The high incidence of thrombophlebitis in this very small group of young people suggested that these patients had a special tendency to respond abnormally to synthetic estrogen-progestogen drugs. We felt it was important to point out that in the evaluation of women suspected of having early rheumatic disease, specific information on the use of oral contraceptives is required before the clinical and laboratory findings can be properly interpreted. Based upon this preliminary study, a case selected prospective study of this problem in a healthy and rheumatic disease population was initiated.

Between August 1968 and August 1969 a questionnaire survey of all women attending the arthritis clinics at the University of Michigan Medical Center was accomplished in order to determine the frequency of use of oral contraceptive agents in these patients. This survey demonstrated that 86 of 203 women between the ages of 14 and 45 years had previously or were currently taking oral contraceptive drugs. I should point out we see more patients than this. This is the number of young women between 15 and 45 years we have seen in the clinic during the period of 1 year. Forty-one of these women had discontinued use of oral contraceptives prior to the time of our survey, 45 women were taking oral contraceptives at the time of the questionnaire survey.

Twenty-three of the 45 patients first noted rheumatic signs and symptoms following initiation of oral contraceptive therapy. Nine of these women with rheumatic disease agreed to discontinue oral contraceptive treatment and continue under special observation, and were referred to one of our gynecology departments for an alternate form of contraceptive treatment and advice.

In contrast to our first group of eight patients identified in 1967, six of nine of these women had well-established rheumatic disease. They had noted the appearance of rheumatic symptoms approximately 33 months after initiating oral contraceptive drug therapy. We felt it was important to determine whether the laboratory tests in patients with overt disease could be modified by discontinuation of oral contraceptive therapy.

In tables 5 and 6 changes in tests for antinuclear antibodies and LE cells are summarized. I will summarize the findings here, that after the patients had discontinued oral contraceptive drugs for an average of 5 months, antinuclear antibodies disappeared from the serum of one patient and decreased in titer in the serum of five others.

The titer meaning that it was still present but a lesser amount when determined by a standard laboratory test.

LE cells disappeared from the serum of five of six patients and clinical symptoms diminished in six patients. Symptoms remained the same in three patients with definite rheumatoid arthritis. This study confirmed our initial impressions from the random study 1967–68 that clinical and laboratory improvement could not be anticipated in every patient with rheumatic disease following discontinuation of these drugs.

Mr. GORDON. Are you saying, then, in many cases it is irreversible?

Dr. BOLE. That is right. Also, by inference, Mr. Gordon, in these patients the drug had nothing to do with the basic disease, but we did not know that until we took some patients with established disease off of the drugs.