milieu for the carcinogen "and many estrogen studies fail to mention such changes as carcinoma in situ as occurring with regularity, in animals or in women to whom estrogens have been given."

Endometrial hyperplasia occurs regularly as the result of continuous estrogen stimulation. I have induced endometrial hyperplasia frequently in women when we were treating them. There is no doubt about the fact that hyperplasia, or overgrowth of the lining of the womb, is related to estrogen. Now, whether cancer is related to the hyperplasia or not is the crux of the whole situation.

In some individuals, humans, prolonged estrogen stimulation results in the development of an endometrial abnormality which is morphologically indistinguishable from invasive cancer, and I could show you photomicrographs of endometrial lesions of hyperplasia produced