age that has been calculated from other population surveys (Lawrence, J. S.: Ann. Rheum. Dis. 20:11, 1961; USPHS Publication 1431, 1966). During 1969 two additional preliminary reports dealing with the problem of oral contraceptives and rheumatic disease have been published. Dr. H. Spiera and Dr. C. M. Plotz (Lancet i: 571, 1969) have reported that in their clinical practice they have seen 22 patients with rheumatic symptoms whose symptoms diminished or disappeared after the patients discontinued oral contraceptive drugs. They did not observe any laboratory abnormalities that could be traced to the use of oral contraceptive agents. It is their current impression that oral contraceptive drugs should be used with extreme caution in patients with rheumatic disorders.

Recently, McKenna, Wieman and Shulman (Arth. & Rheum. 12:313, 1969) reported results of several laboratory tests carried out on 176 apparently normal women using oral contraceptives and studies in a birth control clinic population. In these young women they failed to demonstrate abnormal LE cell tests and only one had an abnormal test for antinuclear antibodies (a group of abnormal proteins present in a large percentage of patients with SLE and certain of the other major rheumatic diseases). They did find an increased incidence (7 cases) of positive tests for rheumatoid factor (an abnormal protein present in the blood of patients with rheumatoid arthritis and some of the other rheumatic diseases.)

Comparing the results of our own studies with those outlined above, we would feel that each of these preliminary reports accurately reflect the findings in different population sof normal individuals and patients with either early or established rheumatic disease. Although these reports appear to be in conflict, it is our impression that they differ because of the size of the individual groups studied and the source of the cases that have been submitted to evaluation. In other words, apparently healthy young women reporting to a birth control clinic for contraceptive advice are quite a different population than young women reporting to a physicians office or an arthritis clinic at a major diagnostic center with rheumatic complaints.

Having reviewed the status of the several preliminary reports that are currently available in the medical literature, I would now like to present the results of our studies at the University of Michigan. In the spring of 1967, a 24 year old housewife reported to our clinic with mild rheumatic complaints. She had been seen at another institution six weeks previously for evaluation of an abnormally low white blood cell count. She was found to have a positive LE cell test and antinuclear antibodies were detected in her serum. These three laboratory abnormalities are commonly associated with the serious rheumatic condition, systemic lupus erythematosus. She had been taking an oral contraceptive drug for eight months. She was not taking any other medication. We confirmed these laboratory abnormalities and found that she had resolving thrombophlebitis in her leg. She was advised to discontinue her oral contraceptive therapy and within six weeks all of her laboratory abnormalities had disappeared. This patient has been followed for the last two and one half years and she has no laboratory or clinical evidence of disease.

Subsequently, during 1967 seven other cases were identified at random from a total of 167 women aged 15–45 who were attending the arthritis clinics at our institution. The development of thrombophlebitis (inflammation in the veins of the legs) in five patients and a history of the development or exacerbation of rheumatic complaints in all of these patients led to discontinuation of oral contraceptive drugs. These patients had been seen at intervals of 1–3 months in the arthritis clinics and blood specimens had been obtained from each individual during and after treatment with oral contraceptives. All of these women returned for special follow-up evaluation in the spring of 1968, 3 to 16 months after they stopped taking these drugs. This special followup evaluation was prompted by the preliminary report of Dr. Schleicher suggesting that abnormal LE cell tests had been induced in young women during therapy with oral contraceptive agents. It is important to note that none of our patients were taking any other drugs except for aspirin. In Tables 1–4 included at the end of this report we have summarized the results of tests for antinuclear antibodies, LE cells and clinical findings in these patients during and after treatment with oral contraceptive agents. These patients had been taking various oral contraceptives for an average of 7 months prior to appearance of exacerbation of rheumatic or vascular symptoms. All had positive tests for antinuclear antibodies while on oral contraceptives and BC (the index case) is typical of six of these patients who stopped