

lab tests. So I suspect, and it is only a suspicion, that the basic constellation of abnormalities that may lead to rheumatoid arthritis are uniquely different from those that lead to some other disease. We cannot find a unifying concept.

Mr. GORDON. That is all.

Senator McINTYRE. Mr. Duffy.

Mr. DUFFY. Thank you, Senator.

Doctor, do you observe similar results, or similar effects rather, in certain women when they become normally pregnant?

Dr. BOLE. Well, as I indicated previously in patients with rheumatoid arthritis, it has been known for years that their disease may remit during natural pregnancy. The scientific explanation for that is still not apparent.

Contrawise, the other rheumatic disease systemic lupus erythematosus that I referred to, which is much rarer, a significant number of these young women have that disease flare during pregnancy, so we have two major rheumatic diseases; one that is known for years that may remit during pregnancy, and the other in some instances will flare. So there is no unifying concept here.

Mr. DUFFY. My problem is this: You say that oral contraceptives can be possible provokers of rheumatic disease; is that correct?

Dr. BOLE. No, that is incorrect. I said they can provoke laboratory test abnormalities that may lead a physician to the concept that the patient had an early rheumatic disease.

Mr. DUFFY. Does one see a similar result in some normally pregnant women?

Dr. BOLE. These tests—LE tests—have not, to my knowledge, been reported as becoming positive in normally pregnant women. The anti-nuclear antibodies, as I indicated, there is a certain substrate possibility of a positive reaction of this test in so-called normal, but we also have to think about what normal means.

Mr. DUFFY. Have you given any thought to the reason why you might not find similar results in women who are pregnant?

Dr. BOLE. Well, I can—

Mr. DUFFY. Assuming, of course, the same chemicals we are talking about.

Dr. BOLE. I can speculate for a moment, but it is gross speculation and, as already testified before this committee, the ingredients in oral contraceptive drugs are synthetic compounds, and although the testimony this morning, to my view, as an investigator in the field of rheumatic disease suggested, you can cross back and forth between so-called natural female hormones and synthetics, I believe that the crossover is limited, depending on what particular phenomenon you are talking about. That would be the best answer I could give you, Mr. Duffy.

Mr. DUFFY. So, to some extent, you accept this generic equivalency concept.

Dr. BOLE. I am afraid you will have to expand on exactly what you mean by "generic equivalency concept." If you mean I am saying that the natural and synthetics do the same things, no, not necessarily. It depends upon the experimental system in man or animal that you are dealing with.